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## Abstract

Informal settlement and slums are from the past decades growing continuously with urbanization, where informal souk or small market propagate informally in slums. Mainly the informal settlement is defined as residential areas where a group of housing has been constructed on land to which the occupants have an illegal claim. These informal settlement maintain few shops in unorganized way which influence the economic conditions. There are also the lack of open spaces where small alleys are mainly allocated in these informal urban fabric. The main aim is to provide a new applicable and better living condition, by providing new retails and promenade path. For that reason, this paper focuses on the principles of how movement occurs within the slums, informal settlement and the built environment, and mainly presents a case study strategy which analyze in depth interviews, group discussion with residents, records, observations and measurements of informal settlement. Moreover the paper declares that the informally created open spaces and movement paths are formed on the basis of social relation, and economic practical problems. In conclusion, an analyzed new promenade path presented as an architectural souk in informal settlement based on theories and practices on movement architecture will be declared and analyzed.

## Keywords

Architecture, Informal Souk, Informal Settlement, Promenade design

# TOWARDS A CREATIVE SUSTAINABLE PROMENADE IN INFORMAL SOUK ARCHITECTURE CASE STUDY: MAR ELIAS CAMPS, IN BEIRUT, LEBANON

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**ABSTRACT:** Informal settlement and slums are from the past decades growing continuously with urbanization, where informal souk or small market propagate informally in slums. Mainly the informal settlement is defined as residential areas where a group of housing has been constructed on land to which the occupants have an illegal claim. These informal settlement maintain few shops in unorganized way which influence the economic conditions. There are also the lack of open spaces where small alleys are mainly allocated in these informal urban fabric. The main aim is to provide a new applicable and better living condition, by providing new retails and promenade path. For that reason, this paper focuses on the principles of how movement occurs within the slums, informal settlement and the built environment, and mainly presents a case study strategy which analyze in depth interviews, group discussion with residents, records, observations and measurements of informal settlement. Moreover the paper declares that the informally created open spaces and movement paths are formed on the basis of social relation, and economic practical problems. In conclusion, an analyzed new promenade path presented as an architectural souk in informal settlement based on theories and practices on movement architecture will be declared and analyzed.

**KEYWORDS:** Architecture, Informal Souk, Informal Settlement, Promenade design

## 1. INTRODUCTION

Over the last decades, there has been an enormous growth in the urban population, where informal settlement is becoming a usual social phenomenon mostly in fast growing. However, this type of disorganized settlement have already become a serious problems affecting the social, the economical and the physical condition of the residents. Concerning mainly the economic condition, for the fabric of the informal settlement shows a need of movement, livability, freedom and open spaces, that helps the existing community to be concerned by the sense of belonging to their area, and to be accepted from strangers, since they suffer from many problems such as: narrow street, bad infrastructure, absence of open spaces and unsafe region to enter it. This paper will explore and affirm the numerous way which the residents use within their urban fabric in order to move them to a better living condition. Furthermore, this paper will also present the principles of how movement occurs within the built environment based on the human attitude within an architectural promenade, and how will reflects on human. Third, the paper will focus on the freedom of movement, and will discuss the importance of the architectural souk in an informal settlement and its impacts on the resident's psychological and social interaction. This paper aims to: "Provide a better living condition for informal settlers through transforming their informal souk into a squashed promenade design."

The main objectives are:

- Produce guidelines of the promenade design of souk architecture in informal settlement.
- Help inhabitants to remain included in the key aspects of promenade design in their informal settlement.
- Analyze the new architecture souk and study its impact on informal settlement's residents.
- Present the suitable green open spaces needed for psychological of inhabitants especially children.
- Try to present the missing life-cycle purpose, which reflects the direct function of social community typology and the specific role played by 'livability' at different community scales.

The paper assumes that the birth of new architectural souk in an informal settlement will helps in improving the human spirit, rejuvenate his social relation and maintain a good economic condition. The paper will be limited by two determinants: Temporal and analytical.

Temporal Determinant: In this paper, there will be an introduction and definitions for many examples and keywords talking deeply about the architectural promenade, its characteristics and its impact on human behavior. Analytical Determinant: The case study in this paper, will talk on the effect of making a souk based on an architectural promenade in slums, and its influence on social activities and relationships.

## 2. LITERATURE REVIEW

Defining the informal settlement and slums are, referring to UN-Habitat, 2012. Yet, urban design and planning is still lack of acceptable tools for an understanding of informality capable of enhancing a promising urban development. Today, this problem is considered one of the main reason beyond the negative urban strategies (Elshestawy 2011; Samper 2010), that have failed, over the past decades, to reduce the wide spread of informal settlements, and encouraging the forced eviction and demolition (Dovey and King, 2011). Being “secured from eviction” is one of the indicators of the Millennium Development Goal 7D (UN, 2000).

According to the Lefebvre's theory of social space, “every society generates its own spaces, and the city had its spatial practice. There is a need for studying this space to understand the social behavior of the living people. Consequently, an analysis of space form is necessarily required.” (Lefebvre, 1991, p. 40). Based on this theory, the urban informality improve the slum dwellers and living conditions requiring an accurate investigation of how the poor people perceive, take decision and use the space, in the process of space organization.

Research about informal settlement goes back to the 60s, it attained new emphasis and still a critical topic in urban studies. The division of formal versus informal, is commonly accepted that a distinction oversimplifies the complex reality of urban informality (Doherty and Silva, 2011; Mehrotra, 2010; Simone, 2008).

Concerning the souk historical background and meaning in architecture, where the architectural character of the Arab traditional souk possessed an authentic concept. However, marketplaces and shopping district in Arab cities of today have lost much of the original features of the oriental souk. As early as 2000 BC the souk had developed into two different forms which were closely related to what we experience nowadays:

- The first type considered of a fairly large enclosure with a spacious courtyard surrounded by shaded colonnades.
- The second type was in the form of linear pathway roofed or semi roofed - surrounded by shops and stores.

Referring to time, architecture and the promenade design are the main factors that affect each other within a building, a community and an urban fabric...

It is known that architecture can determine cultural and historical time, which is perceived through historic, memorable referencing or craft, and time where light can be revealed in the urban fabric, typology and form of a building. Second, the biological time, is where human can use senses like comfort and discomfort, safety and threat, light and dark, and it presents an experiential time where the sense reveals the passing of time in the materiality of an urban fabric. Architecture can strengthen the perception of time and the experience, and this is can be done through the consideration of movement.

*“Movement is the design element that operates in the fourth dimension – time.”*

Movement can be presented by the interaction of the domain bodies and the domain of dwellings and urban settlement. This interaction deserves the careful attention in architecture. As a result, the urban fabric improves several characteristics such as rhythm, pattern, light, proportion and perception that interact and affect the human body and his psychology. Moving to the explanation of movement’s characteristics, the paper will start by rhythm and pattern.

*“Rhythm can be described as timed movement through space; an easy connected path a long which the eye follows a regular arrangement of motifs.”*

The rhythm in architecture creates uniformity and direction in the configuration of promenade path in urban settlement. Visual rhythm could be understood by its relationship to rhythm in sound. The visual effects depends on the movement and pattern of the promenade and pattern of the promenade design. It presents a coherence within the whole building or its urban fabric path. Movement within a rhythmic harmony is achieved by the birth of alternation, graduation, emphasis and contrast of the repeated pattern in the urban settlement.

*“The key is light and light illuminates the shapes and shapes have an emotional power.”*

According to time, architecture and the promenade architectural, a small example will be presented and discussed from different point of view, helping in reviving old theories and their causes. Peter Eisenman points out that time and space in architecture are interconnected. He explains that the movement of a user in or around an architectural form is reflected to the sense of time. A grid, an axis, or an architectural promenade are elements that generate a specific order in the space. (Eisenman 1999: 250). Taking an example of promenade design, or old architectural souk, Al Moez Street is one of the most important examples to be mentioned in the paper.

**2.1 Historical Background about Promenade Souks:**

Before starting the historical background example, it is important to note that the following example below presents an architectural souk spine presented within the city. It shows also the important walkway length of the available souk producing many activities, regardless of its historical and archeological character. Al-Moez Street is considered one of the most important promenades in the Islamic cities in Egypt. On both sides of this street, many Islamic and historical monuments are located. Historically, the street was entitled with this name according to the leader Al-Moez Li-Deen Allah Al-Fatimy, who entered Egypt on 356 H / 969 A.D. Based on critics and historians' perspective, this monumental path is considered the greatest and enormous Islamic open-air museum in the world. The shown figure 1 presents a panorama of Islamic, architectural, social, religious, military, and educational monuments, dated back to consecutive Islamic states. Today, it is a remarkable touristic attraction spot for visitors.



Fig.1: Current Business Activities in Al-Moez Street, Cairo, Egypt

## 2.2 Characteristics of Al-Moez Street

In their paper 'Pedestrian Street Life in Historic Cairo', Aleya Abdel-Hadi, Eman El-Nachar and Heba Safieldin explain that: "Street life in historic Cairo has a little joking between neighbors or in dealing with a street vendor. In the alleys, many people direct to doorsteps and cafés. The street plays an important role in Cairo medieval sociability: an invitation for a cup of tea, a vendor chanting over his merchandise, and food smell that wafts in from a nearby house. Such a neighborhood has a particular essence. Something in the close unite the buildings' fabric, in the vibrations of the passing crowd excites the imagination and generates an interesting experience" (Gharib, 1997). In fact, the unique urban fabric of Historic Cairo was a reflection of its social structure (Bianca, 2004). In our first case, and based on the UNESCO World Heritage Site: Al-Moez Street - the Qasaba (Spine) - represents an interaction between the members of its community and the souk. The street is built over more than one thousand years and its length is around one kilometer, the street has monuments from different historic eras starting by Fatimid, Ayyubid, Mamluk, and Ottoman, constituting an artistic composition of aesthetic beauty value. The most dominant - besides residential - are specialized by old crafts and trades of jewelry, copper, leather, clothes, herbs. Each of these activities is activated in a specific zone of the street. User groups were residents and merchants who have been replaced by a poorer working class community and a wave of emigrants from the Suez Canal cities. The street is designed for pedestrian's walkway, where the narrowest street and curved line has been changed and opened to residential-commercial areas caused by the change of the residents demography. As shown in figure 2, from Bab-el-Fotouh at the north to Al-Azhar Street at the south, all monuments presented along the promenade return to conservation and rehabilitation work which began in the late 1970s (Speiser, 1990).

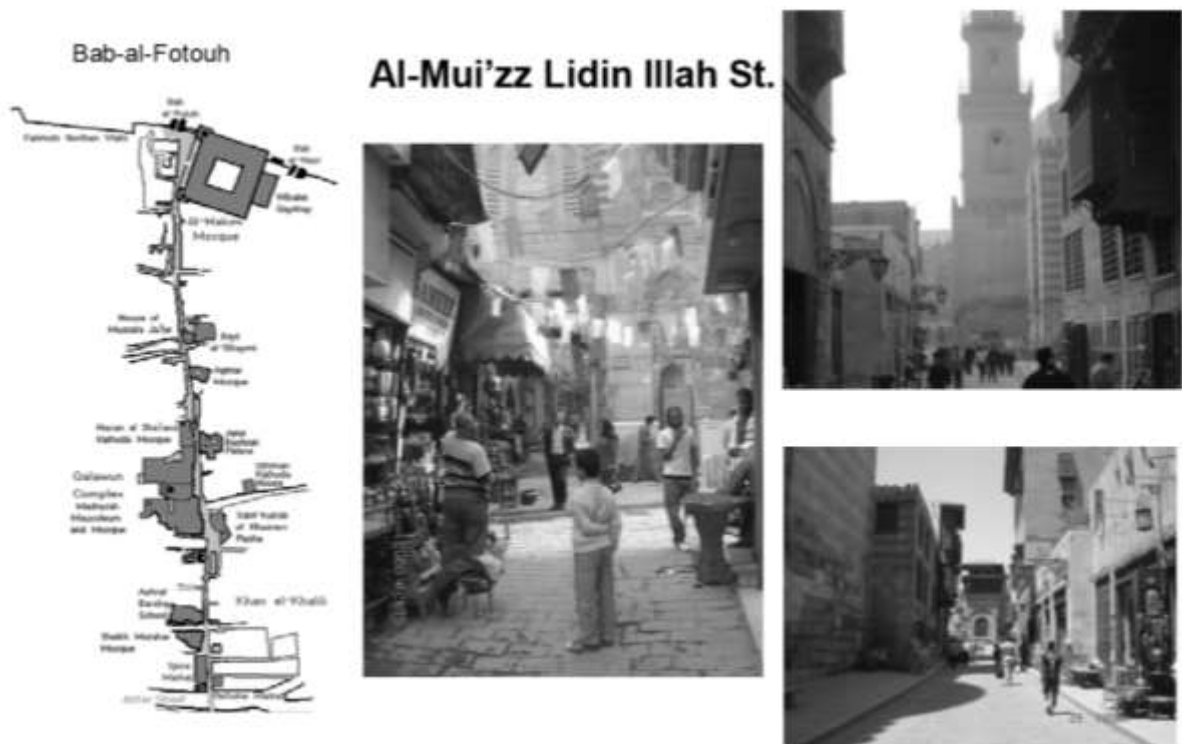


Fig.2: Map and photographs to different sections in Al-Moez Street, Cairo, Egypt

## 2.3 Physical characteristics of Al-Moez Street:

Al Moez street is designed as the main spine of the gated city. It is characterized by its narrowest appearance in section, an unplanned widths and heights that create an interesting and curiosity views along the path. In addition, the building façades vary in their pattern and form according to the era and the function of the building. The pattern of the alley is formed by an interlocking tiles, it is dark raw basalt, it is formed also by light stone cladding for the pavements alley. Al Moez street contains seats presented in the front of shops and monuments considered as a small rest zone. There are a few seats in front of the monuments in the wider shop-free sectors of the street. Because of the narrowest pathway, for walking way only, and because of the different height of the existing building, the monumental souk doesn't contain any shading devices, where direct and indirect artificial lighting is aesthetically designed.

**2.4 Perception of negative and positive aspects for users:**

Starting by the positive aspects of Al-Moez street users especially for residents, shop owners and visitors, are beauty, safety where there is safe places from vehicles, accessibility where no dead-end alley, visibility of shops and the shopping entertainment... In the negative aspects, it shows the rough basalt for the paving material which causes walking problems and difficulties, in addition, to the difficulty, especially for visitors from outside Cairo, to know the souk destination, the have to make a particular effort to reach the specific destination. Furthermore, the ambulances and the fires brigades cannot penetrate and reach the inner streets easily. The users proposed to change the paving materials, which help in regulating the traffic...

According to an overview of informal settlement, souks, promenade path definitions, practical theories, architectural souks presenting the idea of "la marche", the paper presents many parameters related to previous topics which they will be analyzed responding the case study. These criteria's are:

Table1: Main Parameters of Analysis

Economic Condition	Circulation, Architectural Promenade	Permeability	Architectural Souk	Job Opportunity
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**3. METHODOLOGY**

This paper depends on the qualitative research, where analytical methods and data collecting will be introduced and presented. In this qualitative research method, a clear analysis will be presented about the case study related to photographs that support the problems. In this paper, we will talk about the case study of Mar Elias Refugees' Camps, in Beirut, using analytical methods in explaining the case presented in this camp, in addition to several photographs that help more in knowing the situation of this Palestinian living area, distributed in Lebanon as shown in the map of figure 3. The main criteria of selecting this site is its central location in the capital, Beirut, where its density affect the overcrowding presented in Beirut, its connection from two roads, where the internal streets camp connects invisibly. In addition, it is the smallest camp, between the other 12 refugee's camps, in Lebanon, where it is reachable for many areas in its surrounding.

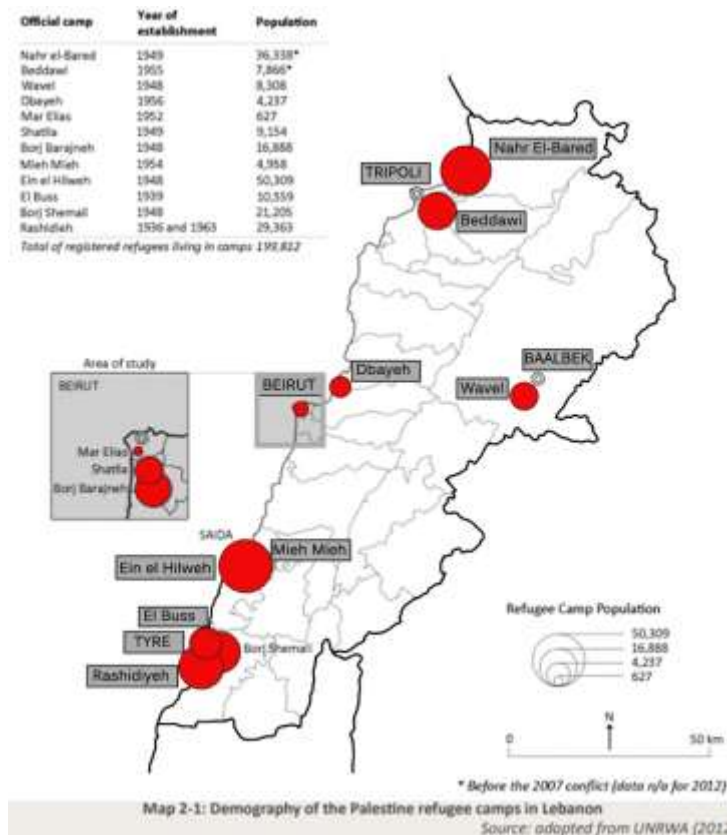


Fig.3: Map showing the distribution demography of the Palestine Refugee camp in Lebanon.



### 3.1 Introducing the Case Study (Mar Elias Camps, Beirut, Lebanon)

Talking first about the social condition of Palestinian refugees in all camps, referring to UNRWA's registration, it gives some analytical data indicating the average number of refugees living in Lebanon. It demonstrates that 425,000 refugees registered since 1948, only 260,000 – 280,000 reside in Lebanon. They are distributed in 12 camps in all over Lebanon; where about a quarter live in Tyre, Saida and Beirut areas, one fifth in the North and 4% in the Beqaa. It seems that more than half of the refugee population live in camps (62%) as compared to 38% living in gatherings area outside the camps. Based on an analysis on the households survey, it results 53% of refugees are women and the Palestine refugee population is young, where the half of the population is younger than 25 year-old. In addition, the average household size is 4.5 members, compared to 4.2 for Lebanese households. Second, on the economic condition, small crafts are presented inside the camp in a hidden way, because of the private enclosure presented in Palestinian's camps. This paper will take Mar Elias camp, as a case study, where specific analysis will be applied. Analyzing the case study, the historical background will be presented about Mar Elias Refugee Camp in Beirut. Starting by its geographical location, Mar Elias was created in 1952 by UNRWA, on an area of 5400 m<sup>2</sup>, located in the southwest part of Beirut. In 1958, the smallest camp accommodated 450 registered refugees and it reached 612 in 2005. The refugees camp was established near Mar Elias Greek Orthodox convent. The camps was firstly hosted the Palestinian orthodox refugees, emigrated in 1948 from their country. But in 1976, after the catastrophe of Tal El-Zaatar camps in Lebanon, and after its demolished, many refugees had moved to Mar Elias Camps and lived there. On the other hand, the majority inhabitants of the camp had left the camp and some had moved to the center of Beirut. Mar Elias is located in Mar Elias area in Beirut, approximately 270 m south of UNESCO Palace along Cheikh Sabah el Salem El Sabah Street. Beside the Cheikh Sabag el Salem Sabah Street from the west, it is bounded by an empty lot and a mosque from the south, a cemetery and Dr. Philipope Hitti Street from the east, and Saint Elias Church and College, Mazraa Stadium, and cemetery from the north. Located in the crossroads between Beirut's southern suburbs of Bir Hasan and Uza'I on another hand, and Ras Beirut and Cola intersection on the other hand. This central location had facilitated the circulation for both camp dwellers, who can easily reach other neighborhoods in Beirut and for people living outside the camp. According to the process of establishment of Mar Elias Refugee camps, described by Jihane Sfeir as follows:

*“After the massacre of Deir Yasin in Palestine, in 1948, and following the establishment of the Israeli-entity, Beirut had received a massive number of Palesinian refugees coming by boats. The Lebanese Government took care of these newcomers and noticed during their landing, that most of these passengers come from Haifa and Jaffa and that all of them are Christians. They are transported to the Greek Orthodox convent of Mar Elias, where they were accommodated in the dependences of the convent and in the garden until 1952. The same year the Orthodox patriarchy decided to open a novitiate to the convent. The refugees were evacuated, but were resettled in a camp set up in the horch (wood) close to the convent.”*

Go back more about the Palestinian refugees will help in understanding the cause of slums, and its enclosure inside these camps. For more than 70 years, Palestinians have lived in Lebanon, and have been refugees that should be called, to be more appropriately: Protracted Refugees, meaning that an individual who moves involuntarily from their region and country to escape persecution, violence, and war persisting longer than the expected in another region. Their vulnerable living situation in camps, caused by the impacts of inaction in both, their country of origin and their country of refugee, which it presented a lot of problem considered by the overcrowding population, poor socio-economic situation of the majority of the residents and the control imposed on entering building materials into the camps, many structures are poorly constructed and irregular increasing the informal settlement, which provides a bad economic situation and unhealthy condition for inhabitants.

The major problem faced in these camps is caused by the missing needs, lack of job opportunities and population growth of the refugees, where they have led to the involvement of shelters in camps, from single tent to extended family multistory building, while, buildings had been developed on needs, which is firstly started horizontally, but when they reached the boundary of the camp, which is they weren't eligible to build outside it, and when the circulation space was hardly been available, the extension of their building became vertical.



The maps show the location of Mar Elias Camp, situated in Beirut Lebanon.



Fig 4: Google Earth Image Showing Location and Limits of Mar Elias Camp.



Fig. 5: A zoom in of Mar Elias Camp, showing the overcrowding population in Beirut, Lebanon.

Reference:

<https://www.google.com/maps/search/mar+elias+google+earth/@33.8739305,35.4805793,2987m/data=!3m1!1e3>

The camp has a strong contradiction with its environment that shows the high density in the urban environment where the camp presents higher buildings, which is separated by large streets. While all the residents, Palestinian buildings are in an irregular form, there is a bad physical condition as well as the infrastructure concerning the sewage system, electricity, roads, etc... The camp shows the poverty that raise in these settlements and its growth since the end of the civil war, even if, according to its inhabitants it is recognized as one of the best camps in Beirut. Mar Elias residents ensure the relative quality of the infrastructure (water and electricity) as well as the quality of life due to the limited size of the camp.

Because the camp is located in Beirut, it has facilitated the development of diverse activities. Some Palestinian NGOs are present in the camp, such as Beit Atfal Al-Soumoud, Palestinian Martyrs' Association, Ghassan Kanafani Cultural Foundation, Al Inaach, Palestinian Red Crescent Society, Aidoun, Palestinian Human Rights Association, etc. These associations had developed their activities in the camp due to its central location in Beirut. (Reference: Mohamed Kamel Dorai. Submitted on 10 Dec 2010 Palestinian refugee camps in Lebanon. Migration, mobility and the urbanization process. Are Knudsen). The commercial activities is developed in the camp, where some dedicated to the camp's residents and others to Lebanese customers that live near their neighborhood or workers employed in thei surrounding manufacturing businesses. A typical example is the experience of the Palestinian refugee who first opened a restaurant in the camp before deciding to reside there.

*"I arrived in Mar Elias in 1992. I purchased a house in the camp and opened a restaurant. In 1994, I came to live here. I opened the first restaurant in the camp. It was a good economic change for me. Customers come from the enterprises around the camp like the daily workers working in the construction sector. Eating here is less expensive for them than in the other restaurants, that's why they come here."*

The camp is characterized by small commercial areas where they have been built along the eastern and western boundaries of the camp. The western entrance of the camp is presented on the main highway from southern suburbs of Beirut reaching Ras Beirut. The major activities presented in this area, such as garage, grocery, manufacturer of furniture, bakery... are not adapted towards the camp population, but mainly to customers coming from other areas of Beirut. The eastern entrance is formed of eleven small groceries, fruit and vegetable sellers. This informal settlement is impressed by both camp dwellers and inhabitants of the neighboring districts. To mainly note, the prices is lower in refugee camps than in other places.

### 3.2 Problems of the Case Study

Problems presented in Mar Elias camp are large. Briefly explained, starting by the bad physical condition presented inside the camp, where most of the inhabitants live under a roof constructed from corrugated iron, wood or asbestos. Furthermore, the use of poor materials is caused by the restrictions of penetrating the construction material inside the camp. In addition, small economic shops presented in Mar Elias, where inhabitants only use these shops. Although, the camp is placed in the center of Beirut, and surrounded by many business activities and other such as Mar Elias school, Boubes mosques, Mar Elias church and so on... but he missed the sense of permeability; which means spaces or areas preferred and used by their users, and have positive impact on the street quality, where no one can penetrate only their residents due to its enclosure appearance. Second, the bad circulation inside the camp due to the narrow street also affects its architectural economical souk with their outside.

### 3.3 Presenting the Questions

This paper has been based on a face to face interview with Mr. Nasser Saleh, Mar Elias camp services officer, and three other experts in the situation of refugee's camps, where several questions had been posed. The questions are mainly directed to the situation of paths, circulation and walkway inside the camp and how affects the social interaction, economic condition and psychological condition inside the camp. The questions are distributed on:

#### Physical Condition:

- Do the length and width of the camp's streets sufficient? And can you comfortably walk around?

#### Functional Condition:

- Do the commercial functions on these streets like groceries, bakery... are sufficient?
- Do the social activities inside the paths such as the resting zone, having a conversation, café... are sufficient?

#### Perceptual Condition:

- Do shop street façades inside the camp could be attractive one day?

### 3.4 Analyzing the Parameters

The research analyses five parameters for the case study, Mar Elias Camp. These parameters are presented below.

#### 3.4.1 Economic Condition

The bad economic situation inside the camp are due to the restrictions placed on refugees in Lebanon. Palestinian's inhabitants have experience in few works, where the majority has experience to agricultural work derived from their old lifestyle in Palestine. Despite their poor living condition, unemployment, the community in Mar Elias camp, referring to a recent analysis, including 350 households, around 2800 inhabitants, remains tightly knit and unified.



Fig.6: Small shop in Mar Elias  
Reference: Video; Mar Elias, un camp de réfugiés palestiniens en plein Beyrouth.  
Published on 6 Dec 2009



Fig.7: The western Mar Elias Camp showing the small shops presented on the highway.  
Reference: Mariabordvik, living in Lebanon, Mar Elias Refugee Camp, in 12, Feb 2011.

### 3.4.2 Circulation, architectural promenade

The narrow alley streets presented inside the camp are the most critical areas, where the overcrowding population and large concentration of urban fabric creates a reduction of green areas, and absence of open spaces, contributing to an increasing of heat island due to the large concentration of the built up area inside the specific boundary lot of Mar Elias Camp. These bad effects had affected the promenade inside the camp, where the small walking path presents an uncomfortable and unqualified pedestrian area for people to pass through.

### 3.4.3 Permeability

The permeability or penetration is an adjective for spaces that urban design may provide in districts. These spaces allow people to walk through from different sides.

Therefore, they could be defined as spaces that are preferred and used by users. Bentley defines permeability as “the extent to which an environment allows people a choice of access through it, from place to another” (Bentley 1985). He suggests that choices can be increased with alternative routes by making areas accessible (Carmona at all 2003). While Stamps defines this characteristic as the ability of something to move through another thing” (Stamps 2003). The concept of permeability is connected to plurality, variety, accessibility and legibility (Bentley 2007). Other researches think that successful spaces have to include variety (Rapoport 1977; Bentley 1985; and Gehl 1987).



Fig. 8: Narrow Dark Pedestrian path inside the camp.  
Reference: Vide; Mar Elias, un camp de refugies palestiniens en plein Beyrouth. Published on 6 Dec 2009.

Table 2: Permeability (Adapted from Yavuz, 2009)

PERMEABILITY		
Physical Properties	Functional Properties	Perceptual Properties

Mar Elias camp missed, from the physical point of view, the good and qualified pedestrian area that offered to their inhabitants, to pass through, interconnected and comfortable for walking. From the perceptual point of view and functional point of the view on the other hand, Mar Elias doesn't contain a pedestrian area, nor a suitable centers as piazza because of the narrow alley street which don't exceed 1.5 to 2 m. Although, working on expanding one main core in Mar Elias Camp helps in extroverting the residents with their outside, and make the



camp easy to comprehend from strangers to let them penetrate the new architectural souk, and this permeability will help also to have a secure and comfortable, in addition, it will present an attractive and open places.

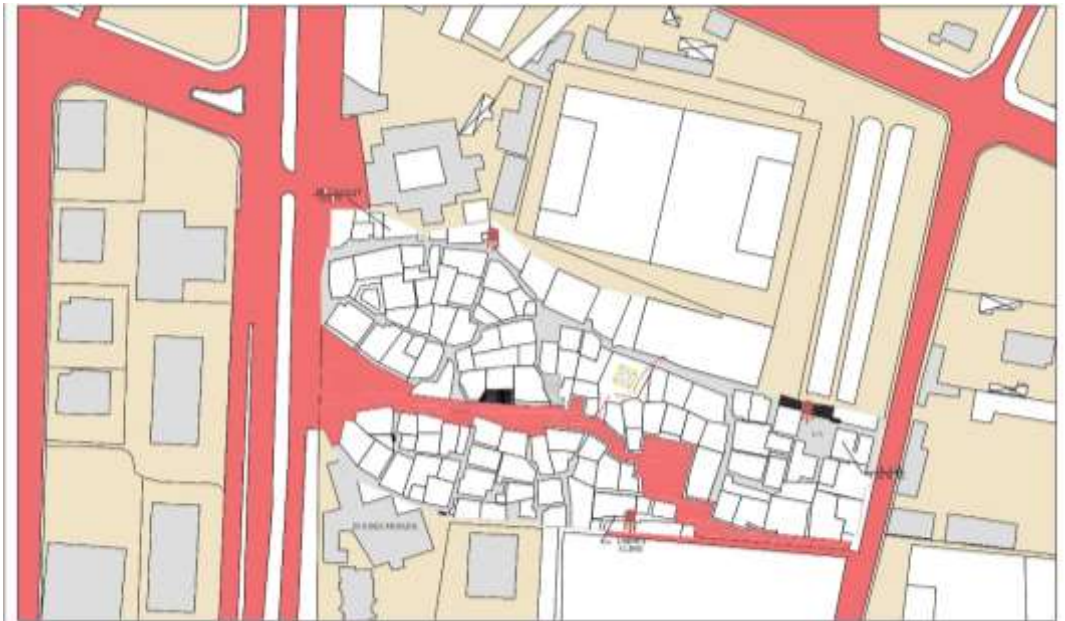


Fig.9: Mar Elias camp showing the proposed architectural souk path connected from its east and west roads.

### 3.4.4 Architectural Souk

Ameliorating the life of Palestinian's inhabitant, and let them feel of their presence, making an architectural souk in their camp, will help in strengthen their social relationship together, and with their outside neighborhood.

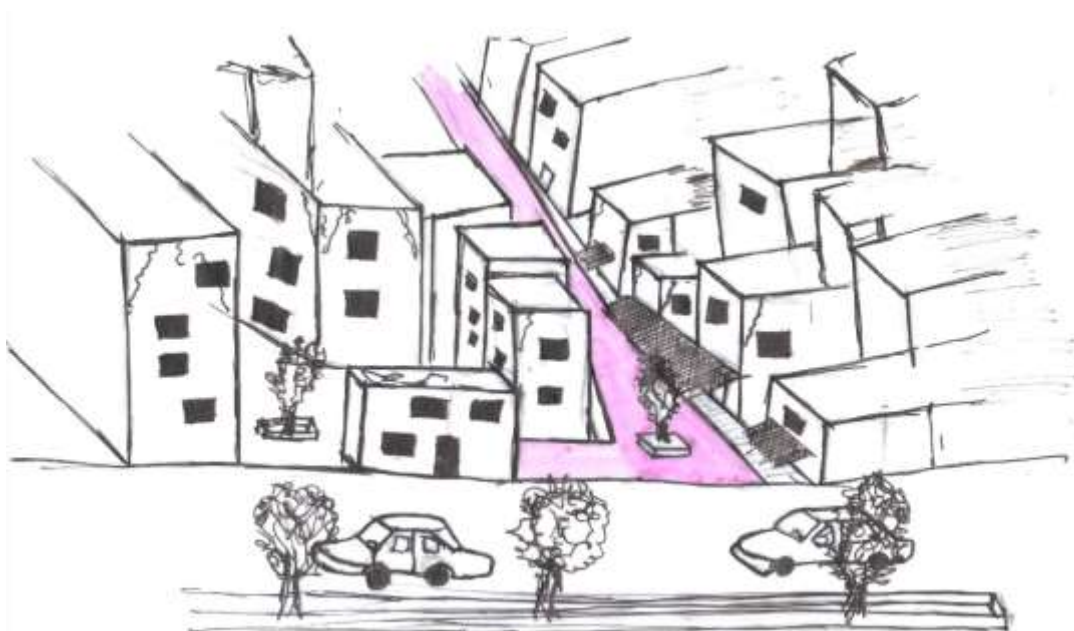


Fig. 10: The proposed spine and pedestrian walkway architectural souk.



Fig.11: The proposed open spaces and shops in Mar Elias Camp.

### 3.4.5 Job Opportunities

For the job opportunity, there will be divided into two ways, the unemployment rate, and the employment rates inside the camp.

#### a) Unemployment

The unemployment rate among the PRL (Palestinian Refugee's in Lebanon) was of 23.2% in 2015, significantly higher than the Lebanese rate of 8%. Disparity in unemployment is observed by gender, location, and age category:

- Gender disparity: females unemployment is at 32.4% compared to 20.8% for males;
- Geographical location disparity: the highest unemployment rate of 27.9% is found in the BEQ, while the lowest rate of 18.1% is found in TYR; and
- Age category disparity: the highest rate of unemployment by age category is of 36.4%, affecting the youth (AUB and UNRWA, 2016).

#### b) Employment

Among the PRL, there are around 80,000 workers. The Labor Force Participation Rate (LFPR) is of 41.8%, with a peak value of 58.2% for the 25 to 34 age group. There is a stark gender disparity in employment, where LFPR of females is of 16.9%, while that of males is drastically higher at 69.2%. This is most probably related to cultural factors and family obligations. (AUB and UNRWA, 2016). For that reason, thinking about presenting an architectural souk helps in offering an additional job opportunity for the camp's inhabitants, where the souk will propagate in the basic ground floor plan connecting the main highway to the east road, promoting many jobs that were hidden inside the camp to be presented clearly.



Fig. 12: The existing Mar Elias Camp, before the intervention.



Fig.13: Zoning for proposed souks shops inside the camp and its circulation.



Fig.14: Ground Floor Plan showing the shops and the circulation walkway path, after the intervention

#### 4 FINDINGS

After posing several questions to analyze Mar Elias’s characteristics and get more information’s for knowing the situation, many questions are posed below.

- Do the length and width of the camp’s streets sufficient? And can you comfortably walk around?

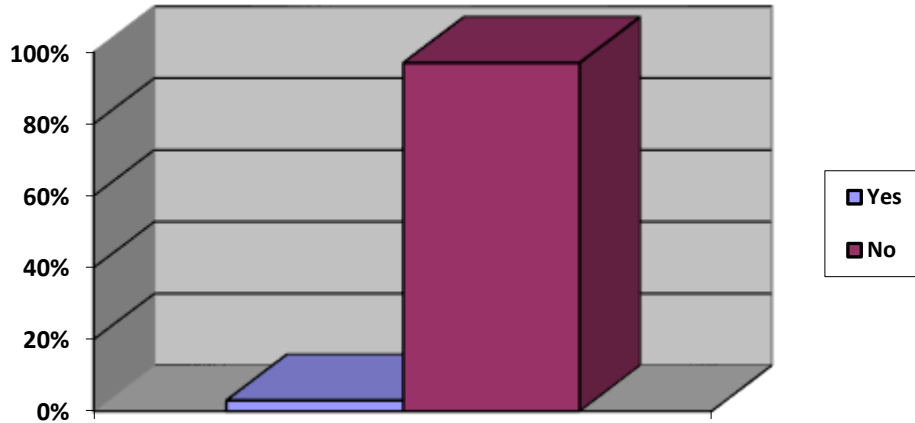


Fig.15: Chart of the width of streets

From the pie chart analysis, it appears that more than 90% of camp’s inhabitant found that the alleys are uncomfortably. We conclude also that, the width of streets inside the camp is around 1 meter to maximum 2 meter, where small walkways are available, and the shelters are narrow to each other, and in some cases they are attached to each other with the absence of the windows and daylight.

- Do the commercial functions on these streets like groceries, bakery... are sufficient?

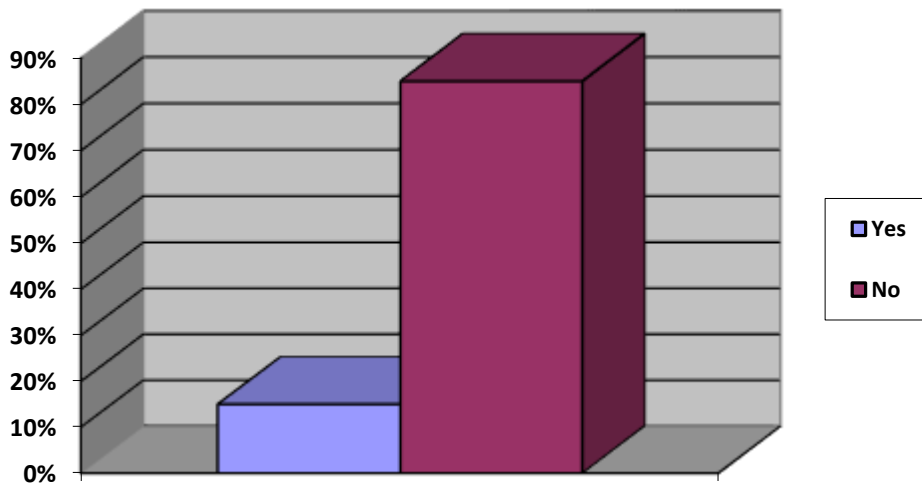


Fig.16: Chart showing the commercial functions inside the camp.

It appears that 85% of the inhabitants found that the shops inside the camp are not sufficient according to their density. In addition, we reached that 15% of the residents who have their own small shops inside the camp refused the architectural souk proposal; they scared to lose their jobs... while the majority confirm that they need this commercial souk inside their life.



- Do the social activities inside the paths such as the resting zone, having a conversation, café... are sufficient?

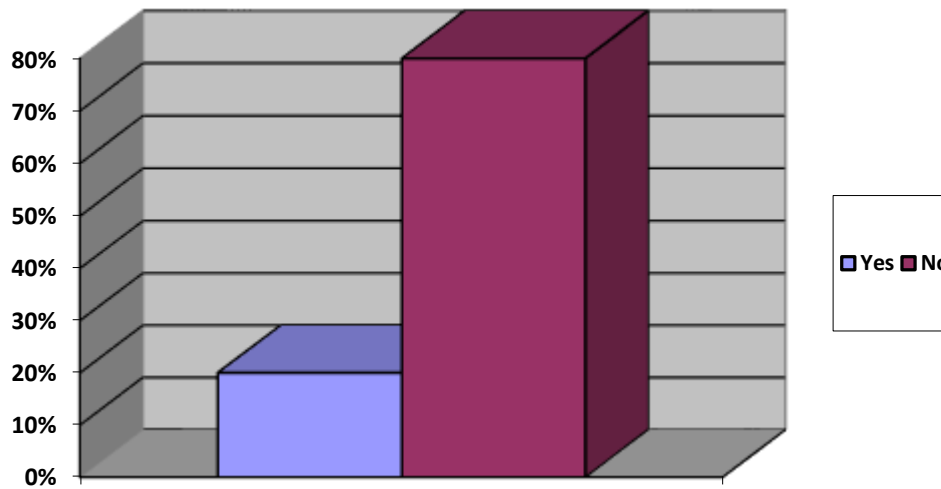


Fig.17: Chart for social activities

It shows that 80% accept the idea of having an economical and walkway souk inside the camp, and few reject. It helps in making the camp extroverted to its surrounded and interact in many other activities with their neighbors. The interaction activities inside the camp are presented, by responding to architectural promenade souk's characteristics, the residents miss these activities, while neither open space for rest areas nor souk's piazza for sharing activities together, for that reason, the majority needs these activities to ameliorate their lifecycle.

- Do you think shop street façades and showcases inside the camp could be attractive one day?

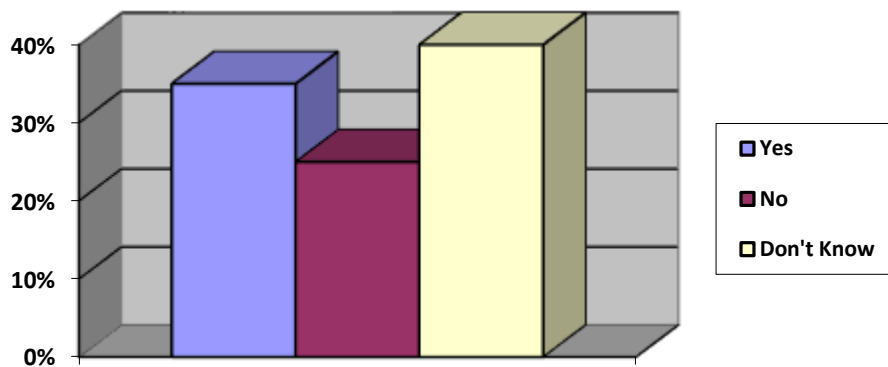


Fig.18: Chart for façade's shops inside the camp.

It shows that 35% accepted the new ideas for changing the façade and made it attractive, others, 25% refused, scaring for the new changes and it costs, while no transformation in their camp had been done before. While 40% they didn't give any acceptance or refusing, because they are unable to think or dream about the new changes that will be presented in their camp.

## 5 DISCUSSION

Based on preceding, the research may produce the following guide to be applied in future for designing the ideal promenade souk architecture in informal settlement.

- Pedestrian-shopping streets will provide open public spaces, where people could come together, build up their social relations and interact with each other and meets their basic needs.

- Improve the economic conditions inside slums.
- Enhance the wellbeing behaviors of inhabitants in informal urban fabric.
- The presence of market, in informal settlement, will encourage removing the enclosure feeling for its inhabitants, and strengthening the social relation with their surrounding urban society.
- Ameliorating the social life between inhabitants and their surroundings.

These factors or guidelines are the main important points, which could be available in many sub-urban and informal settlements, which help in encouraging the social life, the life cycle and preserving the basic needs of the inhabitants. These ideas help also in preserving the dignity of people living in bad conditions.

## 6 CONCLUSION

In conclusion, the paper presents several important recommendations directed to official authorities, to responsible and to interest in ameliorating life cycle of Mar Elias Palestinian's inhabitants.

- Referring to the country, where the refugees' camp are located there, and to the international organization, to remove all camps from all over the world, and merge the inhabitants with their surroundings and present the necessary security and protection for them inside the society.
- Removing all types of enclosure spaces, illegal settlements, and presenting a sustainable region by providing the inside-outside community relationships.
- For physical and perception condition, it is recommended to present for the bad urban fabric the basic needs that could be presented by a rest area, open space and walkways paths that clean their wellbeing behavior and affect their inside out psychology.
- The basic human needs like education, job opportunities and health services, should be presented for informal dwellers, generally relating to governmental which should aim to spend national income on education, create employment opportunities and maintain a good health for a better wellbeing behavior.

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