

Master Thesis

Post War: Architecture of Peace and Reconciliation



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Master Thesis

**Post War:
Architecture of Peace and
Reconciliation**



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Preface

This volume discusses solutions and procedures that can be taken in the process of rebuilding, after a war period. War does not only destroy buildings and cities, but also economies, and most importantly societies. It creates different divisions between citizens. People can be divided according to ethnicity, religion, or ideology.

Thus, recovery should not only be restricted to consider reconstructing buildings and infrastructure, but also economy and society. The objective here is to recreate and encourage coexistence after the impact of war which resulted a rupture in the society. Society is one of the most important factors in building cities and countries.

To understand the major issues and problems, we must look at examples of cities that had experienced war and post reconstruction war phases. Beirut, the capital of Lebanon, had experienced a severe civil war which was followed by a reconstruction process. From this experience, architectural and urban design and solutions, that were implemented, will be analyzed to carry out what were the successes and the gaps, the considered problems and the neglected ones, the effective solutions and the weak gaps. The analysis carried out will be considered in the implementation of design and solutions for the city of Aleppo in Syria.

Experts in the field were interviewed on these problematics and the solutions, including Dr.Nahas Dr.Hallaj, Dr.Badr and Dr.Fawaz.

Prefazione *[Italiano]*

Il seguente volume si prepone come obiettivo lo studio dei problemi legati alla ricostruzione post-bellica di Aleppo, in Siria. Sono quindi esaminate soluzioni e procedure che possono essere adottate nel processo di ricostruzione, successivo, questo, ad un periodo di guerra. La guerra non distrugge solo edifici e città, ma anche economie e, soprattutto, società: tende a creare situazioni conflittuali e profonde divisioni tra i cittadini. Tali situazioni, a loro volta, comportano difficoltà nei processi di pianificazione della ricostruzione e, se non gestite in modo equilibrato, possono essere causa di ghettizzazione. Questo fenomeno va dunque evitato al fine di ridurre l'accentuarsi di tali conflitti socioeconomici, e la pianificazione del territorio riveste, a tal scopo, un ruolo molto importante.

In virtù delle precedenti considerazioni, il processo di ricostruzione non deve esclusivamente considerare le più importanti opere edili ed infrastrutturali, ma programmare una riallocazione di risorse ed opportunità che non produca scompensi o ineguaglianze socioeconomiche. Di conseguenza, la ricostruzione dovrebbe anche gestire l'impatto sull'economia e la società. L'obiettivo, qui, è quello di ricreare ed incoraggiare la convivenza in seguito alla crepa che la guerra ha provocato nella struttura sociale. La società è uno dei fattori più importanti nella costruzione di città e Paesi.

Per identificare e capire i principali problemi, sono qui esaminati alcuni esempi di città che hanno vissuto fasi di guerra e, in seguito, di ricostruzione. Beirut, la capitale del Libano, ha vissuto una grave guerra civile (1975-1990), che è stata seguita da un processo di ricostruzione. Sulla base di questa testimonianza, la progettazione architettonica e urbana, e le soluzioni che sono state implementate, saranno analizzate per capire quali sono stati i successi e i fallimenti, i problemi considerati e quelli trascurati, le soluzioni efficaci e i punti deboli. Le analisi svolte, prendono in considerazione il caso della città di Aleppo in Siria.

Alcuni esperti del settore sono stati intervistati circa tali problematiche e loro relative soluzioni. Tra questi, i Professori Nahas, Hallaj, Badr e Fawaz, che ricoprono oggi un ruolo significativo in questo processo.

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1 Abstract

*“First step in solving any problem is recognizing there is one”*¹, adding a second step, it would be to define it.

Many countries in the Arab region are going through tremendous socio-economic as well as political transformations, some of which have been extremely violent. The scale of violence, its duration and impact in countries like Syria, Iraq, Libya or Yemen is unprecedented since the second World War. These conflicts have destroyed entire cities which for centuries were models of peaceful co-existence among different ethnicities, religions, ideologies and nationalities. They were also models for culture, trade and centres for learning. War has destroyed all this and much more, including social cohesion. Mosul, Aleppo, Homs and other cities have been reduced to rubble and their inhabitants uprooted or displaced.

All wars come to an end, Syria, its cities will have to be rebuilt. The social fabric must be repaired through a legitimate, all-inclusive reconciliation process which must be coupled with equitable sustainable development. It is only in this manner that peace can be lasting, and conflict relapse can be prevented.

For the purpose of recovery and reconstruction of Syrian cities, it would be useful to examine the reconstruction of Beirut and learn from its short comings and successes. Did Beirut succeed in enhancing peaceful co-existence among its different socio-economic groups as well as communities? How can this inform the reconstruction of a Syrian city, like for example Aleppo? Or the Damascus suburb of Ghouta?

As architects and urban planners, we are responsible of designing people's lives and with it enhance peaceful co-existence and reconciliation. Urban planners, for example, drawing the cities, will design roads in order for the citizens to use them, they will design housing blocks to be inhabited after by citizens. Every design will have a great impact on someone's personality and behaviour as well as society in general. For example, people living in rural areas, have different behaviour than someone living in urban areas. The same example can be applied for citizens living in the centre of the city and others in the peripheral areas. Nowadays, we should start

1: Jeff Daniels, starring Will McAvoy in the “Newsroom” (2012-2014)

designing and transforming cities where citizens, urban or rural, of different cultures and religions can interact and co-exist peacefully. This must and should be encouraged particularly in a country of diverse cultures. As such this must be taken into account in the early stages of a designing process.

Among the most important aspects in this regard are public spaces, often overlooked in the haste of reconstruction. Public spaces will have to be developed to encourage diversity and not a clustering of people of the same colour in neighbourhood or areas that conform only to the same colour. Can Public spaces really participate in mixing people from different backgrounds and enhance interaction? or can it be transformed into a place where conflicts can be translated?

Another important aspect is the public participation into the reconstruction of the city. Public participation gives a voice for the people to participate in changes that can occur to their city. However, the city composition changes during the war. Some people left, some people came, some stayed, some planning to come back after the war and some not considering this option. This leads to ask important questions: Who will be considered in the public participation? Who is the local community?

Through all these considerations, the architect of today needs to be a designer of peace and reconciliation.

Abstract *[Italiano]*

"Il primo passo per risolvere qualsiasi problema è riconoscere che ce n'è uno "¹. Un secondo passo, volendo, potrebbe essere definirlo.

Molti Paesi della regione araba stanno attraversando enormi trasformazioni socioeconomiche e politiche, alcune delle quali estremamente violente. La portata di tale violenza, la sua durata e il suo impatto in Paesi come la Siria, l'Iraq, la Libia, o lo Yemen, non vede precedenti sin dalla Seconda Guerra Mondiale. Questi conflitti hanno distrutto interamente città che per secoli erano state modelli di coesistenza pacifica tra diverse etnie, religioni, ideologie e nazionalità. Senza dimenticare, peraltro, che le stesse città erano state grandiosi esempi di cultura, commercio e istruzione. La guerra in Siria, iniziata nel 2011, ha distrutto tutto questo e molto altro, compresa la coesione sociale. Mosul, Aleppo, Homs, e altre città, sono state ridotte in macerie, e i loro abitanti sradicati o sfollati.

Poiché tutte le guerre trovano una fine, la Siria e le sue città dovranno essere ricostruite. Il tessuto sociale dovrà essere riparato attraverso un processo di riconciliazione legittimo e onnicomprensivo, che sia accompagnato da uno sviluppo sostenibile in termini di equità sociale, economica e territoriale. Solo in questo modo la pace può durare nel tempo, e la ricaduta del conflitto essere prevenuta.

Ai fini del recupero e della ricostruzione delle città siriane, risulta utile esaminare la ricostruzione di Beirut e imparare dai suoi discreti traguardi e successi. Beirut è riuscita a stimolare la coesistenza pacifica tra i suoi diversi gruppi socioeconomici, così come tra le sue comunità? In che modo può questa esperienza essere d'aiuto nella ricostruzione di una città siriana, come ad esempio Aleppo? O il sobborgo di Damasco di Ghouta?

In qualità di architetti e urbanisti, abbiamo la responsabilità di progettare i luoghi in cui si svolge la vita, e di migliorare la coesistenza pacifica e la riconciliazione. I pianificatori urbani, ad esempio, nel progettare le città, disegneranno strade affinché i cittadini possano percorrerle, e progetteranno edifici che saranno abitati. Ogni progetto avrà un grande impatto sulla personalità e sul comportamento del singolo, così come sulla società in generale. Per fare un esempio, le persone che vivono nelle aree rurali esprimono modi di fare diversi da quelle che vivono nelle aree urbane. Lo stesso esempio può essere applicato considerando i cittadini che vivono nel centro della città e quelli delle aree periferiche. Oggi dovremmo iniziare a progettare e trasformare città per far sì che i cittadini, urbani o rurali, di culture e religioni diverse, possano interagire e convivere pacificamente. Questo processo deve essere incoraggiato, in particolar modo, in un Paese caratterizzato dalla convivenza tra

culture diverse. Per lo stesso motivo, bisogna tenere in considerazione questa esigenza sin dalle prime fasi di un processo di ricostruzione post-bellica.

Tra gli aspetti più importanti, a tal proposito, figurano gli spazi pubblici, spesso trascurati nella fretta della ricostruzione. Dovranno essere pensati spazi pubblici che abbraccino la diversità, e non la tendenza al raggruppamento di persone dentro aree che sono conformate da uno stesso sistema sociale.

Gli spazi pubblici possono davvero incoraggiare l'unione di persone provenienti da background differenti e migliorarne l'interazione? O diventerebbero forse luoghi verso cui spostare i conflitti?

Un altro aspetto rilevante è la partecipazione pubblica alla ricostruzione della città. Quest'ultima, infatti, dà voce alle persone affinché partecipino ai cambiamenti che possono verificarsi nella loro città. Tuttavia, la componente cittadina subisce profonde alterazioni durante la guerra. Alcune persone se ne sono andate, altre sono arrivate, alcune sono rimaste, altre ancora hanno intenzione di tornare dopo la guerra, mentre alcuni non hanno considerato questa opzione. Questa problematica pone altri importanti quesiti: chi sarà considerato nella partecipazione pubblica? Chi è la comunità locale?

In virtù di tutte queste considerazioni, l'architetto è, insieme agli amministratori, agli stakeholders, e alle personalità significative delle comunità locali, uno dei soggetti a cui spetta programmare un processo di ricostruzione mirato alla riconciliazione sociale. Condizione, questa, essenziale per un reale processo di costruzione della Pace.

2 Beirut, Lebanon

Lebanon, a middle-eastern country, with a total area of 10452 Km², and a population of 6 million citizens, has experienced numerous terrible wars and tensions during the last century.

2.1 War and history

A civil war that started in 1975 and calmed down by the Syrian army intervention in 1977, the Israeli occupation in 1982 and ended in 2000, and lately the 2006 war between Lebanon and Israel.

The civil war of 1975 was a religious and sectarian war. It started due to great tensions between religions, most importantly Christians and Muslims. The conflict started as a result of a power-sharing change. The Muslim community was asking for a better sake in the Lebanese government.

This war resulted in the murder of around 150 000 people, the wound of around 200 000 others, the devastation of the Lebanese economy, but most importantly for our subject, a demographic sectarian separation that can be still noticed till nowadays. Beirut, the capital, has a population around 2 million of citizens (including suburbs). Till nowadays, the two most important fragments are call “Beirut East”, with a population of Cristian majority and “Beirut West” with a population of a Muslim majority. Each part of Beirut kept extending along the territory of Lebanon starting from its neighborhoods.

2.1.1 Beirut 1860-1920

Beirut urbanization started in the early 1860s, thousands of the orthodox community saw after Damascus massacre and the civil war of the Lebanon’s mountain, Beirut as a refuge. Most of the center spaces were inhabited by people belonging to the Muslim community.

During this phase, Christians were inhabiting peripheral areas around Muslims’ neighborhoods. The Maronites, (Maronites, refers to Lebanese people who belongs the Maronite Church in Lebanon, which is the largest Christian sect in the country

contemporaneously) , started occupying spaces all along the way to the Lebanese Mount.

Some mixed spaces were created all along the coast for many reasons, some of them are the presence of the American University of Beirut, Hotels and restaurants.

Other neighborhoods were born, some of them Orthodox, like Moussaytbeh, other Sunna, like Basta. (Micheal F.Davie, 1991)

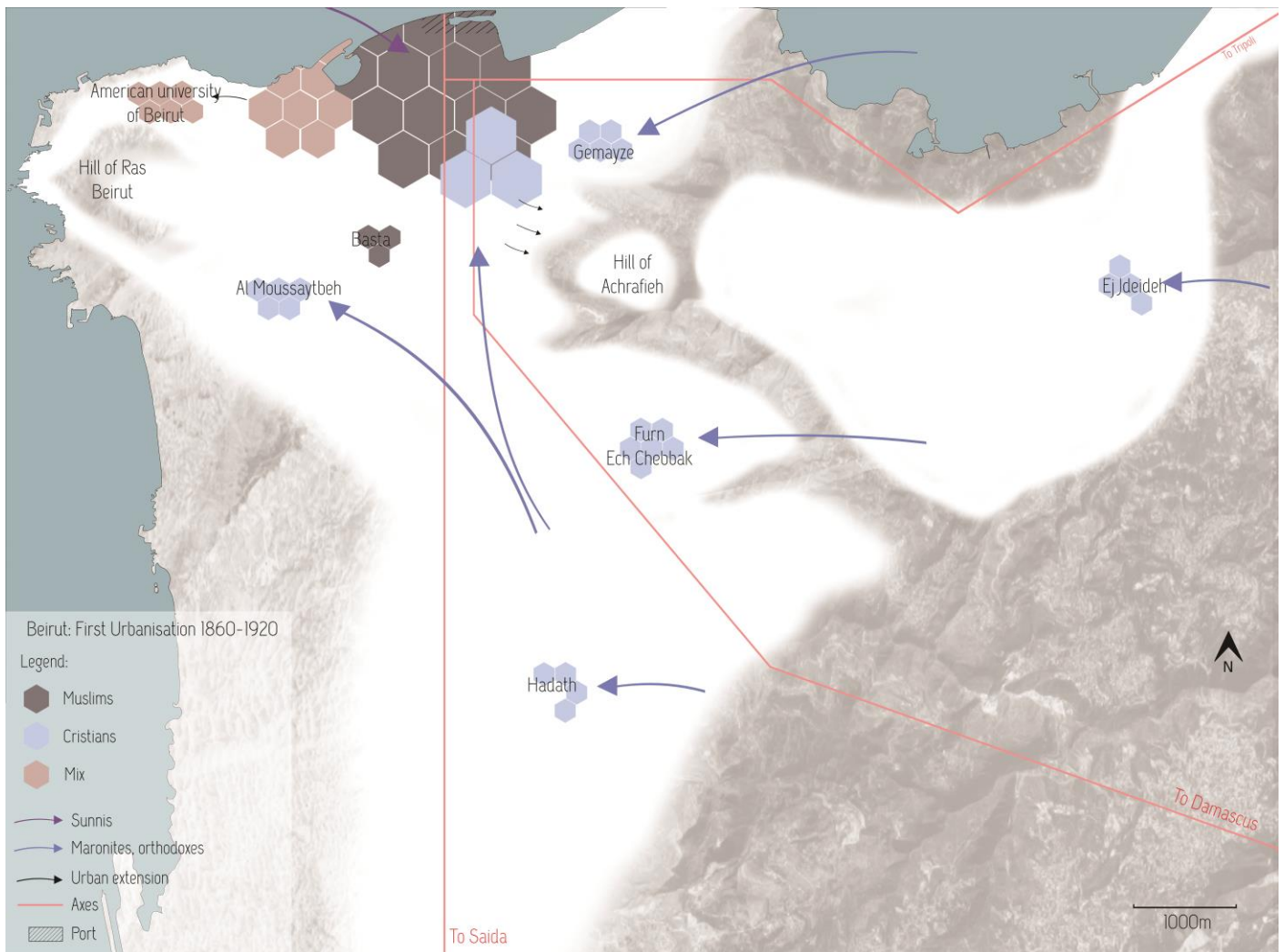


Figure 1: Urbanization of Beirut (1860-1920)¹

2.1.2 Beirut 1920-1950

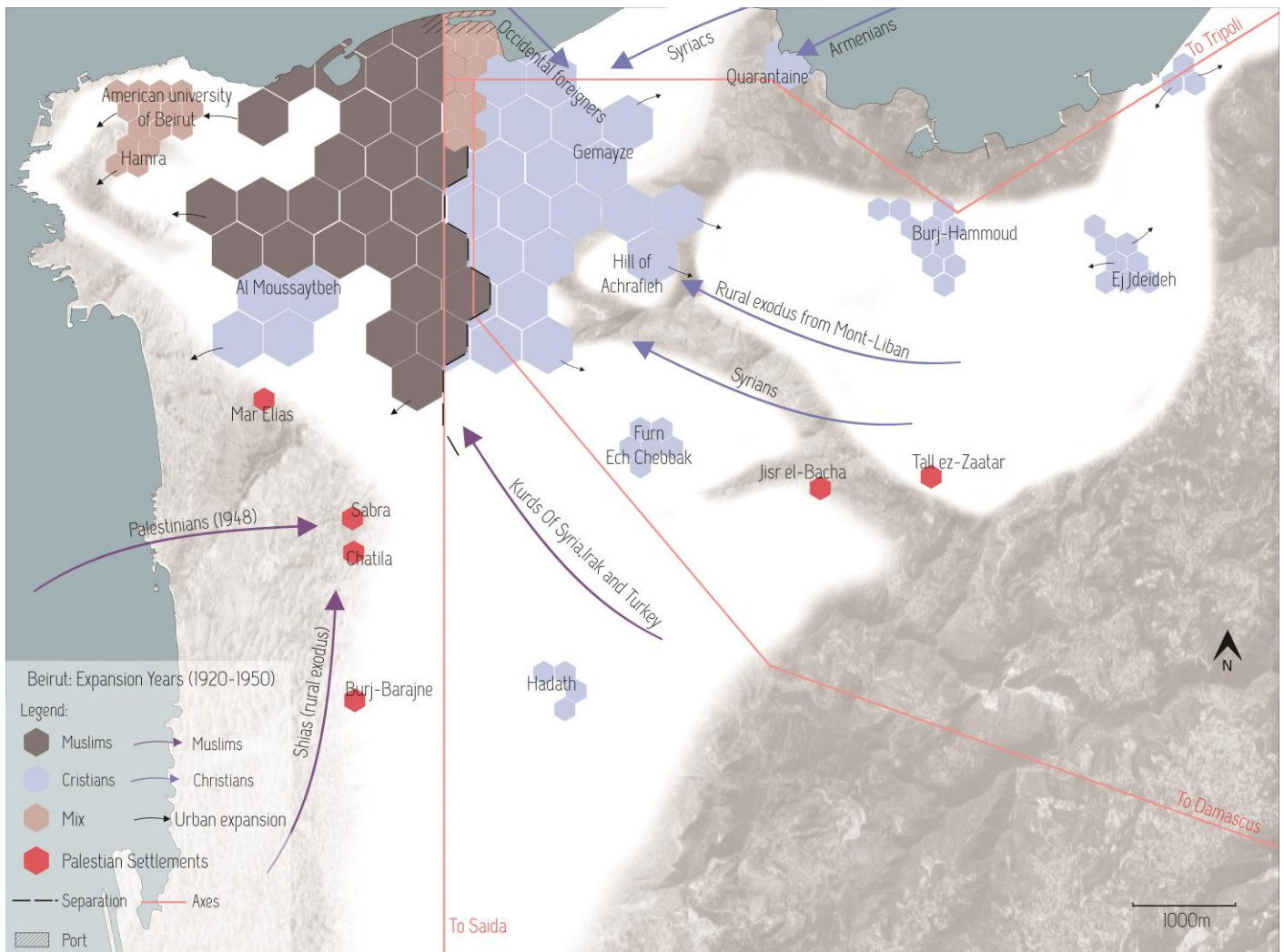


Figure 2: Beirut's Expansion (1920-1950)¹

The massacres of the Armenian population in the 1915 by Turks produced waves of Armenians moving to countries like Syria and Lebanon. The beginning of the 1920s, in Beirut, Armenians started settling in the west of the city, in the Quarantaine and Burj-Hammoud.

During this period, Christians started expanding towards the west of Beirut, the Muslims towards the East. Pre-existing small neighborhoods started emerging such as Furn El Chebbak (Christians), Basta (Muslims).

During the French mandate, the country was opened to the world economy, to new construction material, such as reinforced concrete. This new technology allowed the population to settle in new areas.

1: Figure 2 realized by the author based on Micheal F. Davie, 1991

In 1948, Palestinians refugees found in neighboring countries refuge, mostly Syria, Lebanon and Jordan. In Beirut, Palestinians settled in Burj-Barajne, Mar-Elias, and the famous Sabra and Chatila, which were in the predominantly Muslim side of the city. Palestinians settled also within Christian areas such as Tall Ez-Zaatar and Jisr el-Bacha.

Mixed area was formed around Ras Beirut, mostly inhabited by foreigners, in Verdun and Ramlet El-Baida neighborhoods, Hamra also, was increasing in size, situated next to the AUB, to become a business neighborhood (Micheal F.Davie, 1991).

2.1.3 Beirut 1950-1975

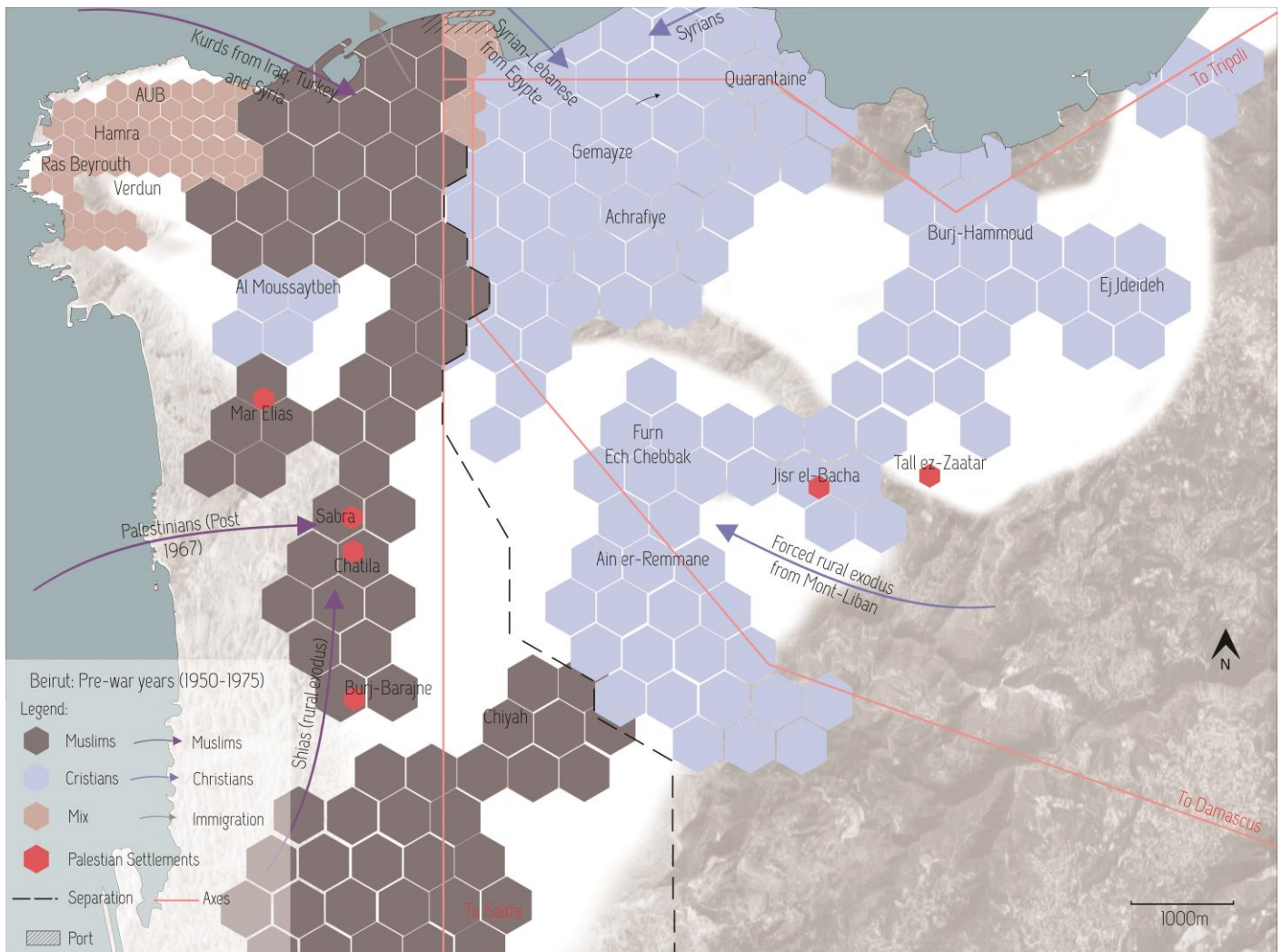


Figure 3: Beirut, Prewar (1950-1975)¹

Syrian-Lebanese Egyptians came to Beirut, settling inside the Christian spaces or the mixed ones.

The wars between Arabs and Israelis have resulted in an increase of the number of the Palestinian refugees, finding themselves in camps all around Beirut peripheral areas.

The southern population of Lebanon, mostly Chia Muslims, were facing attacks and occupation by Israelis. Large numbers moved towards Beirut and found themselves in the peripheral areas of the city.

The junction of these bodies will evolve into the first military confrontations of the civil war. (Micheal F.Davie, 1991).

2.1.4 Beirut 1975-1990

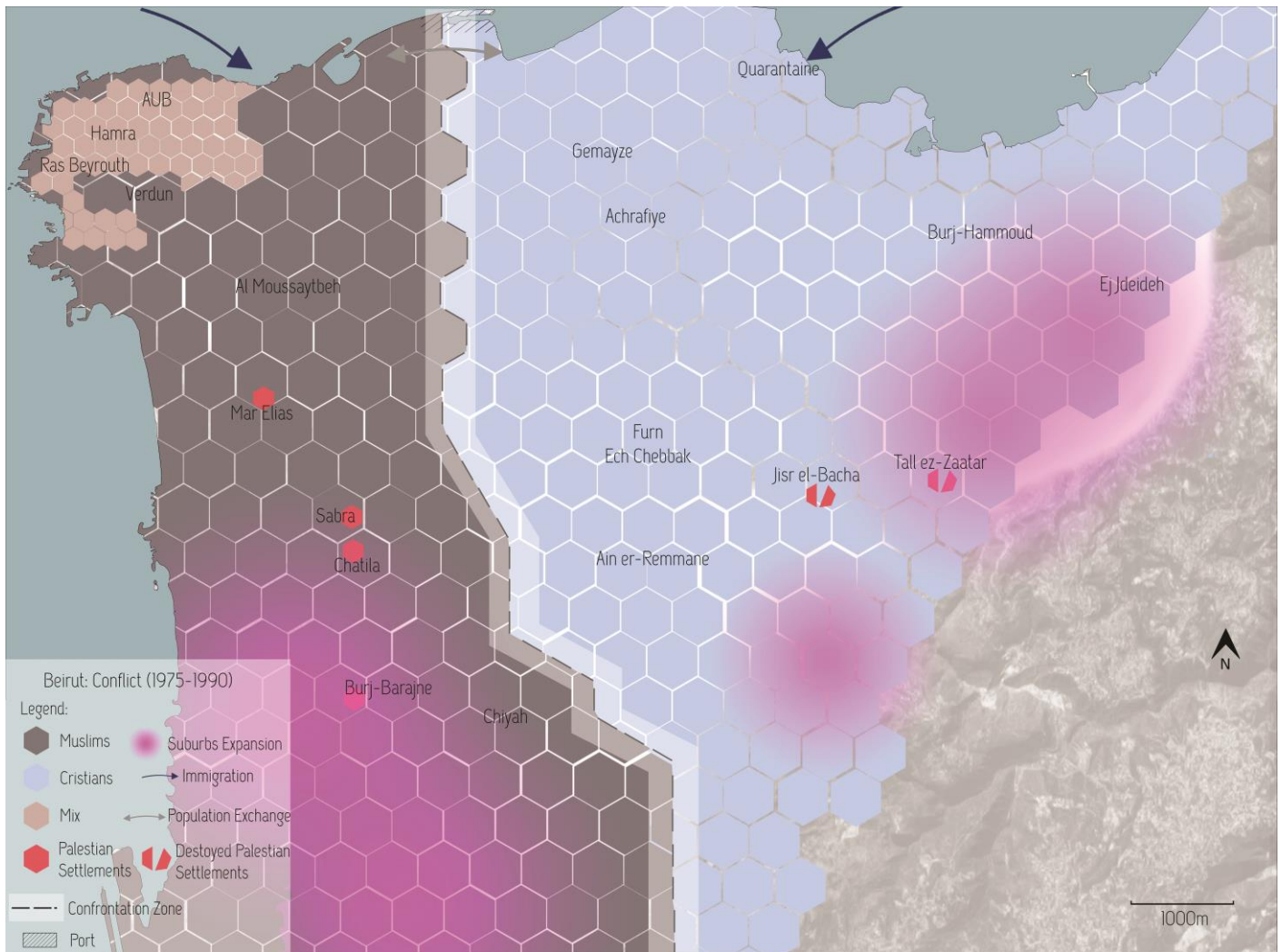


Figure 4: Beirut's Division (1975-1990)¹

The Lebanese civil war resulted into the division of Beirut into two major parts. East Beirut composed mainly of Christians, and West Beirut, composed predominantly of Muslims. Mixed areas can still be distinguished.

Beirut city had witnessed an atrocious war. This didn't result only in human losses, but also in demographic changes, plus social rupture and economic crisis.

How did the Lebanese population act in order to heal the country? How did the Lebanese authority plan the reconstruction of Beirut's infrastructure, economy and society after their destruction?

1: Figure 4 realized by the author based on Micheal F. Davie, 1991

2.2 Post war phase

Beirut city, because of the civil war, was destroyed, that once was Lebanon's economic heart was at the early 1990s, the end of the war, a destroyed city. Lebanon's economic and cultural regional importance was seriously reduced, particularly Beirut. Beirut had an important economical role not only because it is the capital, but also because of the harbor and the airport. During the war those two major economical infrastructures weren't operating.

A country stepping out of a war period, is a country in need of resources to rebuild. In order to provide this country with what it needs, a system of authority must be established.



Figure 5: Downtown Beirut during civil war¹

2.2.1 The Authority Project

“The solution starts from an authority project” said Dr. Nahas, during the interview². The context in which the pursuant phases are very important. The first important phase would be providing people with their needs. Needs of temporary shelters, of water, electricity and all what they need to survive. Then comes the need

1: Figure 5 source: <https://medium.com/demikorban/civil-war-beirut-the-youth-needs-to-know-more-10014ab003fd>

2: Interview made during my visit to Lebanon

to define an authority project. Defining this project will result into the birth of small scaled reconstruction and rehabilitation solutions.

In the Lebanese context, the authority was defined according to a distribution of power among the major militias present on the ground during the civil war, which were largely based on religious affiliation. The militias moved from fighting on the ground into controlling institutions, then creating a system of authority. Regardless of the efficiency of the authority's system, the country moved into planning and implementing the country's reconstruction.

By consequence, we could separate the pre-reconstruction phase into three major contextual phases, at the beginning, the population should be provided with the essential needs in order to survive, then with the establishment of institutions which can be responsible of small to medium projects of reconstruction and rehabilitation of neighborhoods and small villages (such digging well). With time, an authority will be established that will be responsible of large-scale city projects and the full management of the country, the post-reconstruction phase.

2.2.2 Beirut's Authority Project

Beirut city used to be called the "Paris of the middle-east" before being destroyed by the civil war. Beirut city center was one of the major zones of confrontation during the war.

The Ta'if accord (1989), had put an end to the war in 1990. A system of division of power between sectarian war lords was established. This accord was the beginning of investments attraction, since the country was ready to stand-up again for a period of reconstruction and rehabilitation. The reconstruction was mostly aimed at Beirut since it is the heart of the Lebanese economy.

The phases of Beirut's reconstruction can be separated into three phases. They can be easily linked to the phases cited before. The first phase can be frame with the people's initiatives. In other words, the healing and recovery of Beirut started by the people by themselves at the scale of essentials needs, which are housing, small businesses... The state aim at the beginning of the reconstruction wasn't the reconstruction of the major structures, but it was more about creating the new

authority system, providing public services and administrations, but also providing refugees and the population with the essential needs and help them into reconstructing or repairing the essentials utilities.

The second phase starts when the government has started implementing public projects, such as the Solidere project. Rafiq Hariri was a successful Lebanese entrepreneur outside Lebanon (Saudi Arabia), became the prime minister in 1992 (until 1998, then from 2000 until 2005, the date he was assassinated) and was the country's main investor. He was one of the most important figures of the Lebanese post war period. As soon as he was appointed prime minister, he implemented very strict economic policies. The policies were mostly privatizing major infrastructures and industries, such as the airport, electricity, waste management, telecommunications, energy... but also major projects of reconstruction of Beirut. His economic vision was called "Horizon 2000".



Figure 6: Beirut Nejmeh Square (Prewar)¹

The new government goal was to transform again the Beirut city into the "Paris of the Middle-East". Beirut city center destroyed, was a big challenge to be redeveloped by a weak and bankrupt state. At that time unable to reconstruct the Beirut city Centre due to the lack of money and potential, the Lebanese government

1: Figure 6 source: <http://oldbeirut.com/post/32311400227/place-de-letoile-1950s>

set up a partnership with a private company, Solidere, (*Société Libanaise pour le Développement et la Reconstruction du Centre-Ville de Beyrouth*), which stands for "The Lebanese Company for the Development and Reconstruction of Beirut Central District". The most important Solidere's shareholder was Hariri. The most important project realized by Solidere was Beirut's Downtown district. What was done in Beirut's downtown in order to implement Solidere's strategy was to expropriate the original owners of properties in Beirut's city center and compensate each owner with shares in the company. The compensated shares values were estimated less than the quarter of the value of the property in question. The consolidated Beirut city center area measured around 150 hectares. The importance of the city center is its role played during all the history of Beirut, as a melting pot of people with different origins and religious-ideological affiliations. The most important characteristic of the old Beirut downtown in the pre-war period is its ability to join the rich and the poor. It had a variety of places for all people, ranging from municipal offices, hotels, souks, cafes, retails to nightlife spots, such as brothels, bars, gambling places... Beirut Downtown could be characterized as the city center of diversity and divergence.

The third phase can just be characterized as the continuation and the reflection of the projects. It is about managing the country and helping people recovering socially and economically from the war.



Figure 7: Beirut Downtown, Emir Mansour Mosque (Prewar)¹

1: Figure 7 source: <http://oldbeirut.com/post/12025945268/emir-mansour-mosque-1960s>



Figure 8: Beirut City Center (Prewar)¹



Figure 9: Beirut's Life, Rivoli Cinema (Prewar)²

1: Figure 8 source: <http://oldbeirut.com/post/13265770872/weygand-street-1958>

2: Figure 9 source: <https://www.beirut.com/l/19626>



Figure 10: Beirut Downtown, street to Nejme Square (Prewar)¹



Figure 11: Beirut, Pre-war Period, photo showing people from different economical classes and social backgrounds²

1: Figure 10 source: <http://oldbeirut.com/post/108642230463/abdul-hamid-karamah-street-1958>

2: Figure 11 source: https://nakedbana2.files.wordpress.com/2012/03/opera_building_currently_virgin_megastore_1955.jpg

2.3 Beirut City Center Planning

2.3.1 Memory

Is memory very important while applying a reconstruction planning for a city in a post-war period, and why? What is the typology of memory existing in this context?

Memory is the faculty of which we can remember information and events. It is always related to the past and the history. The history of a country and its past create the identity of a country's population. In a post-war situation, history can be very hard to write, because it becomes subjective for each segment of the population who were facing each other during the conflict. But in the end, the history and the memory should provide lessons to the next generations in order to learn how to co-exist. And here comes the task of the government, where it must be the one highlighting how the population used to co-exist before and remove with time the tensions between different counterparties.

What enhances the importance of the existence of a memory is its role in creating an identity to the citizens, and how it can force new generations not to repeat the same mistakes done in the past. Memory should be considered in any post-war design and planning of a city.

A collective memory is a shared knowledge, information, experiences and feeling about a subject. The collective memory of Beirut's downtown is an "everyone-everything" city center, a city center which contained every kind of services, entertainment, retail, hotel, public, and intended for all classes of Lebanese society. This collective memory creates a link between the people and the place. Which results in emotional feeling, a nostalgic feeling. The importance of this place for the Lebanese people results in the obligation of returning the city center to what it looked like and what it was like before the war. The integration of society in the reconstruction of the city center should be critical because in the end, the city center will be mostly used by its own citizens.

Solidere city center planning didn't consider the memory of the local people. This is a major problem which most of the time results from privatizing governmental projects. Private companies have most of the time the intension of promoting private

interests over public ones in any project implementation. Beirut city center is one of the most meaningful places for all the population and specially the one Beirut itself, so the new planning should be critical, relevant and compensative for all the citizens' needs.

Solidere's concept was considering the restoration of old building structures and neglecting totally the role the city center used to play before the war. This resulted in a new luxurious city center intended for a certain group of people, totally undermining its historical role of a melting pot or common space. In Solidere's project more buildings were torn down during reconstruction than were destroyed by the war, transforming Beirut's war-scarred layers of history from the Roman, Mamluk, Ottoman and French periods into a city without memory (Tierney.J 2016).



Figure 12: Before Reconstruction, streets for automobile vehicles existed¹



Figure 13: After Reconstruction, pedestrian streets replaced the automobile vehicles one, with cafes and retail on the sides. Building height were maintained²

1: Figure 12 source: http://chaaraniproperties.com/about_lebanon.html

2: Figure 13 source: http://chaaraniproperties.com/about_lebanon.html



Figure 14: Before Reconstruction, shops next to the sidewalk, streets for the automobile vehicles existing¹



Figure 15: After Reconstruction, same shapes maintained in the reconstruction phase, street for automobile vehicles transformed into a pedestrian one²



Figure 16: Before Reconstruction³



Figure 17: After Reconstruction, pedestrian street created, destroyed building was replaced by a higher one⁴

1: Figure 14 source: http://chaaraniproperties.com/about_lebanon.html

2: Figure 15 source: http://chaaraniproperties.com/about_lebanon.html

3: Figure 16 source: http://chaaraniproperties.com/about_lebanon.html

4: Figure 17 source: http://chaaraniproperties.com/about_lebanon.html



Figure 18: Before Reconstruction¹



Figure 19: After Reconstruction, higher buildings were reconstructed in some cases²

1: Figure 18 source: http://chaaraniproperties.com/about_lebanon.html

2: Figure 19 source: http://chaaraniproperties.com/about_lebanon.html



Figure 20: Downtown before reconstruction¹



Figure 21: After Reconstruction, pedestrian streets with shops on the side, higher buildings were constructed in some cases²

1: Figure 20 source: http://chaaraniproperties.com/about_lebanon.html

2: Figure 21 source: http://chaaraniproperties.com/about_lebanon.html



Figure 22: Before Reconstruction¹



Figure 23: After Reconstruction, some buildings were replaced by higher ones²

1: Figure 22 source: http://chaaraniproperties.com/about_lebanon.html

2: Figure 23 source: http://chaaraniproperties.com/about_lebanon.html



Figure 24: Before Reconstruction¹

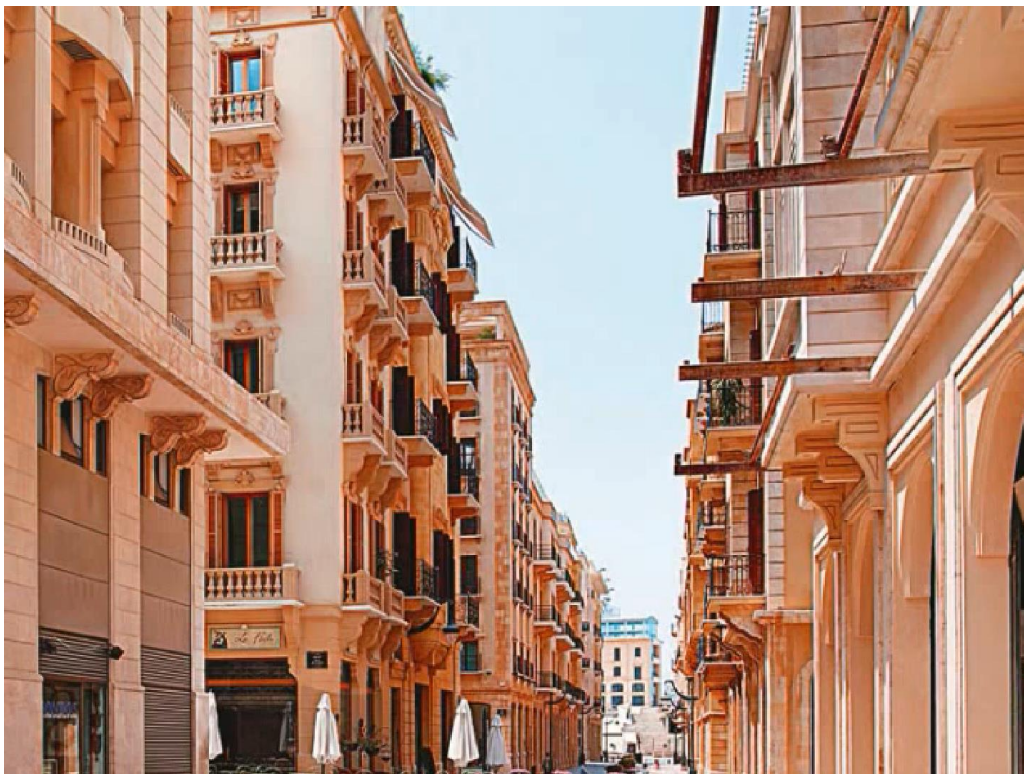


Figure 25: After Reconstruction, street transformed into pedestrian ones, totally and partially destroyed buildings were reconstructed using a homogeneous design²

1: Figure 24 source: http://chaaraniproperties.com/about_lebanon.html

2: Figure 25 source: http://chaaraniproperties.com/about_lebanon.html

2.3.2 Gentrification Process

Gentrification is a process of renovation, restoration or reconstruction conforming to upper- or middle-class citizens in order to raise the property value. This will result in the displacement of citizens with low income and the shutting down of small businesses. Any services or retail targeting the people with low income will be facing a “forced moving out” of the area.

The fact that the planning realized was intended for people with high income, services prices will rise along with goods sold by stores in the area. Consequently, the area’s clients and visitors won’t be the families with low income. Gentrification process certainly improves the material quality of the area targeted, but this will lead to a total erasure of the memory connected to the setting.

Erasing the memory and the major role played by the city center as a “melting pot” before the civil war will result in a loss of the identity of Beirut’s city center. Links between the citizens and the new city center won’t exist anymore. Only feelings of nostalgia will remain in the heart of the Lebanese people.

Gentrification of Beirut’s downtown involved some yuppification of the new businesses newly opened. In downtown Beirut, many shops, catering services and restaurants that conform to yuppies’ taste can be found such as Starbucks, Dunkin’ Donuts...

Stripping the city center from its main role and identity, didn’t help too much in the process of reconciliation and social cohesion. Instead, it had divided again the society according to social class. The fact that the reconstruction was intended for the rich people; Downtown Beirut can be mostly found empty of people. The lack of public spaces makes it hard for anyone who doesn’t want to spend money to stay in the city center. It also affects the interaction between the Lebanese citizens from all classes of society and religions. Interaction between them is very important since the first step into any reconciliation of people and the rehabilitation of a society is speaking-interaction.

A great opportunity was to make from the city center a meeting point of all the Lebanese people, where it can become a link between the separated parts of the city. An occasion for the people to mix. This can be enhanced by creating activities that

can join and mix the new generations such as sport, cultural... but instead, the city center became a part detached from the Lebanese reality.

The new city center didn't become a city center only for affluent people but also an attraction for tourists from all over the world, and specially from the rich Arab countries.

The Syrian crisis, started in 2011, affected the Lebanese economy and specially the tourism sector. This created a negative impact on the Beirut city center, on all the retail present there. Before 2005 most of the cafes and shops were relying on the tourists coming from all around the world and specially the rich Arab gulf countries. After the assassination of Prime Minister Rafic Hariri in 2005, in particular the political tensions that ensued, in addition to the Israeli-Lebanese war of 2006 as well as eruption of the Syrian crisis in 2011, a large number of retail owners of shops and cafes found themselves facing an empty Downtown (Figure 28). The lack of tourism and even the inhabitants of the city going downtown, forced a large number of businesses to shut down (Figure 29).



Figure 26: Beirut cafes surrounding Nejme Square totally empty after that the Syrian crisis started in 2011¹

1: Figure 26 source: <http://www.beirutreport.com/2014/01/erasing-memory-in-downtown-beirut.html>



Figure 27: Retail businesses closed in Beirut downtown due to non-existent clientele¹

1: Figure 27 source: <http://www.beirutreport.com/2014/01/erasing-memory-in-downtown-beirut.html>

2.4 Public Spaces

What makes a city work is where people meet, where people are active. Public spaces are made in order to create interactions between people. Shared activities and spaces enhance the interactions between people. A public space can be any space shared between citizens. It can be a park, an athletic field, a public beach, a public square, a camp site...

2.4.1 Importance and benefits of Public Spaces

According to the type of the public space, many benefits can be recorded. They can be classified under three categories: social benefits, economic benefits and environmental benefits.

Social benefits are very important. They can create a change in every day's life. Public space can contribute to the amelioration of citizens' health. Taking the park as the example, this type of public space can be the place where people can release a stress accumulated from work, quotidian rhythm... It can create a relaxing atmosphere thanks to the presence of nature. Green can isolate people from pollution, noises and can improve the air quality.

Public spaces can be a platform that can provide recreational opportunities, by means, it can be a source of entertainment for all citizens, disregarding the age, gender and social background.

Citizens practicing any physical activity can see in the public space a place where they can perform that kind of activity. The green can provide a better environment especially when it comes to practicing a physical activity.

One of the most important roles that a public space can play is the role of a mixing space. Mixing people coming from all different backgrounds of society disregarding religion, gender, skin color, age, economic and social level. This role of a melting pot can give the citizens the opportunity to interact, which will create empathy, lead them to live new experiences.

The economic level importance is equivalent to the social one. Public spaces can have great impact such as reinforcing economic vitality, attracting human

capital... Public spaces can promote and enhance the tourism of a city. This is a very important factor, since promoting the tourism sector of a city can increase visitors, i.e. its income. When we speak about touristic attraction in relation with public spaces, many examples come to our mind. A very good one is New York's Central Park, which welcome 25 million visitors annually.

Public spaces and property value are linked together. Any real estate appraisal, land valuation or property valuation are influenced by external factors. One of those factors that can have as positive impact is its near presence next to the property. For example, the existence of parks can affect positively the price of an apartment.

As for the environmental level, it has an importance as the two levels stated before. Public spaces can be source of reduction of pollution. Public parks are a good example. The presence of nature is always important in order to reduce pollution. Nature's fight against pollution isn't limited only on the harmful substances present in the air, but also it reduces the city noises (such as cars, trucks...).

Wasted spaces, ex-industrial buildings, or ex-commercial building can be transformed into public spaces. In other words, any wasted space or unused buildings can be transformed in to a public space that can be used by the local community or even tourists coming from other countries. For example, in Turin, Italy, Parco Dora, is the result of a transformed industrial area. This park is now used not only by the citizens of the city, but also from other countries, because it hosts many important events that are a source of attraction for tourists. Same for the Columbus Commons in Columbus, Ohio, USA. Columbus Commons is now located on the site of the former Columbus City Center mall. Since the mall couldn't attract people anymore, it was shut down and transformed into a park. This park didn't only attract the local citizens, but also enhanced the tourism of the city.

2.4.2 Design Quality and Accessibility of the Public Space

Design quality can affect the use of the public space. Trying to improve the quality of the design, three aspects should be considered: safety, comfort and amusement. Many elements can influence either positively or negatively those aspects.

Starting from the safety aspect, while designing a public space, it is very important to consider the security of the space. Unsafety is one of the biggest factors that can repulse and discourage citizens from visiting a place. Many designs concepts can be integrated in order to create safety. Avoiding hidden zones in the public spaces is an example. Hidden zones are characterized by a lack of light, and poor visibility from neighboring buildings or people passing by. They have the potential to host criminal actions, such as dealing with illegal substances, stealing...

Hidden zones can be avoided by having an adequate visibility of the park.

Elements can be added to the public spaces to increase their security. Taking a park as an example, it is very important to have enough lighting especially during night covering all the park including its trails.

If children playgrounds are integrated in the design, those playgrounds should be designed close to housing areas. This will allow a public monitoring.

Comfort should be also considered while designing a public space. Creating a comfortable area will increase its usage by the public.

Pedestrian path should be integrated in the design. The material used for the pedestrian path has an influence on its comfort. In public spaces, there should be always a room to walk comfortably. Prohibiting the access of cars can increase the comfort of walking in a public space.

A public space should also provide the possibility of comfortable sitting. The urban furniture can enhance this comfort. Creating zones with urban furniture can promote the interaction between citizens.

The view quality of the space influences its comfort. Creating a space with interesting and unhidden views, will promote its comfort. Distances can be very relaxing to the eye of a person.

For a public space to be comfortable, it is very essential to consider the noise level. A public space shouldn't be noisy. For the people seeking to use a public space to change the stress and quotidian rhythm, it is fundamental to provide them a calm and quiet space.

The third aspect is the amusement. It is as important as the two factors stated before. It will increase the visit of the public space as improving the experience of the

visitors. Many elements integrated in a design can contribute to this factor. For example, physical activities can be practiced. Taking a public park as an example, it would be important to create zones in this park where physical activities can be practiced.

In some public spaces, such as squares, creating some flexible multifunctional zones is very interesting. The flexibility of those zones allows them to have many functions. Taking a square as an example, if it is flexible, it can have the function of an open market in the morning and during the night it can host night activities, such as concerts. It is important that a public space continue functioning and hosting visitors during day-night and summer-winter.

2.4.3 Public Spaces in a Post-war context

In a post war period, it is very important to merge again the divided society. The first step into realizing this, would be making the citizens speak again with each other. When conversations happen between citizens, the fear of the other and the separation would diminish. Creating a place where meeting can happen, where people can try to mix again is very important in the reconstruction phase of a city in a post-war period.

Public places can play this role. They can become the ground where divisions can be reduced, and people can start interacting again. Public places can also become a place of conflict. “People can still fight in public places, the conflicts can be regenerated and translated in these places” said Dr. Fawaz¹. Here come the responsibilities of the authority system put in charge. This system will be responsible of reducing the secular tensions, to preach for co-existence and peace. To teach new generations about living together.

In this case, the public place will have the role of where the people and new generations will meet, where kids will play together. When kids start playing together, with time, divisions and hate will be eradicated from the society among the new generations.

1: Interview made during my visit to Lebanon

2.4.4 Beirut's Public Spaces

Green spaces, open spaces and public spaces are usually associated together. It is very important to point that not all public places are green, and not all green places are public. Also, not all open spaces are green neither all are public. Parks, squares, etc. can be semi-public, semi-private or even private. Green always improves the quality of the space, because it is associated with nature, the feeling of going out of the quotidian rhythm in noisy polluted cities. Green spaces such as gardens, can be private, or also shared by many users, which means not open to the public. By means, open spaces can belong to a nonpublic sector.

In the case of Beirut, we should see how much the reconstruction space reconsidered the design of public places in the city.

According to the plans of Solidere, there are many "open spaces". But the definition of "open spaces" isn't well specified according to Solidere's Master plans (Rim Al-Ayoubi, 2013). Are they public open spaces? Are they under the management of Solidere? Are they private?

In Solidere's master plan, the presence of green is very common. But as stated before, not all the green spaces are necessarily open to the public or are under public control or management. But in fact, a closer look to the master plan of Solidere, shows that the open spaces number is lower than what is supposed to be according the master plan (Rim Al-Ayoubi, 2013).

MEDITERRANEAN SEA

PEDESTRIAN STREETS

OPEN SPACES

FUTURE DEVELOPMENTS

NEW DEVELOPMENTS

RETAINED BUILDINGS

BEIRUT CITY CENTER LAND MARKS

PUBLIC BUILDINGS

- 01 HOUSE OF PARLIAMENT / G5
- 02 HOUSE OF PARLIAMENT ANNEX / H5
- 03 GRAND SERAIL / H4
- 04 SERAIL CLOCK TOWER / H4
- 05 MUNICIPALITY OF BEIRUT / G6
- 06 COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION (CDE) / G5
- 07 CENTRAL POST OFFICE / H5

RELIGIOUS BUILDINGS

- 08 AL DABRACHA MOSQUE / F7
- 09 ALL SAINTS ANGLICAN CHURCH / E3
- 10 AL MAJIDYA MOSQUE / E6
- 11 AL OMARI MOSQUE / G6
- 12 AMIR ASSAF MOSQUE / G6
- 13 AMIR MUNZER MOSQUE / G5
- 14 MACHEN ABRAHAM SYNAGOGUE / G4
- 15 MUHAMMAD AL AMIN MOSQUE / H6
- 16 NATIONAL EVANGELICAL CHURCH OF BEIRUT / H4
- 17 NOURIA CHAPEL / H6
- 18 ST ELIE ARMENIAN CATHOLIC CATHEDRAL / I7
- 19 ST ELIE CATHOLIC CATHEDRAL / H6
- 20 ST ELIE MARONITE CHURCH / G2
- 21 ST GEORGE MARONITE CATHEDRAL / H6
- 22 ST GEORGE ORTHODOX CATHEDRAL / H6
- 23 ST LOUIS CAPUCHIN CHURCH / G5
- 24 ST NICHAN ARMENIAN ORTHODOX CHURCH / H4
- 25 ST VINCENT DE PAUL CHURCH / J6
- 26 ZAWIYAT IBN IRAQ SHRINE / G6

OTHER BUILDINGS

- 27 ARIHAN SCHOOL / G3
- 28 ALDI SARADAR HEADQUARTERS / G5
- 29 BEIRUT SOUKS / E5 / E6
- 30 BESANCON SCHOOL / G3
- 31 BEIRUT TRADE CENTER / H2
- 32 CITY CENTER DOME / I6
- 33 EL-SOURJ / G7
- 34 GRAND THEATRE / I6
- 35 LAZARETH COMMERCIAL CENTER / I6
- 36 MARINA TOWERS / E3

- 37 MERIT CORPORATION HEADQUARTERS / G9
- 38 MOANAD MUSEUM / H3
- 39 OTTOMAN LIGHTHOUSE / D9
- 40 PLATINUM TOWER / E2
- 41 SARAKAMIS BUILDING / G5
- 42 STARCO COMMERCIAL CENTER / F3
- 43 TANDOS BUILDING / F5
- 44 THE LANDMARK / E5
- 45 UN HOUSE / I5
- 46 VIRGIN MEGASTORE / H7
- 47 ZAITUNAY BAY / E2 / CD3

THE CITY'S ANCHOR POINTS

ARCHEOLOGICAL SITES

- 48 BEVEDERE SQUARE / F7
- 49 CASTLE SQUARE / F7
- 50 HADIQAT AS-SAMAH (GARDEN OF FORGIVENESS) / H6
- 51 MEDIEVAL WALL AND MOAT / F3
- 52 OTTOMAN WALL WALK / E6 - D9
- 53 PETIT SERAIL / G7
- 54 PHOENICIAN GLACIS / G8
- 55 PHOENICIAN-PERSIAN QUARTER / F6
- 56 ROMAN BATHS GARDEN / G5
- 57 ROMAN HIPPODROME / G4

MAIN GARDENS AND OPEN SPACES

- 58 AJAMI SQUARE / F6
- 59 AMIR AMIN GARDEN / I5
- 60 BAB DRIS SQUARE / F5
- 61 BASSEL FULEIHAN SQUARE / E2
- 62 DEBBAS SQUARE / I7
- 63 GENERAL FOULAD CHEHAR GARDEN / I3
- 64 GIBRAN KHLEI GIBRAN GARDEN / H4
- 65 GIBRAN TUENI MEMORIAL / G7
- 66 HARBOR SQUARE / F6
- 67 IMAM OUZAI SQUARE / G5
- 68 JEAN-PAUL II SQUARE / E5
- 69 KHAN ANTONIN BEY SQUARE / E6
- 70 MAKYEYS' SQUARE / H7
- 71 MINA EL HOSN SQUARE / E2
- 72 MUNICIPALITY GARDEN / G6
- 73 NEJMEH SQUARE WITH ITS CLOCK TOWER / H6
- 74 OMAR DAOUK SQUARE / F4
- 75 OMAR ONSI SQUARE / H5
- 76 RAYC HARIRI MEMORIAL / H7
- 77 RAYC HARIRI SCULPTURAL GARDEN / H4
- 78 ROAD EL SOLH SQUARE / H5
- 79 SAIFI SQUARE / I8
- 80 SAMIR KASSIR GARDEN / G7
- 81 SANTIYA GARDEN AND PROMENADE / E5
- 82 SEASIDE PROMENADE / C4 - A9
- 83 SHORELINE GARDENS / E4
- 84 WADI ABDO JAMIL GARDEN / G3
- 85 WATERSIDE PARK / CD4
- 86 ZEITOUNEH SQUARE / F3

SOLIDERE © 2009



Figure 28: Beirut city center' master plan



Figure 29: Open Spaces according to Soldere's Plans, any uncovered or unbuilt space is considered open space by Solidere's plans (Al-Ayoubi, 2013)

Legend:

- | | | | |
|---|---------------------------------------|---|---------------------------------------|
| 01 HOUSE OF PARLIAMENT | 22 ST GEORGE ORTHODOX CATHEDRAL | 43 TANIOS BUILDING | 64 GIBRAN KHALIL GIBRAN GARDEN |
| 02 HOUSE OF PARLIAMENT ANNEX | 23 ST LOUIS CAPUCHIN CHURCH | 44 THE LANDMARK | 65 GIBRAN TUENI MEMORIAL |
| 03 GRAND SERAIL | 24 ST NICHAN ARMENIAN ORTHODOX CHURCH | 45 UN HOUSE | 66 HARBOR SQUARE |
| 04 SERAIL CLOCK TOWER | 25 ST VINCENT DE PAUL CHURCH | 46 VIRGIN MEGASTORE | 67 IMAM OUZAI SQUARE |
| 05 MUNICIPALITY OF BEIRUT | 26 ZAWIYAT IBN IRAQ SHRINE | 47 ZAITUNAY BAY | 68 JEAN-PAUL II SQUARE |
| 06 COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION (CDR) | 27 AHLIAH SCHOOL | 48 BELVEDERE SQUARE | 69 KHAN ANTOUN BEY SQUARE |
| 07 CENTRAL POST OFFICE | 28 AUDI SARADAR HEADQUARTERS | 49 CASTLE SQUARE | 70 MARTYRS' SQUARE |
| 08 AL DABBAGHA MOSQUE | 29 BEIRUT SOUKS | 50 HADIQAT AS-SAMAH (GARDEN OF FORGIVENESS) | 71 MINA EL HOSN SQUARE |
| 09 ALL SAINTS ANGLICAN CHURCH | 30 BESANCON SCHOOL | 51 MEDIEVAL WALL AND MOAT | 72 MUNICIPALITY GARDEN |
| 10 AL MAJIDIYA MOSQUE | 31 BEIRUT TRADE CENTER | 52 OTTOMAN WALL WALK | 73 NEJMEH SQUARE WITH ITS CLOCK TOWER |
| 11 AL OMARI MOSQUE | 32 CITY CENTER DOME | 53 PETIT SERAIL | 74 OMAR DAOUK SQUARE |
| 12 AMIR ASSAF MOSQUE | 33 EL-BOURI | 54 PHOENICIAN GLACIS | 75 OMAR ONSI GARDEN |
| 13 AMIR MUNZER MOSQUE | 34 GRAND THEATRE | 55 PHOENICO-PERSIAN QUARTER | 76 RAFIC HARIRI MEMORIAL |
| 14 MAGHEN ABRAHAM SYNAGOGUE | 35 LAZARIEH COMMERCIAL CENTER | 56 ROMAN BATHS GARDEN | 77 RAFIC HARIRI SCULPTURAL GARDEN |
| 15 MOHAMAD AL AMIN MOSQUE | 36 MARINA TOWERS | 57 ROMAN HIPPODROME | 78 RIAD EL SOLH SQUARE |
| 16 NATIONAL EVANGELICAL CHURCH OF BEIRUT | 37 MERIT CORPORATION HEADQUARTERS | 58 AJAMI SQUARE | 79 SAIFI SQUARE |
| 17 NOURIA CHAPEL | 38 MOAWAD MUSEUM | 59 AMIR AMIN GARDEN | 80 SAMIR KASSIR GARDEN |
| 18 ST ELIE ARMENIAN CATHOLIC CATHEDRAL | 39 OTTOMAN LIGHTHOUSE | 60 BAB IDRIS SQUARE | 81 SANTIYA GARDEN AND PROMENADE |
| 19 ST ELIE CATHOLIC CATHEDRAL | 40 PLATINUM TOWER | 61 BASSEL FULEIHAN SQUARE | 82 SEASIDE PROMENADE |
| 20 ST ELIE MARONITE CHURCH | 41 SEMIRAMIS BUILDING | 62 DEBBAS SQUARE | 83 SHORELINE GARDENS |
| 21 ST GEORGE MARONITE CATHEDRAL | 42 STARCO COMMERCIAL CENTER | 63 GENERAL FOUD CHEHAB GARDEN | 84 WADI ABOU JAMIL GARDEN |
| | | | 85 WATERSIDE PARK |
| | | | 86 ZEITOUNEH SQUARE |



Figure 30: "Open" "public" and available spaces according to Solidere's plans, every open space belonging to a worship place or a governmental building is considered public in Solidere's plans (Al-Ayoubi, 2013)

Open Spaces According to Solidere's plans

- | | | | |
|--|------------------------|--|---|
| | Present in three plans | | Open space for the future |
| | Present in two plans | | Not available spaces (According to experience) |
| | Present in one | | Green spaces containing one or more trees (According to experience) |

Based on Solidere's plans present in *Brochure 2004, Annual Report 2008, Annual Report 2009*

Al-Ayoubi.R, 2013, سيتي إسكايپ



Figure 31: "Open" "public" and available spaces in the center of Beirut, every open public space not surrounded by any kind of barriers is considered available according to experience



Figure 32: Open Green public spaces available in the center of Beirut, every space containing grass or not less than three trees is considered green space according to experience

Legend:

- | | | | |
|---|---------------------------------------|---|---------------------------------------|
| 01 HOUSE OF PARLIAMENT | 22 ST GEORGE ORTHODOX CATHEDRAL | 43 TANIOS BUILDING | 64 GIBRAN KHALIL GIBRAN GARDEN |
| 02 HOUSE OF PARLIAMENT ANNEX | 23 ST LOUIS CAPUCHIN CHURCH | 44 THE LANDMARK | 65 GIBRAN TUENI MEMORIAL |
| 03 GRAND SERAIL | 24 ST NICHAN ARMENIAN ORTHODOX CHURCH | 45 UN HOUSE | 66 HARBOR SQUARE |
| 04 SERAIL CLOCK TOWER | 25 ST VINCENT DE PAUL CHURCH | 46 VIRGIN MEGASTORE | 67 IMAM OUZAI SQUARE |
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| 06 COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION (CDR) | 27 AHLIAH SCHOOL | 48 BELVEDERE SQUARE | 69 KHAN ANTOUN BEY SQUARE |
| 07 CENTRAL POST OFFICE | 28 AUDI SARADAR HEADQUARTERS | 49 CASTLE SQUARE | 70 MARTYRS' SQUARE |
| 08 AL DABBAGHA MOSQUE | 29 BEIRUT SOUKS | 50 HADIQAT AS-SAMAH (GARDEN OF FORGIVENESS) | 71 MINA EL HOSN SQUARE |
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| 10 AL MAJIDIYA MOSQUE | 31 BEIRUT TRADE CENTER | 52 OTTOMAN WALL WALK | 73 NEJMEH SQUARE WITH ITS CLOCK TOWER |
| 11 AL OMARI MOSQUE | 32 CITY CENTER DOME | 53 PETIT SERAIL | 74 OMAR DAOUK SQUARE |
| 12 AMIR ASSAF MOSQUE | 33 EL-BOURJ | 54 PHOENICIAN GLACIS | 75 OMAR ONSI GARDEN |
| 13 AMIR MUNZER MOSQUE | 34 GRAND THEATRE | 55 PHOENICO-PERSIAN QUARTER | 76 RAFIC HARIRI MEMORIAL |
| 14 MAGHEN ABRAHAM SYNAGOGUE | 35 LAZARIEH COMMERCIAL CENTER | 56 ROMAN BATHS GARDEN | 77 RAFIC HARIRI SCULPTURAL GARDEN |
| 15 MOHAMAD AL AMIN MOSQUE | 36 MARINA TOWERS | 57 ROMAN HIPPODROME | 78 RIAD EL SOLH SQUARE |
| 16 NATIONAL EVANGELICAL CHURCH OF BEIRUT | 37 MERIT CORPORATION HEADQUARTERS | 58 AJAMI SQUARE | 79 SAIFI SQUARE |
| 17 NOURIA CHAPEL | 38 MOAWAD MUSEUM | 59 AMIR AMIN GARDEN | 80 SAMIR KASSIR GARDEN |
| 18 ST ELIE ARMENIAN CATHOLIC CATHEDRAL | 39 OTTOMAN LIGHTHOUSE | 60 BAB IDRIS SQUARE | 81 SANTIYA GARDEN AND PROMENADE |
| 19 ST ELIE CATHOLIC CATHEDRAL | 40 PLATINUM TOWER | 61 BASSEL FULEIHAN SQUARE | 82 SEASIDE PROMENADE |
| 20 ST ELIE MARONITE CHURCH | 41 SEMIRAMIS BUILDING | 62 DEBBAS SQUARE | 83 SHORELINE GARDENS |
| 21 ST GEORGE MARONITE CATHEDRAL | 42 STARCO COMMERCIAL CENTER | 63 GENERAL FOUD CHEHAB GARDEN | 84 WADI ABOU JAMIL GARDEN |
| | | | 85 WATERSIDE PARK |
| | | | 86 ZEITOUNEH SQUARE |

Open Spaces According to Solidere's plans

- | | | | |
|--|------------------------|--|---|
| | Present in three plans | | Open space for the future |
| | Present in two plans | | Not available spaces (According to experience) |
| | Present in one | | Green spaces containing one or more trees (According to experience) |

Based on Solidere's plans present in *Brochure 2004, Annual Report 2008, Annual Report 2009*

Al-Ayoubi.R, سيتي إسكايب, 2013

Most of the declared “open spaces” or “green open spaces” by Solidere weren’t open to the public. This leaves Beirut’s citizens a city where few places are available for them to interact (the amount of available open green public spaces is only five in whole Beirut according to Rim Al-Ayoubi in the plan D).

2.5 Experience carried out

At the end of this analysis of Beirut’s city center planning and reconstruction, we can deduce many negative points should be avoided in any reconstruction phase in any city in a post-war period.

It is very risky to privatize very important project intended mostly to the public, or the public use, because most of the private firms, will implement strategies and designs that will be on their favor and not for the public interest. Privatization of public projects should be very well controlled and regulated by governments in order not to let the private interests get over the public ones.

Erasing the memory of a place, including its role, especially if it was the city center (which is normally one of the most important meeting points in a city), will cut the link between the place and the citizen. Only nostalgic feelings will continue being present in the old generation while the identity of the place will totally different.

The gentrification of the area will lead to a new separation in the society, it will occur according to the economical level of the citizens. Since post-war period is in context, this means that the society is already divided between each other. In the case of Beirut, it was a sectarian division. Adding another type of separation will decrease the social cohesion even more. On the other hand, gentrification will eliminate the opportunity of creating a place where people can mix and interact with each other again, especially in the case of Beirut, the city center which used to act as a melting pot.

Public spaces are very important in a city design since they are the core of a city, where people are active, where people gather and do activities which constitute the motor engine of a city. It is what makes it alive. In a post-war period, they can become a place where people’s barriers can fall, and citizens can start speaking with each other. They can become the place where new generations of kids, and young

people can gather, play, interact, and with time they will be responsible for leading the change in the divided society towards social cohesion, removing prejudices and stereotypes that were generated as a result of the war. Neglecting such important places will reduce the quality of life in the city, and thus reducing its dynamism and yielding it hostage to a certain social class.

3 Aleppo, Syria

3.1 History of Aleppo

The precise age of Aleppo is unknown. Aleppo is one of the oldest, still inhabited cities in the world. It is the second largest city in Syria after Damascus. The city's name in Arabic is Halab. Aleppo was the capital of the Amorite Dynasty kingdom of Yamkhad (1800-1525 B.C). It is located on a strategic point between the sea and the Euphrates river, which makes it a major trading spot. This trading spot was active between Europe and the East, especially from China and India till Europe. It was one of the greatest trading centers between Europe and the East before the use of Suez Canal.

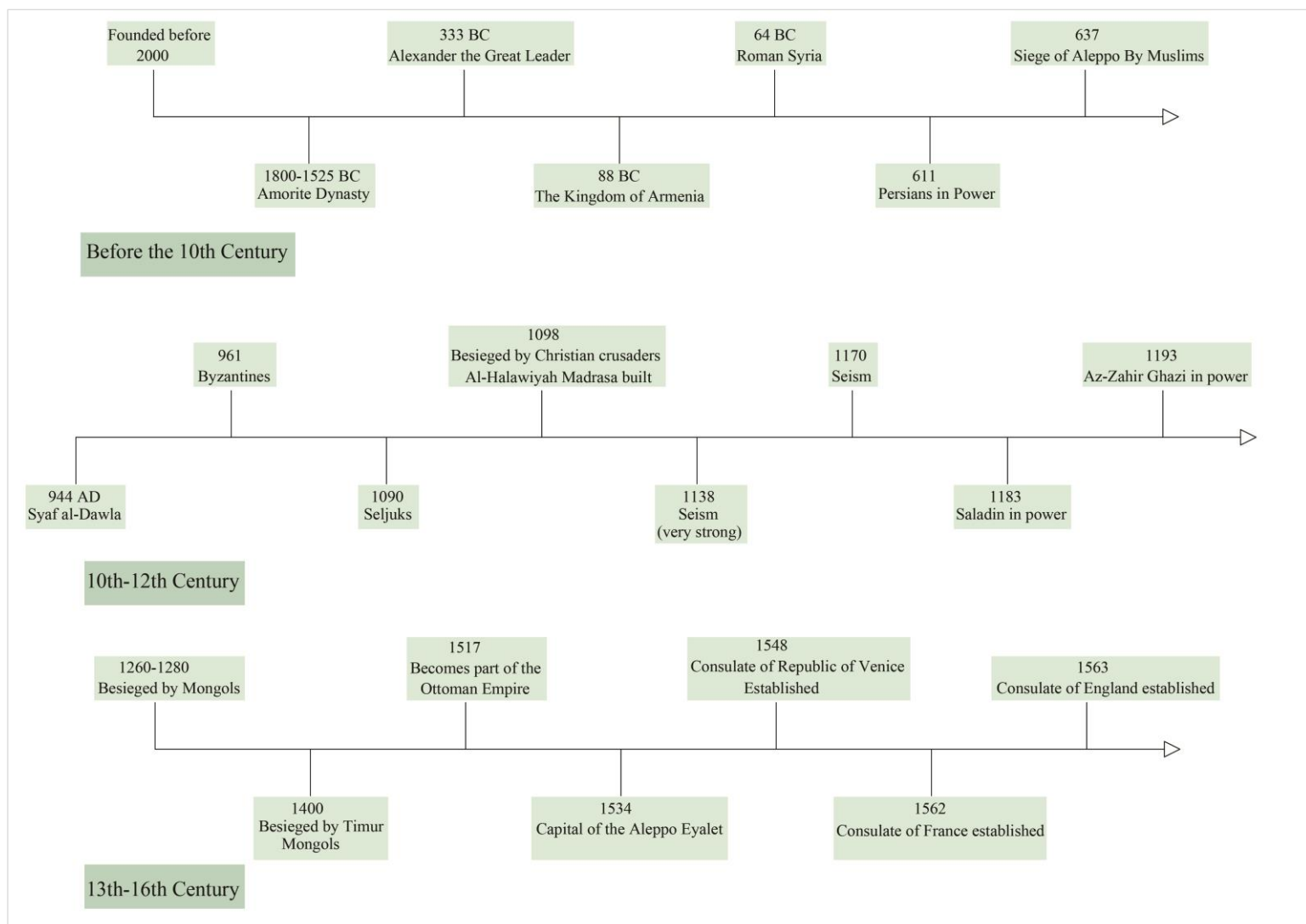


Figure 33: Aleppo Time-table 1¹

1: realized by the author based on: <https://www.varldskulturmuseerna.se/syrien/map-timeline-en.html>,
<https://www.ancient.eu/timeline/aleppo/>

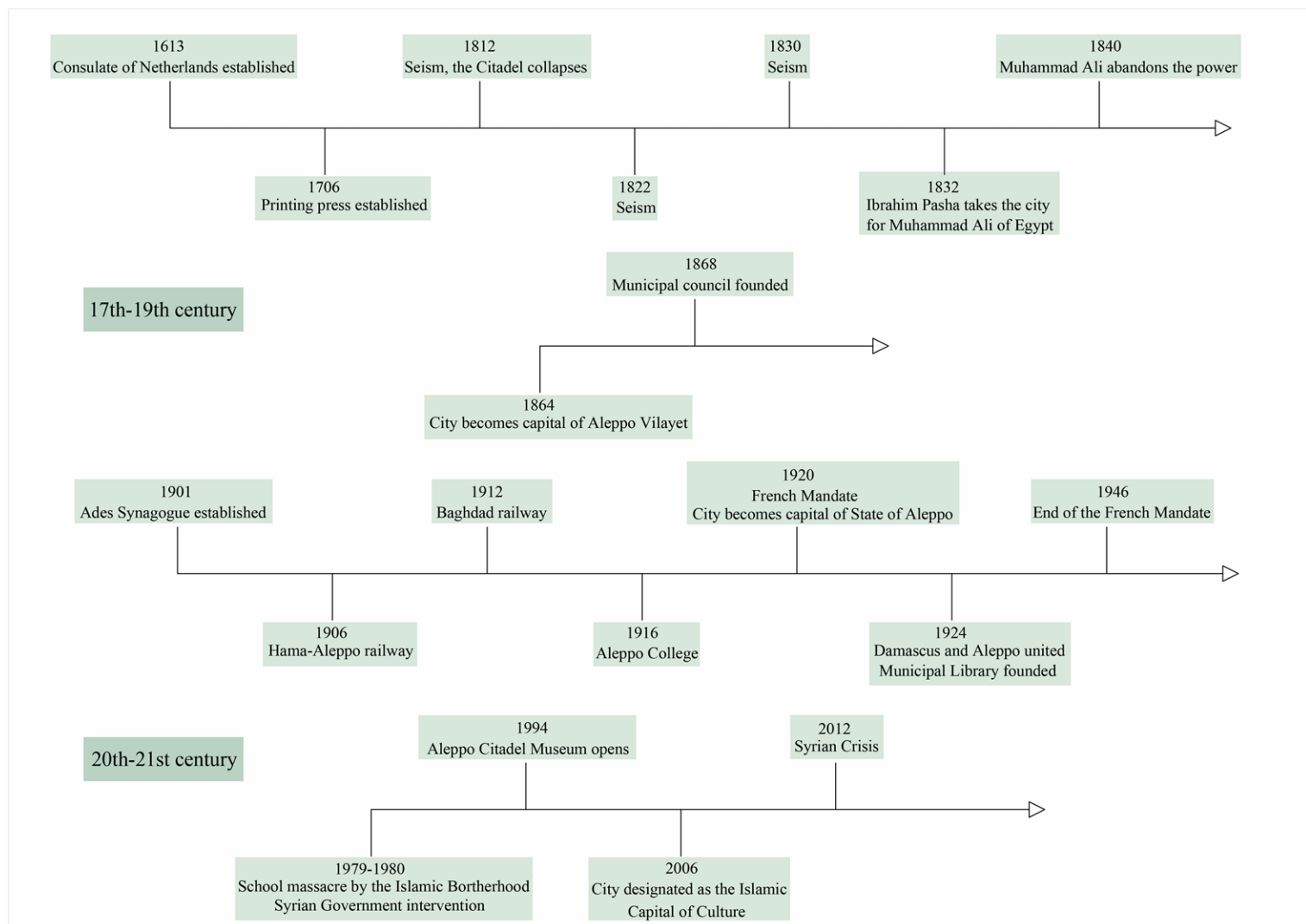


Figure 34: Aleppo Time-table 2¹

3.2 Pre-war urban analysis

3.2.1 Aleppo Governate

Aleppo, located in the north-west of Syria, in 2011 was the city in Syria with the most population, inhabited by 3 million citizens (25% of the national urban population). Since the Syrian war began, the city became the second most populated city, with the capital Damascus becoming the first. Aleppo has experienced many civilizations and its culture is one of the main components of its identity. It had witnessed the evolution of Mesopotamia and was considered the biggest city in the Syrian region for centuries, the third biggest city in the Ottoman empire and the second in Syria. Therefore, Aleppo has an important historical heritage, but also constituted one of the major national trading and commercial centers.

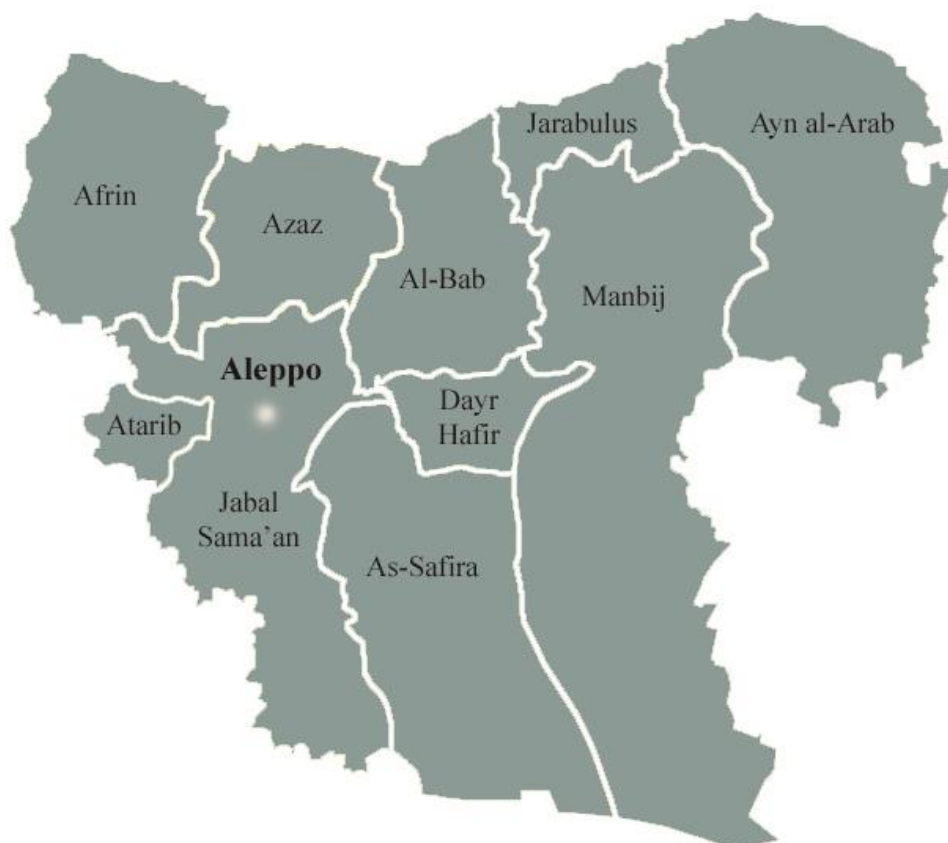


Figure 35: Aleppo Governate Map

During the last decades, Aleppo witnessed a huge growth which resulted in an increase in the IDP¹ from various other cities of Syria. Those two factors lead to the formation of informal settlements, since the population growth was not proportional

1: Internally Displaced Person

with the housing supply and availability. The urban migration didn't occur only in Aleppo, but also in major cities such as the capital Damascus, where informal settlements can still be recorded.

Aleppo Governorate is composed of 10 districts:

- Jabal Sama'an (important concentration of population, Aleppo city)
- Afrin District
- Atarib District
- Ayn al-Arab District
- Azaz District
- Al-Bab District
- Dayr Hafir District
- Jarabulus District
- Manbij District
- Safirah District

3.2.2 Aleppo City

The major part of Aleppo's population was concentrated in the urban areas. Aleppo played a major leading role in the economy of the country. Industry, agriculture and tourism were the main sectors of Aleppo's economy. It is famous for its old city, its remarkable citadel, historical old souk and its handcrafts.



Figure 36: Aleppo Citadel (Before the war)



Figure 37: Al Madina Souq

Figure 36 source: <https://www.bbc.com/news/world-middle-east-33499609>

Figure 37 source: <https://www.reuters.com/article/us-syria-crisis/large-part-of-ancient-souk-in-syrias-aleppo-in-ashes-activists-idUSBRE88J0X720120930>

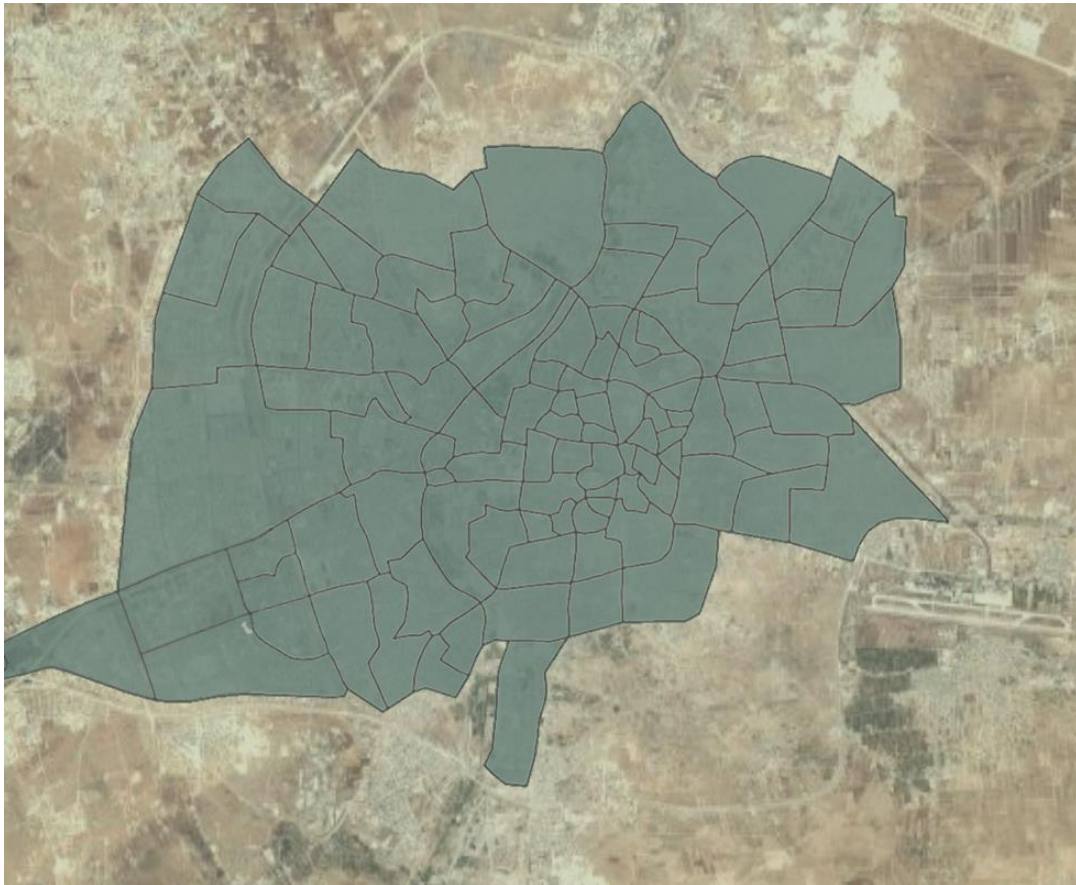


Figure 38: Aleppo City Map

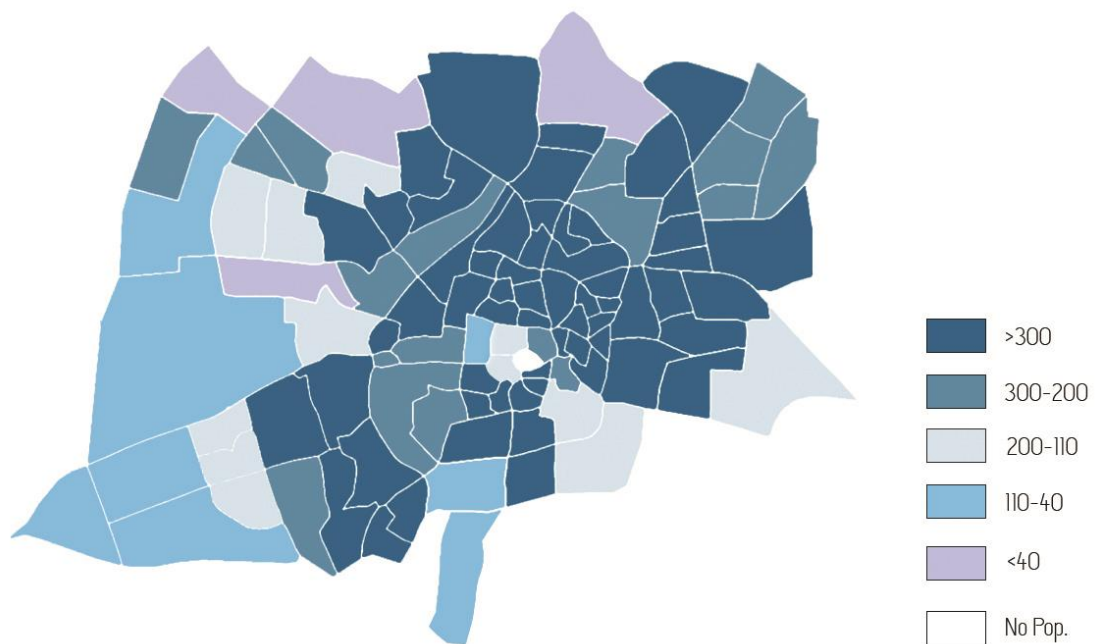


Figure 39: Population Density in the city before the crisis (Capita/ha)

3.2.3 Aleppo City Land Use

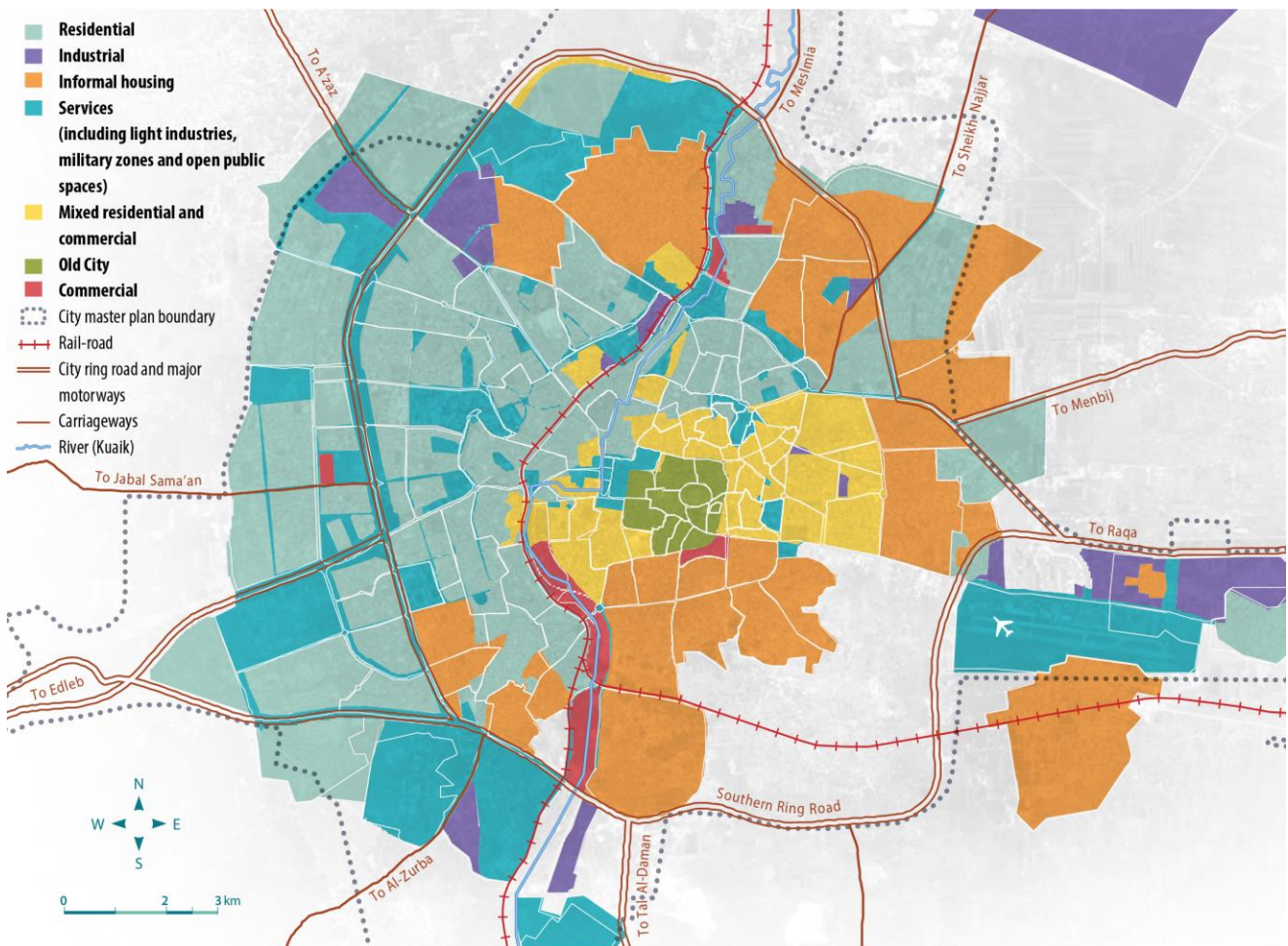


Figure 40: City Urban Composition (Source: "City Profile Aleppo", May 2014)



Figure 41: Land use distribution Based on "City Profile Aleppo", May 2014

3.3 Crisis Analysis

The war in Syria had led to the interfering of many other countries directly on the Syrian territory. The interfering resulted in ripping Aleppo's Governate into three major parts.

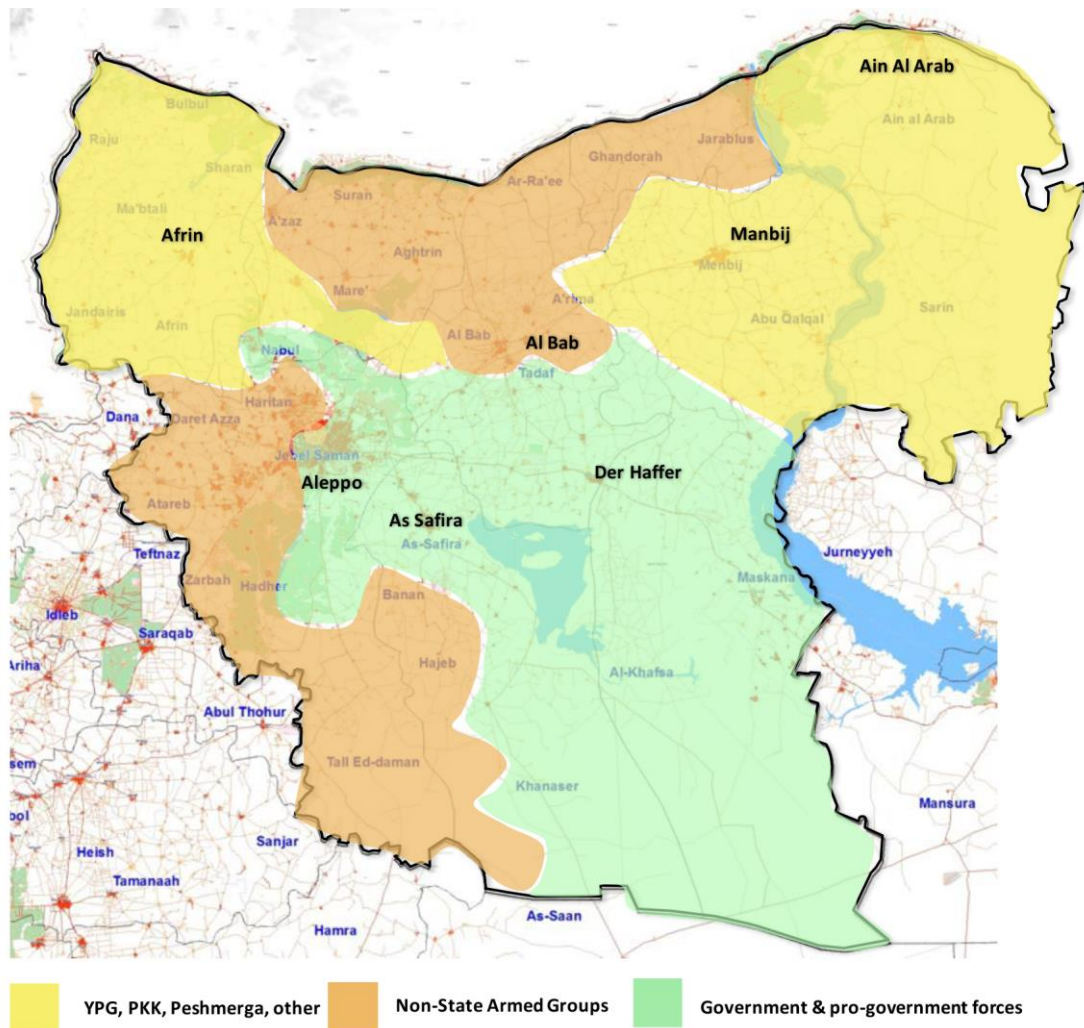


Figure 42: Aleppo Governorate Division

3.3.1 Damage Analysis

Since the beginning of the crisis, IDPs increased in the city of Aleppo. But when the crisis attained the city of Aleppo (end of 2012) people started leaving the city, heading to other cities, or towards other countries.

The war lead to the displacement of approximately 1.72 million of people, the destruction (partially/fully) of almost 302.000 housing units by the year 2013. The industrial sector was heavily damaged and the income source for many inhabitants was almost non-existent. Aleppo was one of the major industrial cities in Syria.

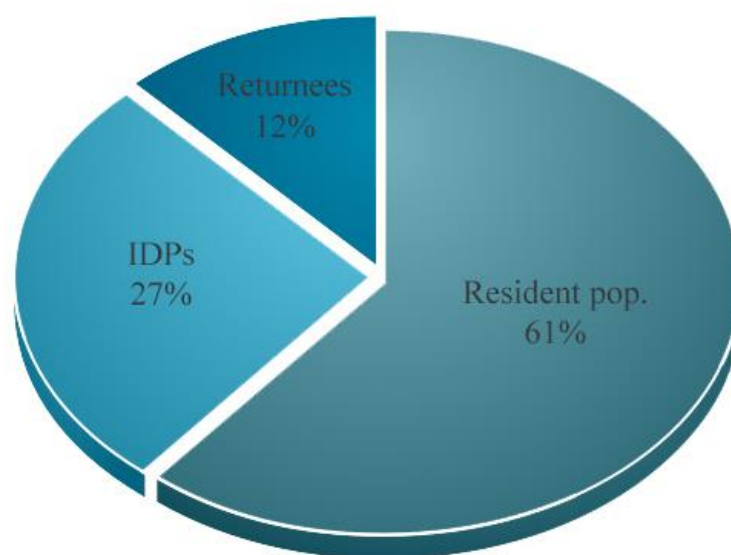


Figure 43: Aleppo Governorate Population in 2017

3.3.2 Aleppo City's Damage

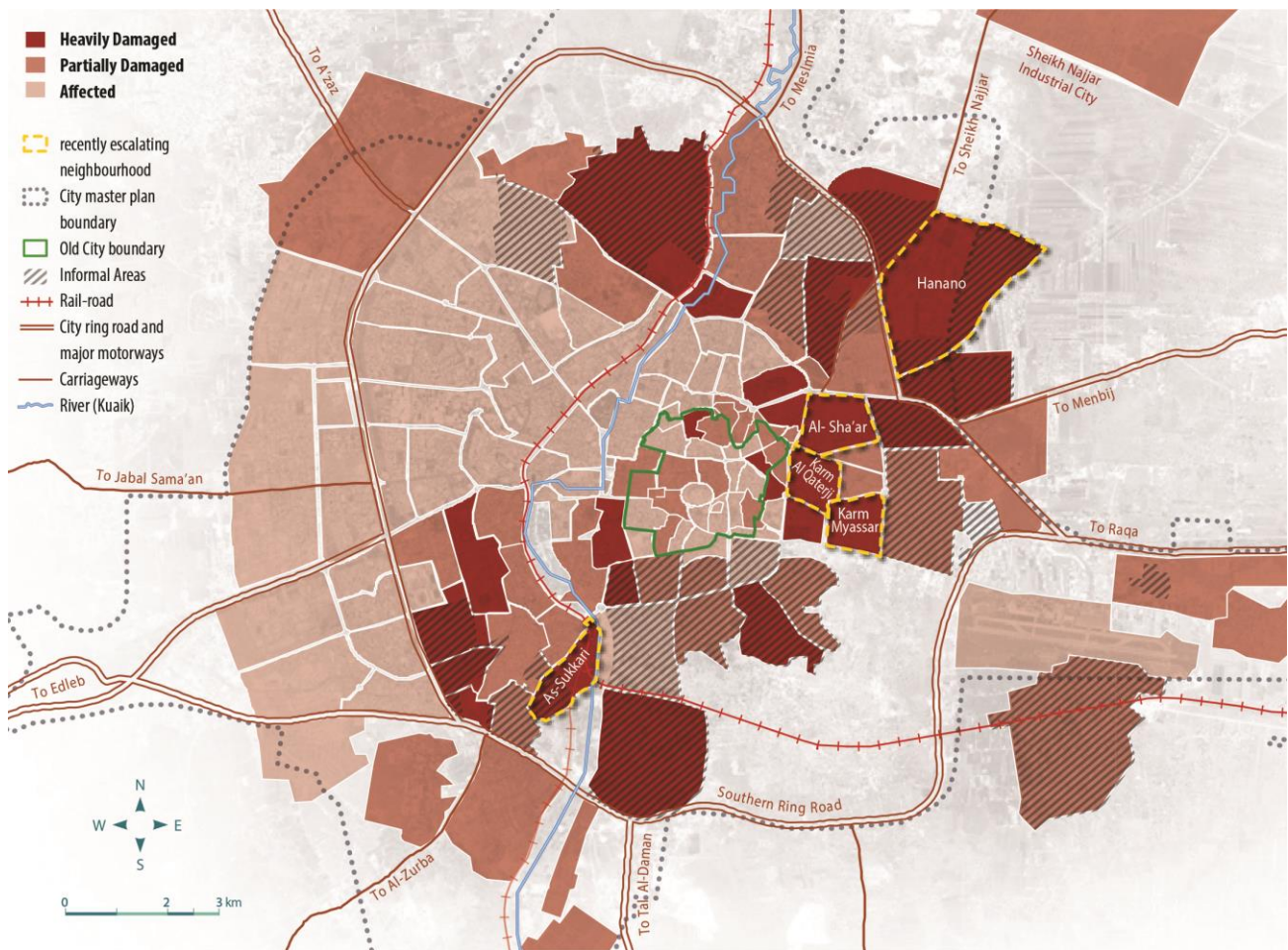


Figure 44: Damage Analysis



Figure 45: Distribution of heavy damage per land-use



Figure 46: Neighborhoods per damage level

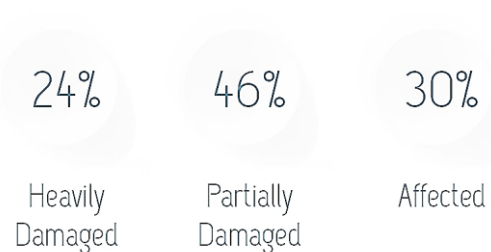


Figure 47: Affected population per housing damage level (for total city population)

Figure 44 source: City Profile Aleppo, May 2014

Figure 45 based on City Profile Aleppo, May 2014

Figure 46 based on City Profile Aleppo, May 2014

Figure 47 based on City Profile Aleppo, May 2014

3.3.3 Aleppo City's Functionality

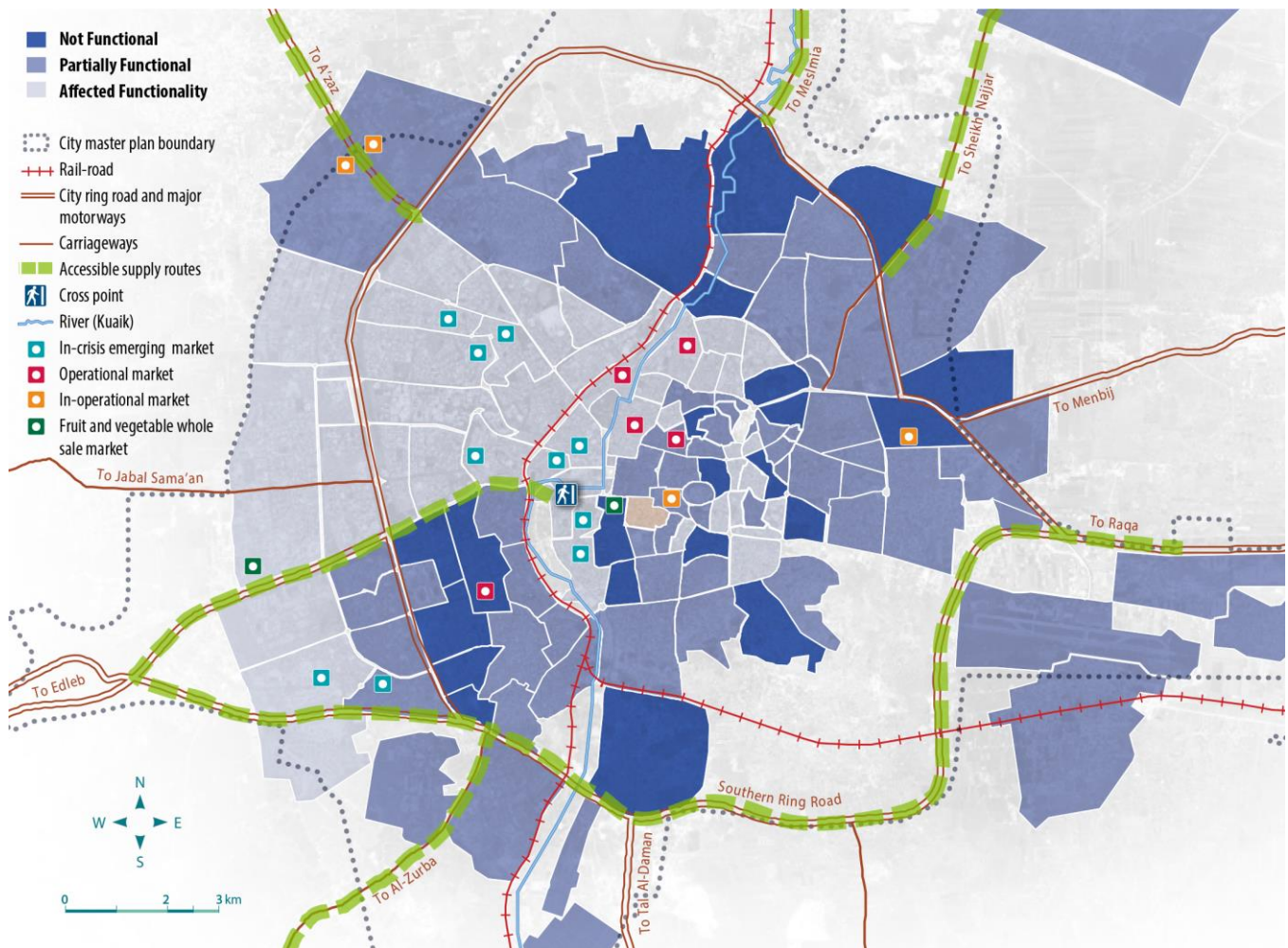


Figure 48: Current level of functionality

People are still living in damaged areas (Figure 47,48). Some of the heavily damaged areas, such as Hanano neighborhood, are still populated (Figure 28). In other partially damaged or affected zones, functionality can still be noticed. This is due to the financial problems that civilians are facing. They can't afford moving to other cities, paying rents, etc., so their only option was to stay in the city.

3.4 Public Participation

In the 1960s, the public were considered always as traditional consumers, users that must accept anything offered to them by the producer or the authority. Lately, an approach where the people opinion is included in a design decision making, was promoted. “The idea of citizen participation is a little like eating spinach: no one is against it in principle because it is good for you” (Arnstein.S, 1969). According to Sherry Arnstein, there exists eight Rungs on a Ladder of Citizen Participation. The first two are manipulation and therapy, they constitute the degree of the “nonparticipation of the citizens”. Then come successively: informing, consultation and placation, which constitute the “degrees of Tokenism”. The last rungs on the Ladder of Citizen Participation are partnership, delegated power, and citizen control. They constitute the “Degrees of citizen Power”. The first-degree rungs have as objective “not to enable people to participate in planning or conducting programs, but to enable powerholders to educate or cure the participants” (Arnstein.S, 1969). The second-degree rungs allow “the have nots to hear and to have a voice” (Arnstein.S, 1969), which means the citizen can participate in discussions and conversations. The final, third degree rungs are consisting of “levels of citizen power with increasing degrees of decision-making clout” (Arnstein.S, 1969), in other words, the citizen has directly the power to participate in the decision making.

3.4.1 Importance of Public Participation

Public participation involves, while designing or managing an area, the local community in order to give them a voice that can affect or influence changes occurring to the area and make those changes in the favor of the locals. Giving the local community this voice isn’t only in their favor, but it is also in the favor of the architects, planners and the authority, because the people participation can help the design improving and creating a satisfying environment for everyone. It develops an atmosphere where people sharing common ideas can be brought together. When concluding the design, after considering the public opinion, the citizen will feel connected to the design, and if it succeeds, the feeling of achievement will also be shared with the community. The planning and design strategy and procedure should satisfy the needs and requests of the local citizens.

3.4.2 Benefits of Public Participation

Having people's participation and cooperation is an essential part of the design process. It includes many benefits: it helps in improving the city's design, it tailors the city according to the citizens' needs, wants and opinions, it empowers the people, making them able to participate in the city changing design and helps in gaining people's cooperation and understanding. As for the architect or the urban planner, he/she can sell the change and the design to the people and make them embrace it.

First, the public participation improves the quality of the city design. What makes a design successful is not only its esthetic part, but also its implementation and functionality. The use of a certain design space by the people influences its functionality and shows if the designed space is operating well or not. In other words, if the people participate in a design process of a space, and the designer takes into consideration their needs and feedbacks, this will allow the new space to be working effectively according to the citizens.

Second, Tailoring the city according to people's needs and opinions will favorize any success. The achievement will be shared with the community and this will emphasize more the design in question. But if the things go the other way, which means the design in question faces a failure, public participation will minimize this failure.

Third, giving the power and the ability to the people to participate in changing the city design will grant the community a feeling of having the power to change their built environment, the ability to participate in finding solutions to problems facing the design in question.

In addition, people's participation can generate ideas for the architect or urban planner, and more likely, he will be able sell the change to the people and make them embrace it. Having the people opinions and ideas can be very helpful in resolving some conflicts, especially in a post-war period.

Finally, gaining people's cooperation and understanding, in other words, any future designs or changes in the local built environment, more people will be encouraged to participate in the change that will take place.

To conclude, people participation has many benefits as previously mentioned and should be given importance in any design process that includes building and urban planning.

3.4.3 Techniques, Procedure of Public Participation

People's participation can be implemented in many ways and methods. Each one of them is effective in a different way on a different level. It is always important to implement many methods to gather data from all generations, genders and backgrounds constituting the local community.

Making surveys is a very known method used to collect data. This method consists in an implementation of a questionnaire where citizens' opinion can be expressed through their answers. It is based on statistics, see how many people shares approximately the same opinions. One of the advantages is that surveys can gather data from huge number of participants. It can be qualitative and quantitative. Surveys are time consuming, this is one of the main issues in implementing such a method, but considering social media, surveys can become less time consuming and faster in information selection.

A second method that can be implemented which is creating groups on social media or creating online forums. Using this method can give the local community the freedom to express their opinion whenever they want and give some ideas on implementations of solutions for a problem in a certain design. One of the disadvantages of this method, is that for many elderly citizens, it is uncommon for them to use forums or social media, which means they won't be able to express their opinions.

Interviews is also a very common procedure. It is very helpful since it is a face to face method. This can make the data collected more descriptive and accurate. People from all generations and backgrounds can express their opinions during an interview. The disadvantages of this method are the time consumption and the fact that it is hard to find common points and shared opinions since interviews are subjective.

Establishing an office that can gather citizens' feedbacks and opinions is a very effective method. Any person can pay a visit to the office and complain, give ideas, share opinions, criticize decisions...

The cons of such a method are that it is time consuming and can be responsible cost increase.

Simulations of a design experience can be a very interesting procedure. Let's take the example of designing a multi-use open space, assuming that it can become an open-air market in the morning, and during the night it can host some concerts for example. Some simulations of such ideas can be realized in order to make the citizens live the experience. Making people live the experience is very important and interesting, because they will be close to the reality of the design and the decisions made about their built environment.

After the simulation, information and feedbacks can be gathered in order to remake new decisions, keep the old ones, change something in the design, etc. The simulation can consume too much time and can add costs if the design doesn't satisfy the needs of local community.

3.4.4 Importance of Public Participation in a post-war period

After a war, the population becomes divided, socially, ideologically, politically..., and in order to implement any solution in any city, at any level (reconstruction, restoration, infrastructure, municipal decisions...) all the part of the community should be satisfied in order not to leave any feeling of grievance.

In the case of war, usually the neighborhood, area, or city are heavily damaged. Considering an example at a neighborhood scale, implementing a reconstruction will always cause some changes in the design and the role of the damaged neighborhood. In other words, the local community will be facing a situation where they will have to live in a new space carrying all along a nostalgic feeling. The main problem in this case is if the new reconstructed neighborhood doesn't satisfy the local community, they will lose any sort of link to the new neighborhood, they won't feel belonging anymore to the place. The public participation process is very important in this case. It will allow the locals to participate in the reconstruction of

their new area. This will lead to a creation of a link between them the new space. The nostalgia of the old neighborhood will remain, but at the same time they will feel belonging to the space because they have participated in the reconstruction.

It is a very hard work to bring peoples interests and opinions together. Making everyone happy is a very hard mission. But it is still not impossible. In many cases, at least one of the community's groups is left excluded. This (these) excluded group(s), will become one of the causes that can hinder any decision making. In a post war reconstruction, all the groups should be involved in the design and the solutions in order to avoid any future conflicts.

At a scale of a city for example, the authority in charge should study carefully the needs of the community living there, after the crisis, and implement solutions that involves all the community. Particularly, going out of a crisis, at the beginning, all the citizens ask for the basics needs, which are water, electricity, medical services. The authority or the local institution have the obligation to provide those basic needs for everyone without discrimination.

The public participation can promote solutions for finding common grounds. Making surveys, interviews or any method listed before, can help the decision maker acquire an understanding of the situation. This will lead to find solutions that can fit everyone.

For example, in the case of Beirut's downtown reconstruction by Solidere, the people with low income weren't considered. The target in the reconstruction were people with high income, tourists from Arab countries, especially the Arab golf. Investors and rich people are a part of successful design, and they certainly shouldn't be excluded or neglected in any decision making.

But also, citizens with medium or low income should be considered since they are part of the society. The Syrian crisis had a negative impact on the Lebanese tourism sector, which left Downtown Beirut an empty city center with businesses shutting down (figures 28 and 29).

3.4.5 Obstacles of Public Participation in the case of Aleppo

The notion of public participation comes from involving the different communities in the concerned area and considering them while redesigning a neighborhood, city, etc.

One of the obstacles that public participation can face “is the presence or absence of a solid national welfare system” (Ciaffi. D, Mela. A, 2006). In other words, the public participation depends if the government will promote social services or not.

If we would like to consider the participation of the public while reconstructing a neighborhood or a city in a post war period, a very important question comes to our mind, which was asked by Dr.Hallaj at Wave 2017 at Università Iuav di Venezia during his presentation “Syrian cities and the challenges of reconstruction” which is : “Who is the city?”.

At the beginning, a city always has its initial citizens, in the case of Aleppo, they're the Aleppines. They are registered there. During time, the city can face changings, such as economic growth, which will lead to the creation of work opportunities. Citizens from other cities will be attracted to move there. In this case, Aleppo received many IDPs¹ from neighboring cities, governates, even from all over Syria.

The attraction didn't stop at national borders, but eventually has crossed them. People from neighboring countries such as Lebanon went to find work and business opportunities in Aleppo.

When the war has started, the population of Aleppo started witnessing various changes in its composition. Some people chose to flee to other safer cities in Syria such as Damascus. some of them fled to other countries, neighboring ones, such as Turkey, Lebanon, or distant ones, in other continents such as Europe and America. Those people who fled to other countries, some of them, especially young people, have started new lives, which coming back to Aleppo isn't an interest for them anymore, and for sure other people will have the intention to come back.

The war didn't only drive out people from Aleppo. Citizens from other cities and neighboring villages moved to Aleppo to find refuge.

1: Internally Displaced Person

Therefore, another problem can be mentioned, which is the property ownership. Some people came to Aleppo and stayed in other people houses or constructed settlements on other people's land because they needed a shelter. When the war is over, some of the owners will come back and ask the property back, some won't, some had already passed way. This problem should be handled by the government.

On the other side, people who found a refuge in Aleppo might not have the intension to come back to the city or village they came from. All of this participate in the change of Aleppo's population, and therefore, the question in this situation will be: "Which people should be participating in the reconstruction of the city?"

3.4.6 Solutions for the Public Participation in Aleppo

As mentioned before, public participation in Aleppo is very complex and delicate. "There are already fears that the last to participate in these emerging plans and conversations will be the Syrians themselves – and that such plans might not put the Syrians at the heart of the reconstruction." (Azzouz, October 2018).

The integration of the public opinion is very critical. The authority in charge in the post war phase should have the responsibility to make studies and take decisions in order to know "who is the city". Many issues should be solved to know who is living in the city.

Each case should be considered apart. For example, the property ownership is one of the deepest obstacles that the authority should confront. Beneath the property ownership obstacle, many problems can be recognized.

First, the abandoned properties. These properties are abandoned by citizens that left Syria to live in other countries, and don't have the intension to come back. Disregarding the damage affecting this property, those citizens have the obligation to claim their property in order to start the reconstruction. In 2018, the Syrian government gave a period where refugees in other countries should claim their ownership. This law obligates who are outside the country to come back and claim their properties. This law solves indirectly another problem. The fact that many families do not exist anymore, because of massacres committed by terrorists (such as

ISIS), leave some properties unclaimed. These properties will be managed in the post war period by the government.

The property ownership doesn't stop here. Some IDPs¹, coming from other cities, or governates, found in Aleppo a refuge. Those people took from other citizens' houses, who left the city, a place to live. They might have been living there from 2 till 6 years. Some have constructed businesses on other people's lands. Many problems in this case would be generated, giving back the property to the real owners, will leave people outside, without a place to live. This issue should be managed and handled by public institutions and the government, where new urban political policies should give back the property to the real owners and provide the ones who left with a temporary refuge until the reconstruction operation occurs. The new urban planning policies and design should give some people the opportunity to stay in the city if they have the intension.

Another critical issue should be confronted. Before the war, many families lived in informal settlements. Those families might have, or not, lost their homes during the war. Since their homes are not recognized as their properties, many will lose their homes in the post war reconstruction phase. This problem should be tackled by political urban policies where those citizens will be provided by decent homes. Providing them with places to live do not only benefit them, but also it will contribute into preventing any future informal settlements construction.

1: Internally Displaced Person

4 Design Guidelines

The masterplan of any future reconstruction of Aleppo is very critical. Many factors and elements should be considered.

4.1 Primary actions

In any Post war reconstruction, primary actions should be taken. One of the most important actions, is providing shelters for the locals. Temporary housing will help the locals to find an accommodation after these hard periods of their lives. Accommodating the locals will participate in reducing any future construction of informal settlements. Encountering informal settlements isn't only time consuming for the government, by it can get very costly.

Among the temporary housing, essential needs and services should be provided by government to the people. The needs are water, electricity, food and medicine. The services are sewage system and communications.

Providing people with shelters, essential needs and services will not only help the civilians to start recovering, but also will provide the authority more time to study the reconstruction process.

4.2 Sustainable Design

4.2.1 Self-Sufficiency

“It is very important to consider a sustainable design, buildings that can generate their own energy” said Dr. Badr¹. The masterplan should consider a sustainable design. The concept of self-sufficiency can be integrated. Since the government is rebuilding cities and neighborhoods, laws, pushing the people in charge of the reconstruction to integrate self-sufficient buildings and neighborhoods, should be endorsed.

Buildings can generate their own energy. Many methods exist. Buildings can use the solar energy to generate their energy.

¹: Interview made during my visit to Lebanon

Many methods can be integrated in the design, such as using solar panels, solar windows...

As producing energy, buildings can also limit the consumption of energy. This can be done according to the materials used in the design and construction process. In other words, consumption of electricity or gas can be limited according to what is present inside the wall of the buildings and which types windows are used.

Windows can act as insulators. Windows can be single, double or triple glazing. Each types of glazing can be Low-E. Low-E windows limit the amount of ultraviolet and infrared light that can pass through the window without having an impact on the light on transmitted light. They improve thermal insulation while enhancing the energy efficiency. Windows can also contain gazes, such as argon and krypton, they are efficient for thermal insulation. The glass of the window can also be mirror glazing.

Inside the wall, insulation can be introduced. Insulation types are various, for example it can be made of foam, polystyrene, etc. Wall insulation provides thermal insulation which means less consumption of energy.

Buildings can also collect and filter water in order to limit their water consumption. Collected rain water can have many uses.

Rain water can be used for drinking and cooking. Special filtration systems can make the rain water drinkable. It is essential to use to systems since the water can get in contact with dirty surfaces.

It can be also used during showering or laundry making. Those activities constitute a huge percentage in the daily consumption of water. In this case filtered water can be used again.

Toilet flushing is as well a big consumer of water in the daily life. Rain water can be use directly without being filtered. In some building, grey water is reused in the toilet flushing.

Watering gardens or plants, if present in a building or a house, is an activity that consumes a great amount of water. Rain water can be used to water the gardens and the plants.

4.2.2 Recycling

Recycling construction materials has many benefits. It has a great impact on the environment. Recycling can decrease the costs of the projects that will be realized. The cost, most of the times, controls the decisions making of any project. Decreasing its value can carry positive benefits for the project.

Positive effect on the environment can take place. The production of many materials can result in the generation of CO₂. Recycling can limit CO₂ emissions. Recycling a material limits also the consumption of raw materials and decrease the amount of waste. Materials such as metals, need raw materials in order to accomplish their production. Most of the waste used to finish in landfills, recycling will decrease the areas and the number of landfills.

The war had caused the destruction of neighborhoods. From the destroyed buildings, several materials can be collected and recycled in order to be used again in the reconstruction process. Those materials are concrete, metals, timber, plastics, bricks.

Concrete, a widely used material in construction, can be recycled. It is crushed using special equipment. Then it is stripped from dirt and specific elements. This recycled concrete can be reused in many projects. It can become the base of new asphalt streets, aggregate to mix new concrete, cement material and can be used in the foundation of new buildings.

Metals can be recycled as well. Recycling metals can be done many times without losing any of its mechanical properties. Metal is a very valuable material that it can be even sold as scrap. Since metal doesn't lose its properties, this means it can be used in all the construction needs, it is melted down and reused.

Timber can be recycled. Wood can be used as a biofuel. It can be used for making pathways, architectural components. High wood consumption results in the deforestation of many forests in the world.

Plastic is a material that has many uses in a building. Plastic can be used in pipes, wall covering, insulation, flooring. It can be found also in window frames. Many plastic types can be recycled, such as polyvinyl chloride (PVC), polystyrene, polyethylene...

Plastics should be separated according to polymer type in order not to contaminate it. Recycled plastic can be used as filler, in street furniture, as packaging... Unlike metals, plastics cannot be recycled several times.

Bricks can be collected from demolished buildings. They should be separated carefully from other block types of the building, in order to not be contaminated. They can be used to reproduce new ones. They can also serve as aggregates.

4.3 Old City

The old city in Aleppo is a very meaningful place not only for the Aleppines, but also for all the Syrians. The old city was considered by the UNESCO as a World Heritage Site. Therefore, the reconstruction of the old city should take into account the process of preserving the cultural heritage. Some of the districts in the old Aleppo were constructed during the 12th century. Old Aleppo contains big mansions, characterized by their unique architectural features, Khans and Souqs (Figure 37), the citadel (Figure 36) and many other historical buildings.

4.3.1 Memory

As stated before, memory constitutes the identity. The old city of Aleppo is a major constituent of Aleppo's identity. Any future reconstruction masterplan should consider the restoration of the old city respecting its old features and design. Any changes can strip the city from its identity. The Syrians and especially the local Aleppines will lose the link to the place, and the old city will be only there giving a nostalgic feeling of what it used to be and the old role it used to play before the war.

4.3.2 Protecting the old city

The authority in charge should force the masterplan designers to respect the structure of the city which constitutes one of the most important pillars in the identity of the Aleppines, and the Syrians nation. Urban political policies and laws should oblige the making of an appropriate and decent zoning in order to protect the cultural heritage of the old city.

4.4 Public

4.4.1 Public Help and Protection

After Seven years of war, a great part of the citizens will not have the financial capacity to restore or rebuild their houses or their destroyed businesses. As stated before, temporary housing should be provided, but also rent prices should be reduced and public housing should be integrated in the new masterplan. The authority in charge should facilitate the work of organizations which have, as mission, programs of rehabilitation and help for the citizens to rebuild again their lives. Socioeconomic aids should be provided to the damaged people. It will help in the process of rebuilding their homes and businesses. This aid can be national or international.

International aids should be distributed equally between the citizens. Any unfair distribution could cause future conflicts.

4.4.2 Public Participation

Public participation is critical in the process of reconstruction of Aleppo. It can allow important discussions to take place. Those dialogues can empower the local community and create changes that can be in their favor. The Aleppines have experienced big tragedies during the war, it is very important to listen to what they want and what they need. If their needs are met by the new masterplan of the city, the probability that the change occurring in the future will face a rejection by the locals will be low, in other words, the inhabitants of the city will be able to adapt more easily to changes made during the reconstruction.

4.5 Refugees

Refugees who left the city or the country should be encouraged to come back. The country will be indeed in need of people for labor. The reconstruction phase needs manpower. Refugees, which a very important number of them is skilled, even holder of diplomas in many different fields, can contribute in a very effective way to the reconstruction of the city, even the whole country. In order to encourage them,

law and policies should be applied to facilitate and encourage their return, such as help to rebuild their homes.

4.6 Stakeholders

Many stakeholders are involved in it. Most important stakeholders during the reconstruction are the investors, local community and the architects. The new masterplan should avoid any imbalance and injustice.

Investors are very important actors in the reconstruction phase. The capital they commit into the reconstruction makes the realization of many projects possible. In a post war phase, investors find the reconstruction a great opportunity to invest and generate high profits. The problem is when the private interest overcome the public one, like in the reconstruction of Beirut's city center. Opportunities for investors to generate profit should be maintained, but the fact that the city will be inhabited and used mostly by its own citizen shouldn't be disregarded. Public interest should be always considered in a decision making. Privatization of important projects such as the city center of Beirut, is a very risky decision. It can be taken, but it should respect a framework, decisions and laws took by the authority to protect the public interest.

Architects and urban planners are important stakeholders. They are responsible of the projects from the city scale to the building scale. The problem that can occur is when the architects and the urban planners see the city as a place where they can experiment their new ideas and designs disregarding the interest of the local citizens. Architects and urban planners should have the duty to provide designs that can contribute to the urban resilience. Designs that can provide places where the people can interact again, create dialogues, in other words, places where the ruptures in the society can be reduced during time. Designs realized by the architects should be in the favor of the local citizens,

We must also be wary of a lack of balance in the plans for the reconstruction and the building of urban resilience.

In a post crisis period (war, earthquake...), there are always concerns about the participation of the local community, the affected people. The local community cannot take decisions; therefore, the participation process allows them to influence

those decisions and make them in their own favor. Any masterplan or discussions about the reconstruction, the local community should be considered.

Conclusion

- **Thesis target**

The purpose of this thesis is to show that architects can participate in the process of rebuilding the social fabric in Aleppo after the war, and to provide guidelines of the reconstruction process.

- **Beirut's Experience**

Considering the Lebanese experience, the reconstruction of Beirut, which also experienced in the last decades tragical wars that resulted in destructions and genocides, useful knowledge can be distinguished. The study carried out shows very important element to implement and factors to avoid in the masterplan. The factors to avoid are gentrification, memory erasure and stripping the city from its role. Those factors help in creating more social divisions, the loss of the place identity and the disconnection between the citizens and the new design implemented. The element to implement is the creation of interaction spaces, in other words, public spaces. They highly contribute into making people speak again with each other, they are places where bridges can be constructed again between divided citizens. Public spaces can surely become places where conflicts can again be regenerated, but this leaves the authority in charge with the challenge of reducing the tensions between the citizens.

- **Aleppo Post war**

Sooner or later the war in Syria will end. No war has ever been endless. When the war will end, Syrians will come back to their cities. In the case of Aleppo, many people will come back to their homes with the intentions of rebuilding what they have lost. Facilitations should be provided for them in order to accomplish the reconstruction of their houses with temporary housing.

Regarding the Old city in Aleppo, proper evaluation should be made in order to take precise actions which will have as main target rebuilding the old city while preserving its cultural heritage, its historical image, without harming its old function. The “Beirutization” of the reconstruction process should be avoided. In the post war period, the city reconstruction process shouldn't strip the city from its role and encourage the construction of towers and fancy buildings.

Public participation is a very important factor to be considered during the design of the masterplan of Aleppo. However, the main challenging task will be defining who will participate in the reconstruction.

Finally, architects and urban planners can support social-cohesion through the design of cities that promote peaceful co-existence after a conflict. During a post-war reconstruction, their most important task will be to design a space for everyone, not space favorizing stakeholders over others.

Architects can contribute in designing space for everyone, not spaces for a certain group, spaces where conflicts and tensions can be reduced. They can be the architects of peace and reconciliation.

What remains to be seen is the level of cooperation of the government and the citizens. Will they consider those guidelines or other factors will influence the decision making and a replay of Beirut's experience will take place? Who is (are) the organization(s) charged of managing the complexity of the reconstruction and its funding estimated more than 350 billion dollars?

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Interviews

- **Dr. Charbel Nahas:** is a former Lebanese Labour minister. He has acted as an expert for a number of Lebanese state institution, as well as many international organisations, including the World Bank and the United Nations
- **Dr. Omar Abdulaziz Hallaj:** architect and development consultant. Mr. Hallaj has served as the CEO of the Syria Trust for Development, a non-governmental foundation providing a framework for a variety of community based developmental initiatives in Syria. Previously, he worked as the Team Leader for the German Technical Cooperation Project for the Development of Historic Cities in Yemen (GIZ). Also, he was a partner in Suradec, a consortium for urban development and urban heritage planning in Aleppo, Syria. His professional work closely concentrated on linking institutional, social and economic development concerns to the production of the built environment. He is currently senior coordinator of CommonSpace Initiative.
- **Dr. Yarob Badr:** Former Syrian minister of transportation. Currently is a regional advisor for the UN in economic and social commission for Western Asia.
- **Dr. Mona Fawaz:** an associate professor of urban planning and studies in the Department of Architecture and Design at the American University of Beirut. Based on an interdisciplinary approach that looks at actor strategies, legal/informal regulatory frameworks, and property regimes, her work investigates the social production of city spaces in a series of empirical case studies taken in informal settlements as well as in large-scale public and private urban developments.