

THE ROLE OF MODERN SOCIO- CULTURAL ASPECTS IN TRANSFORMING JERUSALEM OLD CITY URBAN FORM

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دور العوامل الاجتماعية والثقافية الحديثة في تغيير الشكل العمراني العام في مدينة القدس القديمة

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Dedication:

Always Aim for the Moon, Cause Even if You Miss, You LL still be among the Stars.

For María Angeles Espín § For Dr. Mahmoud Elrífaí

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ABSTRACT:

This study concerns with the relation between the modern expectances, which influence the social life and the cultural components, and the transformations that take place on the urban form. The study aims to understand the transformations on Jerusalem Old City urban form under this general idea, in order to achieve a framework of enhancing the quality of the place on the city. Jerusalem Old City affected deeply by various transformations in the social and cultural structure and the urban form, in a way influenced the level of livability and the heritage value of the city. These transformations appear as a result for many factors, between social, economical, environmental, and political, however, the study aim to understand the transformations through the social and cultural approach under the modern influences. The study leads to clarify the transformations on the urban form with its relations to the modern expectances; the factors produce that, determine the place congruent to modern expectances, and the influence of these transformations on the city physical and social structure.

The analysis of the study heeded under the assumption of the *human on environment relation*, which considers a deep influence for human behavior and built environment and vise versa. The method to understand the problem depends in analyzing the maps and the figures. The analysis passes through three stages, firstly using the theory about the modern expectances on the place, and the influence of that on the urban form transformations. Secondly, the use of cross

reference approach that clarifies the factors that lead for the urban transformations in Jerusalem Old City in addition to the place congruent to modern needs. And finally, the questioner approach, that shows the users expectances and evaluations. The different levels of analysis lead to conclude that the modern social and cultural expectances drove the resident to transform their surrounded urban form under the un-self conscious design aspect in order to meet their needs. The political conditions, through its different components challenge the affordability of these modern needs; the city suffers from the Israeli leaders policies toward the Judization of the city through the rapidly growth of the Jewish population and to force the Arab resident to make their homes elsewhere (Taraki, 2005). Accordingly, the study demonstrates that this political attitude influence, through the urban and social life transformations, the city social mechanism in a way leads for the deterioration of the city life standards and heritage value.

ملخص البحث:

يقوم هذا البحث بدراسة العلاقة بين الاحتياجات الحديثة التي أثرت على الحياة الاجتماعية والعناصر الثقافية مع التغيرات التي ظهرت على الشكل العمراني العام. يهدف البحث للوصول إلى مفهوم أعمق للتغيرات التي حدثت على الشكل العمراني العام في مدينة القدس القديمة تحت تأثير المتغيرات الاجتماعية والثقافية الحديثة, حيث يأتي ذلك تحت مفهوم شامل وهو رفع جودة المكان في مدينة القدس القديمة. تعرضت مدينة القدس القديمة خلال القرن العشرين لمجموعة من التغيرات التي أثرت على النسيج الاجتماعي والثقافي اللمدينة, بالإضافة إلى تأثيرها على الشكل العمراني العام, نتج عن ذلك تأثير مباشر على مستوى المعيشة والحفاظ على التراث الإنساني في المدينة, إن مجموع هذه التغيرات يمكن إدراجها تحت تأثير عدد من العوامل التي يمكن تصنيفها بين عوامل اجتماعية, اقتصادية, و سياسية, بحيث يندرج الهدف العام للبحث بالتخصص بفهم دور العوامل الاجتماعية الحديثة في التسبب بهذه الظاهرة, التعرف على مجموع العوامل التي أثرت على توفر هذه الاحتياجات, قدرة الفراغ على استيعاب هذه الاحتياجات, واثر ذلك على الية عما الفراغ العمراني وانعكاسات ذلك على السلوك الإنساني والفيزيائي للمكان.

إن فرضية البحث العامة تقوم على أساس علاقة الإنسان مع البيئة, التي تعتمد على العلاقة المتبادلة بين الإطار البيئي والسلوك الإنساني. وبحيث تقسم آلية التحليل إلى ثلاثة مراحل متسلسلة بين الوصول الى تحديد وتعليل التغيرات في مدينة القدس القديمة اعتمادا على إطار نظري يحدد الاحتياجات الحديثة في المكان. ثم تحليل حالة مشابهة تم التعامل مع الاحتياجات الحديثة فيها بعمق, وهي مدينة طليطلة القديمة, بهدف الوصول إلى الأسباب التي أثرت على توفر الحلول في مدينة القدس القديمة. وبعد ذلك استخدام الاستمارة بغاية الوصول إلى رأى العامة حول القضية ذاتها وتقييمهم.

لقد تم التوصل, ومن خلال مراحل التحليل المختلفة إلى أن حاجة الناس الاجتماعية والثقافية الحديثة في المدينة القديمة في القدس, دفعت تحت نظرية ألا- وعي في التصميم إلى تغيير المحيط العمراني بهدف توفير تلك الحاجات التي لعب العامل السياسي دور أساسي في منع إمكانية توفيرها. من جهة أخرى, فقد أوضح تحليل الحالة المشابهة قابلية المكان في البلدة القديمة في القدس على استيعاب الاحتياجات الحديثة. في

النهاية, أوضحت الدراسة دور هذه التغييرات على الآلية الاجتماعية و الثقافية للمكان, كما إنها انعكست بشكل مباشر على السلوك الإنساني في المدينة من خلال مجموع المشاكل الاجتماعية, بالإضافة إلى تأثيره على الشكل الفيزيائي, هذان السببان هما الأساس الذي اثر على مستوى المعيشة والحفاظ على الموروث الإنساني في مدينة القدس القديمة.

1 Chapter One:

General Overview

1.1 Introduction

The Old City of Jerusalem witnessed a radical transformation in its urban form parallel with the different changes that influenced the city social fabric and cultural dimension since 1948. The challenge of this process was not related to the consequence maturity; at the same time, it did not consider the originality of the city different quarters "The traditional distinction between four major quarters, the Jewish quarter in, can still be seen in the Old City. But the cultural characteristics of these historic quarters are changing, not without unfortunate consequences for the consistency of the urban fabric and authenticity of the buildings." (Pressouyre, 1999).

According to many specialists, this drastic alteration influenced both, the viability of the Old City and the future of its cultural heritage through the deterioration of its physical situations. The negative influence in its life quality standards, and the dramatic change in its urban form, lead to inscribe the city, which was listed by UNESCO as a world heritage site in the year 1981, as a heritage in danger site in 1982 (Welfare, 2004). The city no consequence maturity was deeply influenced by a set of factors which varied between political, social development, and economical. These factors prejudice the challenge of accommodate the modernity needs within the heritage value of the city "the greatest challenge, however, was finding the balance between meeting the needs of today's building users while preserving the historic and cultural heritage of a unique Old City" (Ibid).

Modernity, which is performed through the industrial revaluation, the rising of new ideologies, and the modern hi-tech means, role in changing the social and cultural needs in a way influenced the surrounded built environments. The dilemma which became vital was to involve the modern socio-cultural needs with the value of the

places "We need places where people can exercise their wills and enjoy the willfulness of others within a pattern of accord that is physically rooted to the place – more enduring than, but enlivened by the transit interests of those who each day can give it a new life and point" (Moore, 1974).

As all the historical cities, Jerusalem Old City was in need to accommodate its modern socio-cultural needs, but the political, social, and economical obstacles lead to the absence of plans that could provide these needs, therefore it drove the residents toward transforming their surrounded environment. Understanding this dilemma about the transformations in Jerusalem Old City Urban form, in relation to the accommodation of the modern socio-cultural needs will be the study's main objective. The study will be carried out through listing the transformations in the city urban form in general; then inspire the influence of the political, social, and economical factors to accommodate the modern needs in the city and the influence of that in the total urban form. From another direction, the study will examine the influence of the transformations in the city form on the social mechanism of the city, and its relation to the current city social problems such as crime, lack of socialization, and social overcrowded area.

The study, which assumes deep influence of the political situations in driving the socio-cultural needs toward transforming the city form, will open the visions toward new ideas that can justify the current physical conditions in the city. It will open new fields of study toward improving the life quality in the Old City of Jerusalem, in addition, it will enrich the decision makers with new dimensions for planning and preservation policies which could assist in achieving better living

conditions in Jerusalem Old City through supporting the quality of space, and rising up the livability of the place.

1.2 RESEARCH PROBLEM

Modernity through its components, (industrialization, rising of new ideologies, and the modern high tech means), manipulate both the social fabric, and the cultural meaning with their relations to the city urban context. The change on the social fabric influence the city urban context through the modern social structure and their contemporary expectances from their surroundings, while, as modernity developed the culture three components, (technology, communication, and value), the cultural implications on the places changed too. This set of transformations has a direct influence on the city urban form in a way becomes evident on the contemporary cities urban form and the modern trends of rehabilitating the historical locations.

By make a projection for these conditions on Jerusalem Old City, it became evident that the city influenced by the role of the modern social expectancies and the new cultural components in cause the transformations on the city social and physical dimensions. These influences can be observed through the following problems:

1.2.1 SOCIALLY

- Increase the level of crimes and drug addictions.
- Decrease the level of city socialization.
- Deterioration of privacy.
- The lack of social spaces.
- Over crowded population.
- Pressure on the public services.

• The lack of social entertainment places.

1.2.2 PHYSICALLY

- The rapid growth on the vertical and horizontal orientation.
- The changes on the buildings functions.

Detecting these problems focuses the light into two key issues: First, the set of factors that influence the role of the modern social and cultural needs on the city and which can be cited as the following:

- The migration of the elite and middle class families (the original community) toward the new neighborhoods around the Old City, and the concentration of the low income families on the city core (Touqan, 2004).
- The political anxiety which is presented through the deep influence of the settlers exercises on the city (Touqan, 2004), which can be noticed through the establishment of new Jewish quarter in 1967, and which didn't respect the heritage of the city. In addition to the expansion of the settlers to other Arabic quarters and their occupation to the remained open spaces (Pressouyre, 1999).
- The obstacles rolled by Jerusalem municipality policies in order to guarantee a good life conditions for the Arab residents, and the problem of ID holders, which enforced a large number of Jerusalem Arab residents to go back to the city municipal borders from another closed Palestinian areas.

The second key issue to be noticed is the challenges that the city faced because of these problems, and which leads to:

- List the Old City of Jerusalem as a Heritage site under danger by the UNESCO in 1982 (Welfare, 2004).
- Influence the viability of the Old City.

1.3 RESEARCH MAIN OBJECTIVE

The research aim to realize the quality of the place in the Old City of Jerusalem; through achieve a framework of understanding the influence of the modern social expectancies; and contemporary cultural components on the physical form of the Old City. Understanding this relationship will assist in opening different visions toward rising the livability of the Old City for the inhabitants, and will support the efforts headed for preserving the heritage value of the Old City. This general aim will be achieved through:

- Verifying the modern social expectancies and the cultural components that influence the urban forms, which must be concerned by the designers.
- Outlining the transformations which took place in Jerusalem Old City urban form and the way it influenced the mechanism of this form, through studying its influence on the elements which consist the urban appearance and which perceived by human being.
- Determining the space congruent to the socio- cultural needs and changes in Jerusalem Old City.
- Determining the aspects which have direct influence to provide the modern needs in Jerusalem Old City.

- Studying the effects of the modern changes on the city social mechanism and its influence on the social life.
- Establishing a guideline where decision makers can adapt them.

1.4 RESEARCH QUESTION

The research main argument can be inducing under a set of questions, which can be addressed as the following:

- Did the urban form of Jerusalem Old City influenced by a deep transformation in its appearance and mechanism?
- Did the modern social and cultural needs played a role in any transformation take place in the Old City urban form?
- How the transformations in the urban form in Jerusalem Old City influenced the perceived image about the city?
- How the transformations of the city urban form influenced the city's social mechanism? Did this role affect the social problems which took place lately?
- Did the transformations in the urban form in Jerusalem Old City influence the livability of the place? And did it have a role in listing the city as heritage site under danger?
- What are the hidden factors which derived the modern social and cultural aspect to transform the Old City urban form in this way?

1.5 RESEARCH METHODOLOGY

In order to achieve the study's main objectives, the research will adapt the following phases:

• Theoretical phase_ where the main terminologies, questions, quotations, and ideas related to the study field will be introduced. In addition, to outline the theories and visions of the city urban form with its relation to social and cultural mechanism, to cit the modern social and cultural needs and changes on the city, and then the Islamic city relation to all that.

Analytical phase-case study approach

Social sciences adapt case study research as a principal way of studying the social phenomenon; it considers a sufficient way of bringing people to understand a complex issue or object, or to add strength to what is already known by previous researches or theories. In sociology, qualitative researches are used in order to examine real life situations, the basis for the application of ideas and extension of methods (Tellis, 1997). According to *Robert K. Yin*, case study research method is an "empirical inquiry that investigates a contemporary phenomenon within its real_life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used" (Yin, 1984).

This research can be classified as explanatory case study research.

As the relation between modern social changes and city urban form become overlapped. The boundaries between the phenomenon and the context are not clearly evident, and as this subject consider a social complex issue,

which depends on a number of events or conditions, it's so sufficient to conduct case study methods to reach the objectives of the study. The research main case will be Jerusalem Old City, it is the main inspiration of the research problem, and the conditions of this case will give the opportunity for understanding the research main problem. A cross reference case study, which has the same conditions as Jerusalem, and in which it gave a model to overcome the research problem will be useful to analyze in order to enrich the theoretical background of the research.

This phase will be divided to two main stages:

• First stage-context descriptions

- a. The general physical and social conditions and the development of the context.
- b. The general transformations which took place in Jerusalem Old City physical form.

• Second stage-case analysis

The conditions which derived the residents toward transforming their city physical form through:

a. Theoretical analysis approach: The transformations in Jerusalem Old City urban form can be justified according to the theories which deal with the human modern needs in the space. This will determine the reasons that force the resident to transform there urban form from modern socio-cultural needs perspective, and the influence of that on the social mechanism of the space.

- b. Cross reference approach: A similar case, which is Toledo Old City in Spain, with new solutions for the research problem to be presented in order to observe the social behavior with the urban form that considers social and cultural needs. To examine the modern social and cultural needs which are proposed by the theory, with a practical case, and the place congruent to these needs.
- c. Questionnaire approach which will be used in order to get the users participation in the way of understanding the problem. The questionnaire will be useful to get the users evaluations for the modern transformations; it will increase the level of objectivity for the research.

After this analysis it was vital to understand these aspects which affected in providing the modern needs and will be essential to determine the influence of these transformations in the city mechanism, socially, and physically.

1.6 RESEARCH LIMITS

The study aim to reach a general understanding for the research main dilemma, this means that the output of this study will guide for a comprehensive knowledge about the research objective. Accordingly, it is vital to note that the level of analysis will be limited in the following points:

- The urban form analysis in order to set the transformations. Due to the following:
 - *The limited data which is caused by time limit.*
 - Accessibility problems to the case sites.

- The number of adapted theories:
 - The time limit.
 - The concentration on the research main case, more than make argument on the theoretical background.

It's important to note, that the study will not give any evaluation view about the current conditions on Jerusalem Old City, it will just make a general discussion to present what is going on.

2 CHAPTER TWO: CITY

FORM & HUMAN ASPECTS

2.1 Introduction

This chapter aim to focus the lights on some terminologies and theories, which is essential in order to achieve the research objectives. It will start with descriptive definition of the city, this is vital in the line to introduce the research direction; this definition will show the city as a social organism. In addition, to show the relation between city forms and how people defined the city. On the same level, it is important to explain the meaning of urban form, in order to clarify the components, which will be analyzed.

From another perspective, this chapter will define both the social, and the cultural meaning and the relation between these two terms. It will also address the meaning of the socio- cultural aspects that influence the city urban form. This will provide a measure to determine the socio- cultural dimensions that the urban form must be organized according to, and to determine the way these components are interrelated.

2.2 THE CITY, ITS FORM, COMPONENTS & CHARACTERISTICS

During the search for the relation between city form and social life, a deep question rose up as a director that orientates the hierarchy of the study, "what is a city?" Really, it is essential to understand this organism before analyzing its components, characteristics and it is influence on others, according to *Lewis Mumford's*: "What is the city? How did it come to existence; what process does it further: what functions does it perform: what process does it fulfill? Before analyzing the components of the city, it is essential to understand the functions carried out within this closed container and to accept that the city is not merely a container. A city must attract people and institutions that carry its life before it has anything to hold." (Mumford, 1968).

What is a city as question seems very direct, but in deep, it is with a wide range of meaning that depends on the people concept. The concept that relate to the cognitive image about an ideal city, which noticed by their experiences about other cities. In another way, the question can be rose up in a form of recalling several images of cities mechanisms, this will lead us to *Victor Gruen* when he described the city, if it is a place like Madrid, Rome, or Vienna where there is still recognizable a concentrated, teeming, dynamic expression of urbanism? Or it's a place like Manhattan, Los Angeles, or California, which *Gertrude Stein* once said, when she was asked how she liked it there:" there? There is no there there?" Alternatively, is it a place like Venice, Toledo, or Athens which although its small industries, it becomes a very enjoyable place for its inhabitants and millions of visitors every year? Must it be big like metropolitan New York, or can it be small as Salzburg the jewel of Austrian cities? Does it become a city just by the act of being incorporated, or must it offer social, cultural, recreational and political consciousness to its inhabitants? (Gruen, 1964)

2.2.1 THE DEFINITION OF THE CITY AS SOCIAL ORGANISM

City definition is an important issue in this study. From one hand; it will show the relation between social life and city urban form, the relation which introduce the city through its form as the place where social life took place "intellectuals idiom (human being is habitual civilized) means that he is in need to a medium to collaborate in, called the (city) and later known as urbanization" (Taher, 2004).

On the other hand, it will introduce the people conception about the city, which relates to its urban form. To construct a deep understanding of that it will be useful to adapt the description definition rather than the direct one. As *Gruen* described, the city is the thing that articulated in the countless cafes and sidewalks of Vienna, it is the crowded

sidewalks, covered galleries in Italy, the city is the parks: the tiny green spots with benches, it is the holy feeling that expressed from mosques and churches; It is the elderly lady strikes up a conversation with elder gent setting next to her on the bench in central park and later marries to her; A six years boy who ask another "do you want to play with me?" and later becomes his lifelong friend; the young man who offers a seat in the streetcar to the young girl and engaged to her two weeks later; the gentleman who asks for a permission to sit at a sidewalk café with another and ends up writing a book with him; it is the millions of chances of meetings that turn out to be the important events of lifetime (Gruen, 1964).

Tracing these descriptions will lead the definition of the real city, which is main point. It is clear that in our minds the definition of real city linked to the cognitive image we have about its form and activities, this causes the relation between city, its form and activities. City activities are different from social, economical and political, but here we are dealing with these activities from its social aspect, hence, the city identifies as:

A place of full of life, it is a place of different moods, between morning, afternoon and evening. It is a mirror of everything human, for love for hate, for spirituality and for social activities, it is the well functioning place with different choices between be socialized to feel private, to act people together or give opportunity to escape alone, it's the base that link different classes together, rich and poor. Finally, the place gathers a person to live together it is a place with a high social dimension (Gruen, 1964).

According to the definition, the city which is the social base includes two main aspects, the symbolic meaning of the social life and its functional needs. Therefore, it

includes the medical, social, recreational and religious activities that link together as co-urbanist activities. This determines the character of the city urban form in addition to its physical appearance, social, ideological and spiritual meaning that articulated in this form. This characteristics can be considered as the main criteria used by the human being in order to determine his satisfaction of its form, and which must be adapt in the analysis part of the research.

2.2.2 <u>CITY URBAN FORM MEANING</u>

As cited above, the study deals with the city from the relation between two considerations. The first is the city urban form, and the other is the city social and cultural life activities. City form here allied to *the masses and open spaces*, it relates to the appearance specify by these components. The appearance is:

The visual impression, and the way it function in, it is the feeling it leaves in the beholder.

More of all that, it is according to *Cruen*:

"The inherent quality of an object (here the object is the city masses and open spaces) plus it is impact on those who experience the object through their sense" (Gruen, 1964).

This means that appearance measured through physical and psychological influence of the environment on the human being, it relates to the way he feels in, how comfortable he is, to inspiration he gets, the degree he can live in undisturbed, and the level of freedom of expressions and experiences he can achieve. Dealing with the city urban appearance will be through the study of its elements that human being understands the appearance according to it, and which are the elements that consists the city components "masses and open spaces".

2.2.3 CITY URBAN FORM COMPONENTS

While talking about city's urban form, it is important to analyze the components of this form. In the way to define the city urban form, it is address that the form represented through the city spaces and masses. *Beckley* (1979) analyze the city form "masses and open spaces" as:

- The space between and around the buildings _ that's to give the external open space a positive relationship to the adjacent building in addition, to relate that space to the large urban patterns through the visual and functional vision. The open spaces here refer to the streets, courts, garden and transitional joints.
- The positive and negative form: The replacement of any building in the environment sets up immediately relation with the space around it. By determined its identity, shape and volumetric. According to *Venturi*, analyzing the positive and negative space can implement to crowded environments like Rome, or that are less built- up like Las Vegas. From his point of view, this sort of analysis is useful in order to tie together all spaces in one related whole (Venturi, et.all. 1977).
- Townscape and human awareness: This refers to the physical appearance of the space, the elements that give a particular aesthetics and the people satisfaction of that. This is determined by the people ideologies, social manners, needs and future visions. This term is firstly used by *Gordon Cullen's* who consider this term as the most influential one that affects the

users eyes and determine there perception to the environment (Cullen, 1961).

Roger Trancik agreed with Beckley in the importance of the open spaces and the masses in analyze the city urban form, he talk in his theory, figure grounded theory about the analysis of the figures in the spaces in the three dimension considering the masses and the spaces (Trancik, 1986). According to that the analytical part of this study, which aim to analyze Jerusalem Old City urban form, will be based on understanding Beckley components, in which the city masses and open spaces represented through. From another direction, and in order to determine the city urban form quality, it is important to study the city visual characters that influence human mental perceptions of the environment. According to Kevin Lynch in his book, "image of the city" human being perceived the city form through its paths, nodes, landmarks, edges and districts (Lynch, 1960). These elements are the ones that determine the way the people perceived and construct the quality of the city image. Analyzing the relation between these elements and the meaning that it gives for the city form and which is determine through the relation between human being and the built environment, will be included in the next part of this chapter.

2.3 THE INFLUENCE OF THE URBAN FORM IN HUMAN BEING

In order to get a deep understanding for the transformation of the city urban form, it becomes indispensable to recognize two aspects. First, the relation between social life and the city form, which will clarify the way the human acts and reacts with its form, and then the way to cause transformation in its form. Second, the specific city image and elements - perceived by human beings- with the characters that enrich this relation, and determine its quality.

As commonly known, the city through its urban environment is one case of the environment in general, an environment that consist everything surrounded to the organism, whether individual or group. The organism act and react according to what is determined by this environment, this lead to be the main pillar that consists the human behavior and decides his satisfactory from it.

2.3.1 HUMAN-ENVIRONMENT RELATION

In this order, the research adapt the ecological view - mentioned in *Amos Rapoport* book - *human aspects and urban form*, in which the relation between human and environment become as an organism *in* environment rather than organism *and* environment (Rapoport, 1977). This relation will be studied through its relation to the physical statue of the environment, it means that the study will adapts the architects view about the social life relation to the urban form, which consider the environment through the built spaces, its forms, the way it affects the people perceptions, the way its used, and the meanings its can elects (Colquhoun, 1989), this deals with the form as the primary concerns. In his book Rapoport, adapt two visions to describe the environment as ecological system, each settle on the urban environment components that act and react with human being. The first vision listed was *Ittelson* seven components, which are (Ittelson, 1960).

- a. <u>Perceptual</u>: The way people experience their environment, for him it is principal in linking people to the surrounding.
- b. <u>Expressive:</u> The affect of shapes, colors, textures, smells, sounds, and symbolic meanings on people.
- c. The domain of aesthetic values: Culture, Rapport adds the values.
- d. Adaptive: The extent of activities in the environment.

- e. <u>Integrative:</u> The social groups and how they facilitate with the surroundings.
- f. <u>Instrumental:</u> Facilities provided by the environment.
- g. The general ecological interrelationships: All of these components.

The other vision according to *Rapoport* is *Lawton* vision (Lawton, 1970). His vision is about the levels that the organism reacts with the environment. The environmental components are:

- a. The individual.
- b. <u>The physical environment:</u> This includes all the features of the environment such the climate, the nature and the built areas.
- c. The personal environment: Refers to the organism of individuals or groups.
- d. <u>The suprapersonal environment:</u> Relates to the human impose in the environment, which came as a result for the personal characteristics due to grouping by age, class, ethnic, origin, and lifestyle.

e. The social environment.

According to these classifications, and in order to understand the city urban form transformations influences in Jerusalem Old City, relevant to socio_ cultural changes, its vital to note that the urban form constructed according to two ways, self conscious way (carried out by the designers), and un_ self_ conscious (carried out by the people them self's) (Beckley, 1979). This is based on the way people perceive, adapt, and integrate their needs, in respect to the values as *Ittelson* mentioned. As the values developed from time to time, the people are in need to adapt and integrate new needs, and the absence of self_ conscious way of integrate these needs will derive for the un_ self_ conscious way to take place through many levels starts from the individual level and ends by the social environment level as mentioned by *Lawton*. The

influence took place through the changes in the setting of the elements, which perceived by human being and which construct the urban appearance for him.

2.3.2 URBAN FORM ELEMENTS & HUMAN COGNITION

In the track that links the physical urban form to the human social life, the quotation which was done by the architect *Daniel Burnham "Make no little plans; they have no magic to stir men's blood.*"(Gruen, 1964) raised up, but this appears in the form of question on the urban form scale, the question is "what stir men's blood in the city urban form?", With terminologies that are more scientific the question can be reform as "What is the elements that externally represented the face of the city, and which makes it recognizable and better perceived? Because the transformations on the city form presented for human being through these elements, the following parts will discuss the theories that deals with it, and which will be adapted in the analytical section of the research.

2.3.2.1 THEORIES OF URBAN FORM PERCEPTION

Scientifically there is two orientations towards the answers of this question, and which based on the way the people build their cognitive maps, the first is the psychological, which tend to consider the *knowledge* as the way to recognize the environment, and then to impose its picture on him, these means that the level of perceiving the environment related to the people backgrounds, which depends in there culture, value and lifestyle. The other orientation based in the anthropological, in which the *meaning* is the pillar to perceive and recognize the environment. Its obvious here that the two orientations are dealing with the subject through the society culture values and symbols (Rapoport, 1977). The same direction will be resulted if we try to answer

the question according to *Shannon's theory of information* (Shannon & Weaver, 1949) "the information they embody and convey". He explains the elements that consist what he describe the face of the city are more informative elements than others, therefore it seems to be more legible and better perceived and remembered.

2.3.2.2 LYNCH COMPONENTS OF PERCEPTION

In this orientation, *Lynch* (1960) talk about the informative aspect that he called it as the external represented of the city as one of the two main pillars that makes the city more recognized and better perceived, for *Lynch* he added the internal representation. In his book *the image of the city*, *Kevin Lynch* depends on two questions to determine the way people understand their surrounded environment and decide its quality, the questions are; "do people know and mentally structure the physical environment? And, which features do they notice?" (Lynch, 1960). For Lynch the answer of the question that there are five elements, which are significant in shaping peoples image of the city. These elements are; paths, nodes, edges, landmarks and districts (Ibid).

Lynch is not the only who talked about this case, subsequent studies indicated another elements were essential for human to perceive environment image, these studies considered the symbolic, cultural and personal elements, in addition to Lynch elements (Golledge & Spector, 1969). According to the above studies, we can finally classify the elements of the urban form that change it to more memorable and better perceived in a way influence the environment quality as:

a. <u>Geometrical urban elements:</u> Includes *Lynch* elements (paths, nodes, districts, landmarks and edges).

b. <u>Semantic urban elements:</u> Involves the symbolic, cultural, personal and functional one.

In order to determine the influences of the urban transformations in Jerusalem Old City urban form quality, the research will adapt both of the geometric and semantic elements to understand these influences. This will be carried out through analyzing the city's components listed in the previous session. At the same level, it is vital to understand the aspects that play the role in developing and changing the city's face.

2.4 ASPECTS PLAY THE ROLE IN TRANSFORMING THE CITY FORM

Cities emerge and develop according to many aspects; these cause the transformation of the city face from one time to another. As the aim of this study is to understand the transformations of the city urban form according to socio-cultural needs, it is vital to look to these aspects which determined by *Cohen* in 1976 in three main points (Eisenstadt and Shachar, 1987):

- A. <u>The instrumental orientation:</u> The urban space organized and the city developed according to economic benefits. This means that the economic needs of human being are the main factor of emerge, control, organize, and develop the city.
- B. The territorial orientation: The urban space organized in away to achieve tight internal security and more political domination of the city. Many cities established according to security and political needs, it located according to these two factors, it aligned by walls and internally organized, and finally it developed and transformed according to it.
- C. <u>The symbolic orientation:</u> Relates the society and their culture, and the reflection of that in the city development and its internal organization.

As the concrete form of the city influenced by these orientations, the most important aspect to be emphasized will be the third one. In which the form and the development of the city will be understood according to the socio-cultural orientation and which get a symbolic meaning (as *Cohen* did). However, it is vital to carry out the study keeping in consideration the influence of the other two aspects, the economical and the political, and the way they affect the socio-cultural one. This orientation will be analyzed in relevant to the city urban form component and elements.

2.5 SOCIO-CULTURAL ASPECTS & CITY URBAN FORM

City emergence and its urban form development based on three aspects, according to *Cohen*, one of these aspects is the third that came as a result from a wide range of social and cultural factors. The social factors here mean:

"The factors that includes city social relations, characteristics, needs, means of communications, and activities." (Rapoport, 1977).

The cultural factors here meant by:

"it evolves a group of people who have a set of values and believes which are learned and transmitted, which create a system of rules and habitats, and leads to life style" (Ibid), it consists of, technology, means of communication, and values.

Tracing the two definitions will lead to strong relation that connect social to cultural factors. As the social factor determines the people needs and relations, culture determines the values that reflect the way the people decide their needs, activities, the level of the used technologies, and way of communications. This leads them to build their environment, choose their food and clothes, and therefore produce a life style. Under the purpose of achieving the urban form quality through reorganizing the built

environment with new social and cultural needs, it is essential to understand the characteristics that present these needs, and the influence on the urban forms.

In this orientation, in order to present the effects of the socio-cultural needs in the urban form, the following points will be covered in this session:

- **2.5.1** Clustering between group homogeneity and heterogeneity.
- **2.5.2** The subjective elements that defined group clustering and homogeneity, which used in different places and times. And which present the direct influence of human being in space and vise versa.

These terms represent the social and cultural mechanism of the urban forms, according to that, the analysis of the socio-cultural transformation and city urban form must go through understanding the influence on these factors. In this direction, and in order to establish more deep understanding, the following parts of this chapter discuss these elements in depth.

2.5.1 <u>Clustering Between Group Homogeneity & Heterogeneity</u>

People aim to live with each others to built their environment in a cluster way, this process occurs in cities based on group lifestyle, symbols, and defenses against lifestyles and stress (Rapoport, 1977). To achieve this desire there is a basic need to understand the built environment in terms of homogenous or heterogynous clustering areas. Homogeneity is the way to present the people tendency to cluster with others like themselves.

One example of homogeneity clustering is the neighborhoods. The environment provides a social and physical elements intermediate between the individual and his

family and the larger heterogynous group in a place where people from similar desires live together. To live in homogeneous areas, the group is in need to identify itself and to identify the others, this can be expressed as the one function of the culture, it provides the opportunity for the people to integrate and separate.

Each group may share a public image – unconsciously (Boulding, 1956). At the same time, each group has its own internal structure. This creates boundaries between group members and not members, *Rapoport* divide these boundaries into three (Rapoport, 1977):

- Behavioral boundaries: The behavior in space determines the level of crowding and density.
- Physical boundaries: It filters and controls the interaction and information from different directions.
- Social boundaries: Separates group members from non-members "us from them".

Homogeneity leads for separation between clusters, this separation can be read in such areas with very strong ties like Moslem cities, as these cities has quarters where people bound together by ties of language, religion, occupation, or family (Von Gruenebaum, 1958), so the Islamic city can be visualized as a collection of homogeneous areas, these areas are identified according to religion, origin, family, or occupation identities. However, at the same time, it is important to show that these homogeneous areas connected to each other through the macro scale level.

Many advantages appear in the homogeneous areas which raise it as a satisfied area to live in. The satisfaction came as the area consists of people from the same culture, and as people like to live with such people to share them their values, ideas, and norms, understand and responds to the same symbols; agree to the child rearing, interaction, food, clothes, lifestyle, and leisure (Rapoport, 1977). In addition, homogenous area show a lesser rate of conflicts and crimes, people are better able to govern themselves since it is easer to agree on decisions and have "pervasive consensus" (Gans, 1972). For Rapoport, forced heterogeneity is bad as force segregation. He also added that heterogeneity increase prejudice, when people choose their habitat they evaluate others better than when they are forced to live with others, when there may increase negative feeling (Festinger and Kelly, 1951).

Finally, it is important to emphasize that clustering has too many advantages; it causes reduction of conflicts, less prejudice and crime, lesser deterioration of housing and urban areas, and greater complexity and richness of urban environment. The Jerusalem Old City analysis of the urban transformation on the research case, must consider the transformations on the city clustering system and the influence of that in the social mechanism of the city.

2.5.2 CLUSTERING SCHEMA ACCORDING TO SOCIO-CULTURAL ASPECTS

Clustering becomes an essential concept in the way to understand the relation between socio-cultural aspects and city urban form, as mentioned above clustering models and typologies are varied from one society to another, this based on peoples behaviors, lifestyles, lifecycles, values, believes, and social needs. There are number of schemes based on ethological concepts about that, but here one particular scheme,

which presented by Rapoport will be introduced as threw following (Rapoport, 1977):

- A. Home range: The usual limit of regular movements and activities that can be defined as a set of settings and locals and their linking bathes.
- B. Core area(s): These are areas within home range which are the most usually inhabited and best known.
- C. Territory: This is a particular area or areas which are owned and defended (whether physically or through rules and symbols).
- D. Jurisdiction: This can be defined as ownership or control of territory for a limited time and by some agreed upon rules.
- E. Personal distance or personal space: The bubble of space surrounding individuals.

The relations between these parts in the environment are listed in terms of space hierarchy as the following (Rapoport, 1977):

- a. Urban public: Open to all.
- b. Urban semi public: Public spaces for public uses but with some limitations of purpose, special use etc.
- Group public: The meeting ground between the public and private realms managed by the community.
- d. Group private: Community gardens or strong areas managed by some groups.
- e. Family private: The dwelling and gardens under the control of the family.
- f. Individual private: The innermost sanctum of the individual.

These levels of hierarchy, between the environment different parts, will be essential in the case analysis. This analysis will include the aspects that define the clustering schema such as; public and private domains and territorial markers, behavioral setting system, and house settlement system.

2.5.2.1 Public Private Domains

As seen previously, urban spaces in general divided into domains, distinguished by rules and symbols. However, the aim of space design is to achieve interaction and connectedness. Distinguishing domains will be an appropriate way; it leads to separate the space between public and private, us and them. In this orientation, privacy can be defined as the "the control of unwanted interaction" (Rapoport, 1977). In order to understand this term, questions rise up such as; with whom one interacts, when and under what conditions; what constitutes withdrawal, where both interaction and withdrawal occur all vary.

Privacy as defined above is to avoid unwanted interaction; through rules, psychological means, behavioral cause, structuring activities in time, spatial separation, and physical devices (Ibid). The use of any of these mechanisms depends on the society, and the culture of the people, along with the activity and its behavioral setting. The separation (using any of these mechanisms) will lead to private-public separation in term of front and back. This kind of separation determines the sort of behavior within these spaces.

Spatial and physical separation mechanisms are used the most by architects and urban planners to create public/private domains, front/back, and wanted/unwanted interactions. These barriers called territorial markers, which control the access of

others, what one want them to know. In addition, these tools are varied from one community to another; it mostly depends on people's lifestyle, values, unwritten rules, and believes.

2.5.2.2 BEHAVIORAL SETTING SYSTEMS

Home range is greatly varied as the behavior of the peoples in spaces varies too. This home range is made of behavioral setting and their linking pathways. In addition, the behavioral space is different to the physical size of places, culture, age, and varies for individuals and groups (Rapoport, 1977).

According to Rapoport (1977), behavioral settings are "places where particular activities occur, and they have boundaries which inform people that they are entering a different place" (Ibid). The setting provides reason for appropriate behavior; this behavior depends on time, nature, culture, and space activity. The environment consists of different settings, each setting differ in its needed richness, nature, and facilities.

Understanding behavioral setting becomes essential for design environments, each environment design and development affected by the number and nature of settings it has. In addition, each space analysis based in the study of the settings it has in the same location, this plays a main role in defining the house settlement identity and clarity.

2.5.2.3 THE HOUSE SETTLEMENT SYSTEMS

There is a clear unification between the dwelling and its surrounding, its important to understand that we cant separate dwellings from other elements of the system, in this domain, beside the concepts of private and public, back and front, and

the behavioral setting, the concept of house settlement system raised up. *Amos Rapoport* discuss this concept in details, he mentioned for the house settlement system as the way "people live in settlement and landscapes of which house is only a part, and the way in which the larger settlement is used affects the use of the house" (Rapoport, 1977).

Talking about house settlement system will present the specific elements that make the system, the elements make up the system are different, and the aim is to involve different groups within this system. House settlement system influenced by kinship, social networks, sex rules, work patterns and the like (Ibid).

2.6 CONCLUSION

As a conclusion of this chapter the city is the location that includes the social relations, and which measured through its co-urbanite activities, its appearance, function, spiritual, and social dimensions. The research deals with city's form which consisted from *masses and open spaces* and presented by the appearance. This is determined through the visual impression, the functional mechanism, and the feeling it leaves in the beholder. This shows the relation between the city in whole, and the urban form through the evaluation criteria's.

Dealing with Jerusalem city masses and open spaces means to study the space between and around the building, the positive and negative forms, the townscape, and the human awareness. The study will adapt the environment through its built context, and which is changed under self-conscious and un-self-conscious. Integrate the adapted needs according to the development on the social values. The components will be analyzed through the influence on the elements that makes the form; the person can recognize the form and its quality through: geometric urban elements, and semantic

urban elements. The transformations effects on the city urban form components will be studied through the socio- cultural dimension, but at the same time, it will be justify according to the influence of the other factors such as the economical and political ones.

The influences of the urban form transformations on the city's socio-cultural mechanism of Jerusalem Old City can be determined through the social activities, way of communications, level of technologies, and changes according to the values. This will be analyzed through the analysis of the group clustering between homogenous to heterogynous. The elements of group clustering are: private public domain, behavioral setting of the space, and the house settlement system. This analysis will determine the change in the space mechanism on the city and will include the social problems influenced by these changes.

3 CHAPTER THREE:

ISLAMIC URBAN FORM &

CONTEMPORARY SOCIAL

NEEDS

3.1 Introduction

This study aims at analyzing the relationship between the socio-cultural aspects and the urban form of the city. It concentrates on the Old City urban form level, and the core of the study is Jerusalem Old City. Basically, the existed form of Jerusalem Old City with its socio-cultural structure present the Islamic city terms, accordingly, it will be beneficial to understand the Islamic city social life, and its relations to the religious meanings, this will assist to understand the way the existed form established in, with the value of this form. From the other hand, it will be useful to analyze the internal structure of the Islamic city; this will offer a basic knowledge about the urban form components in Jerusalem Old City, in relation to the components and elements, which were listed in chapter two, in a way gives opportunity to understand the transformations in Jerusalem Old City urban form and the influence of these transformations on Jerusalem Old City's mechanism.

The study will discuss theories about the modern socio-cultural needs and the way it integrated with the Islamic Old Cities urban form. In this way, this study will offer the tools needed to integrate the modern social and cultural needs with the Old City's heritage, value, and identity.

3.2 ISLAMIC CITY BETWEEN RELIGIOUS & SOCIAL DETERMINATIVES

Architecture and urban forms become the physical representations of people's life, which prepared by the inhabitants themselves or by the designers in order to find their shelter "as far as architecture is concerned, it is the haven where mans spirit, soul and body find refuge and shelter..." (From an urban management manual by Ibn Abdun, an Andalusian judge from the 12th century) (Bianca, 2000).

Accordingly, it is essential to notice the interaction relation between *people and* what they believe and people and what they built. Built environment always structured by man, and influenced by his attitude and way of life, in traditional communities - which becomes more obvious- the environment structured by the inhabitants themselves. This can be called as self conscious urban design (Beckley, 1979), in such type the people believes influence in the environment becomes more dominant.

As spiritual traditional community, Muslims aimed to structure and materialize their perception to the universe in relation to their own culture. The distinction of this culture gave rise for the integrated cultural system by embodying the religious practice in people's daily life. Islamic communities came from different origins, it has different cultural backgrounds, but it all shared in the religious and spiritual meanings that gave order to the society. The religious organization of Islam is the main ordinate of people's life, values, traditions, meanings, and way of life. Therefore, the culture of Islam transformed to be religious culture that relatively affected by the place and the time.

Therefore, it is a principal matter to study the Islamic religion and social aspect before analyzing its architecture and urban form (this will be later useful in analyzing Jerusalem Old City's urban form). In order to do that, it is essential to go through two main stags, which are:

- **3.2.1** The role of religious and spiritual values in determining Islamic social structure.
- **3.2.2** The Influence of the Shaping Factors in Islamic City Form

The next parts of this session will discuss these stages, but before start with that, its vital to know that the physical shaping factors based on the role of spiritual and

social values, this due to the definition of Islamic culture as a religious culture as mentioned above.

3.2.1 THE ROLE OF RELIGIOUS & SPIRITUAL VALUES IN DETERMINING ISLAMIC SOCIAL STRUCTURE

In his study about the city form emergence and development, *Cohen* (1976)set three main orientations that affect city emergence and development (see 2.4), the first orientation of that is the symbolic orientatio. Islam as a culture that based on the religious routes and its social implementations depend on the symbolic orientation (religious and social) as a main pillar for determining the city's structure. These clearly reflected in spatial terms, such as the urban setting and the morphological output, which shaped the built environment.

The implications of religion on the social life in Islam presented through the "five faiths of Islam" which are "faith (Shahada), prayer (Salat), almsgiving (Zakat), fasting during the month of Ramadan (Siam), and the pilgrimage to Kaaba (Hajj) (Bianca, 2000). Tracing any of these faiths will lead to a deep understanding for the religion influence on the social structure. One clear example could be the prayer, in Islam it is recommended to be done collectively whenever it is possible, five times a day. In Friday noon's, local community comes together in an event which has a strong social event (Ibid). The five times pray are the principal aspect of dividing the Muslims day. Accordingly, all commercial and social activities structured in. Another fact that the physical act of the prayer through his movement and orientation to Mecca, has distinct spatial implications.

In addition to the religious effect, social characteristics and cultural values the built environment in Islam affected by the origin of Islamic communities, these communities originated from different distinct which enrich Islamic society with varied rules. However, more effectual is the original background as a tribal society of the Hijaz of the first Islamic generation who later becomes the influential generation of all Islamic societies, this can be understood through the relation between nomad and urbanization. According to *Ibn Khaldun*, the nomad trip origin are the carrier of needed potential of strength and pride which is produced under the hard conditions of the desert, this potentials will be materialized after the emerge of the nomad in the desert and their integration to the urban societies through the places they establish their civilization in (AlTaher, 2004). The tribal society with its Bedouin roots emphasize the relation to nature and simplicity, as the Bedouin are the sons of the desert and they use to keep simple to travel and to found environmental solutions with this surrounding "the native Arabic is the son of his desert environment, which force him toward moving from part to part, and which came against the place attachment..... meanwhile the simplicity character of the Arab individual becomes congruent with all his desert life conditions, in addition to become a reaction to his behavioral prototypes, social values, and ideologies" (Abu Khashan, 1996).

Islamic society had its internal structure constrains which are varied between one constrain to another, however, it is a key factor in *Ibn Khaldun* point of view is the social cohesion "Asabyya" of nomad societies, it is a main reason to foster a strong leadership with group solidarity and quality; these factors are important for establishing the Empire and also for its sustainability (Ibn Khaldun, 2004). This considered as the second control tool after the religious orders that minimizes the need for the formal structures, at the same time, the society was in need for the social institutions which presented through the mosque. The mosque in Islam considered as the prime public

building, that includes in addition of its religious function all sorts of political, and social functions. The mosque embedded as the center of the urban fabric that gives the sacred identity for the society and reflects its role in the social life (see fig. 3-1). The development of Islamic society push the need for formal institution to the surface, the only institution rise up was the establishment of religious endowment. The religious endowment in Islam called (waqf), "it based on pious donations by the powerful and the wealthy, which were given for the social purpose and become forever the inalienable prosperity of the community" (Bianca, 2000). The waqf consists of funds to built or maintain the social institutions like the mosque in the beginning of Islam or the other institutions, which came later such as schools and baths.

The social structure affected all life patterns, this obviously expressed in Islamic city urban form. Analyzing the influence of the shaping factors in Islamic city form, in addition to its internal structures, will assist to understand the massive influence of the religious society filtered by the social and cultural aspect in shaping the built environment.



Fig. 3-1: The mosque as the center of the urban context in Islamic city, Qairawiyin mosque in Fez (Bianca, 2000).

3.2.2 THE INFLUENCE OF THE SHAPING FACTORS IN ISLAMIC CITY FORM

Islamic built environment comes as a response for a set of factors, starts (as cited in 3.2.1) from the symbolic factor (social, cultural and spiritual one), then the physical factor (environment and response to surrounding), and later the territoriality factor (the royal palace and the political influences). However it is, the role of the spiritual and socio-cultural factors become the most influential factors of all.

This study emphasis in the role of the social and cultural factors in shaping the built environment in Islam, which can be divided as:



Fig. 3-2: The Khittat Urban Pattern_ City of Fez (Bianca, 2000).

- The role of the religious orders to construct the community life style and way of life.
 - The impact of the origin of the Islamic community as nomad trips.
 - The impact of the other life styles, which take place as an outcome of extend of Islam to different civilizations, and which present the social and cultural needs of these civilizations.
- The existing built structures (architecture prototypes) in the

regions where Islam extended to, and which present the social cultural life in these areas.

Under the aim of understanding the effect of the religious and community tribal origin in the city urban form, spatial implications and examples will be useful, the first spatial implications in Islam was "al_khattat", this term present the Islamic planning صلى الله عليه) pattern, which take place after decade of the death of prophet Mohammed وسلم), it first implications was in the areas closed to Mesopotamia and Egypt such as Basra, Kufa, and Fustat (Bianca, 2000) (see fig. 3-2). The Khattat consisted in the beginning with very primitive architecture; it composed of tents and simply reed and mud buildings, this related to the simple origin of Islamic society, "the organization pattern of these settlements was to become significant for, if not typical, for later Muslim cities." (Ibid). The urban patterns of the Khattat depend in the central public space, which is occupied by the mosque, in addition that the mosque enclosure defined the administrative and political space. Markets composed around the mosque, the dens markets their represent the influence of the pray in the social and economic human life in Islam. The markets also represent through the way it built in and the enclosure it consist, the impact of the community origin and its way of make environmental solutions, the markets shaped in a comparable way to tents. The other social factor of shaping Islamic settlements is the existing built structures (architecture prototypes) in the regions where Islam extended to, the reuse of the existing Roman Hellenistic town structures explain that, Muslims adapt the existing structures in the places they move to, in a way to modify it to be more suitable for their life. The case of Aleppo presents this concept, in which the old forum and agora occupied by the mosque, the Moslems deal in this case with the location and the existing style, in addition to the change of the orthogonal geometric streets to more organic ones to express the less governmental control (Bianca, 2000) (see fig. 3-3).



Fig. 3-3: Model representing the historical city structure of Aleppo.

The change in the orthogonal structure and the location of the mosque (Bianca, 2000).

The last social factor of shaping the Islamic settlement is the impact of the other life styles; this is obvious through the concepts of walled gardens. This example becomes a rich one that it express the role of all-social, cultural and religious factors in determining the shape of the Islamic settlement, the gardens reflects the original concept of the Arabs about the oases, which give them environmental solutions, it also reflects the religious concepts about the paradise, which is described in the holy *Quran* as a green place of fruit and other trees with water, but the concept of the walled garden developed from the Iran concept of "firdaws":, and heir the influence of the other civilizations become obvious (see fig. 3-4). This walled gardens reflected in the reception areas out side the Islamic city, the palaces gardens, and the houses courtyards.

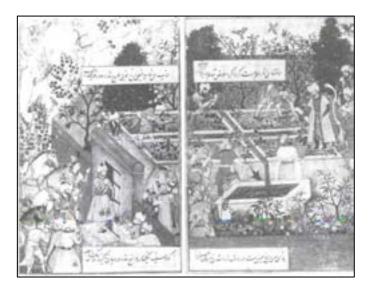


Fig. 3-4: Mughal miniature from the 17th century showing the walled garden (Bianca, 2000).

The examples above introduce the role of social, cultural, and religious factors in shaping the built environment in Islam; this will be useful in order to develop the knowledge of understanding the existed urban form of Jerusalem Old City. However, the examples above, introduces the internal structure of the Islamic city, which will be discussed in the next part of this study, in order to understand deeply the impact of these factors, and the way to analyze it.

3.3 THE INTERNAL STRUCTURES OF THE ISLAMIC CITIES

City components (which is discussed in chapter two) through its forms, functions, and facilities reflect its community social and religious meanings, this can be noticed by analyzing its internal structures. In the Islamic city case, the internal structure analysis passes through the study of:

3.3.1 Functional organization.

3.3.2 Meaning of circulation and spaces.

3.3.3 Elements of urban composition_ mosques, residential areas, markets, gates, and axis.

3.3.4 The Geometric urban pattern.

Understanding the mechanism of these orientations will assist in determining the orientations that will be used in order to analyze Jerusalem Old City urban scheme, using the urban form components and elements which introduced in (2.2.3 & 2.3.2).

3.3.1 FUNCTIONAL ORGANIZATION

Islamic urban forms typified by the dominancy of the functional models, as well as the inherent concept of order, which produced its singular physical character (Bianca, 2000). There is a strong relation link the functional analysis with the understanding of the land use patterns in Islamic cities. Investigating the land use patterns will lead for the concentration in the city multifunctional core surrounded the central mosque by high dense markets. It makes the major urban node. The multifunctional area, usually, includes a number of baths "Hammams", schools "Madras", and caravans "Caravansaries" (Ibid), these all facilities support the functional and social meaning of the mosque, it all coordinate with the mosque and the market "Suque" in determining the multifunctional identity of the center.

According to *Stefano Bianca*, the mosque volumetric assimilation on the central complex space express the symbiosis between the religion, social, education, and commercial functions (Ibid). The functional effect on the city form reflected through the roofscape continued image of the arcades roof integrated to the mosque roof system, the only difference between these roofs are making from the minaret or the mosque domes, which express a dominant landmark in the urban scale.

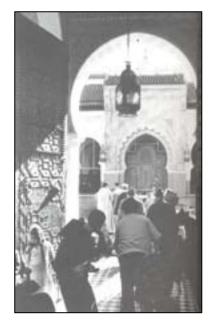


Fig. 3-5: The transition from the market street to the ritual space of the mosque courtyard (Bianca, 2000)

The mosque courtyard presents the city central open space. Accordingly, the *Soque* open spaces extend to these space, in which the functional verity unified by the space continuation (see fig. 3-5). However, the size, location, and centrality are the factors that give significance to the function of the facility as well as the case of the minaret and the dome in the explained example above.

Mixed land use, with the functional character of the Islamic city, shared in unifying the image of the city form. It also assists to enrich the space continuation

between the different function. This is considered the pillar of the space homogeneity and functional integration with each other's, furthermore, emphasizes the social characteristics explained before.

3.3.2 MEANING OF CIRCULATION & OPEN SPACES

Spatial experience is essential factor for understanding the Islamic city internal structure. Experience mainly reflects moving space sequential with time (Ching, 1979). Back to the compactness central compound, based on its exclusive pedestrian movement mode, the experience it compresses the available public space within the *Soque* (see fig. 3-6). The public space of the *Soque* operate as paths, balanced by the courtyard space of the satellite buildings such as *Madrasa* and *caravanserais* that operate as nodes (see fig. 3-7). These courtyards aim to "provide compensatory public space off the covered main alleyways and are allocated to more specialized functions and social needs" (Bianca, 2000).

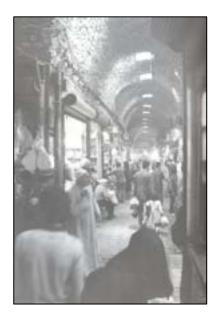


Fig. 3-6: The covered *Soque* of Aleppo (Bianca, 2000).

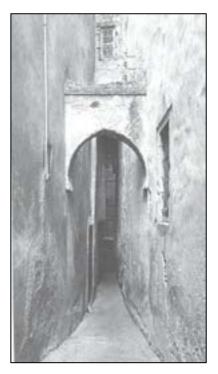


Fig. 3-8: Element which use to indicates for full private interior, the city of Fez (Bianca, 2000).

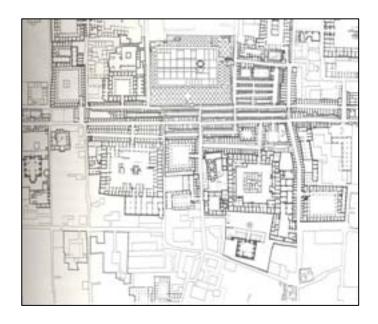


Fig. 3-7: The mosque of Aleppo with its relation to the other open spaces through the *Soque* space (Bianca, 2000).

Moving through the high-articulated complex leads the visitors to experience the spatial continuity that reflects the public and private life. The movement in space will give the opportunity to investigate the space's organization providing a physical guidance with respect to the differentiation between different sectors (Ibid). There is a slight visual reference system related to the accepted and expected codes of social behavior, each individual has his own private path communicate with the neighbors by distinct

architectural devises such as intermediate gateways, internal passages, and communication routs (see fig. 3-

8), in addition to the sequential landmark system that consisted from the domes, minarets and other elements.

Space organization, which discovered through spatial experience, is another vital factor for expressing the Islamic social and religious life in physical terms. It depends on the space's continuity, balance between different sectors, and space hierarchy (between different space levels).

3.3.3 <u>Elements of Urban Composition</u>

Islamic urban structure composed from a number of elements, which seems to be unified under one roof.

The heart of this organization is the multifunctional core, linked to the city's main gates with a number of paths. The main gates considered as secondary nodes -after the main multifunctional center-; it provides transitional nodes for all the transportation means and pedestrian from out world to inner city (see fig. 3-9). The main gates provide a relative small space with some caravansaries around it shared in consisting its edge. The paths extended from the main gates toward the central city open space along the markets -the main city internal edges- "taking the advantage of commercial client" (Ibid). The paths give spatial and functional continuity, between central Soques, it also used under the purpose of providing privacy.

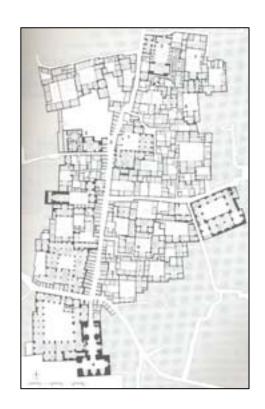
Simply, residential areas growth in the space lifted between the multifunctional core and the main paths crossing the city, In general the residential areas established closed to the central area. The residential quarters generated and sustained by strong micro-community shared in the tribal origin. Each number of residential unites consists a social unit (one district), which shared in its own mosque, small *Hamam*, and number of street fountains. The irrigation networks and internal axis contact houses with the major public spaces, managed by the neighborhood communities. Hidden enclosures

leads to round shared dead ends physically defined the identity of the neighborhoods (see fig. 3-10).



Fig. 3-9: (Above) The Islamic city main gates as secondary nodes which includes several operations, the gates of Fez (Bianca, 2000).

Fig. 3-10 (right) Plan of residential neighborhood of Bab Qinasreen in Aleppo (Bianca, 2000).



3.3.4 <u>Urban Patterns of the Islamic City</u>

Urban system in Islamic cities composed from cellular composition of attached and enter connected masses with enclosed circulation system at various hierarchy levels of urban structure. City homogeneity and inner unity created from the overlapping of discrete architectural shells into one complex pattern. This produced from the city growth in incremental "natural" way (Bianca, 2000). In this natural organization there is a great similarity between public and residential buildings. Similarities related to the vocabulary of complex individual structures and the way in which the composite elements connected to large compounds (Ibid). Differences In urban fabric appears when it comes to shift from public to private, the space organization beside the

architectural and urban elements are the tools, which assist to move in hierarchy toward the privacy. For example, the space organization between markets and residential areas, these two areas spaces designed into back-to-back system, this organization of the space give privacy meaning and hierarchy feeling, however, its important to noticed the unification between the two areas which due to the volumetric appearance.

Talking from morphological perspective, "the main driving forces of growth and metamorphosis in nature are polarity and gradation through there mutual enter action" (Ibid). Polarizing force implied in the nuclear cellular structures, it provides clear separation between neighborhoods, it almost use urban elements (like the gates) as transitional nodes, which give "push force" at the lower level, and "pull force" at the urban levels (see fig. 3-11).

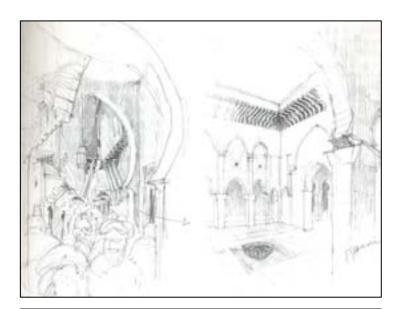


Fig. 3-11 Gate ways which give the push force and pull force feeling, the city of Fez (Bianca, 2000).

3.4 THE TRANSFORMATION OF THE INTERNAL ISLAMIC CITY STRUCTURE

ACCORDING TO MODERN NEEDS

The city through its masses and spaces is considered as a dynamic organism, it develop according to the social needs "space is not static: it is organized, used, controlled, and manipulated by social agent and social actors representing different social groups in society" (Taraki, 2005). Modernity, which characterized by industrialization, technology, and the rise of new ideologies, affects the social life needs and the cultural values in a way, which has a direct influence on the city's urban form. According to *Rogers* in his urban task research, architects and urban designers should concern with what he described as the central driving factors of urban change (Rogers, 1999):

- The technical revolution: centered on information technology and global to local networks, the technical revolution influence the level of services, the expected facilities and activities, the total appearance which changed according to the technical values, the means of circulations, infrastructural systems, and the need for the open spaces which present the modern needs to escape from the machine to the nature.
- The social transformations: life patterns reflecting, increasing life expectancy and new lifestyle choices, the social transformations presented through the changes in the family size and structure which become congruent with the modern life styles, the change in the way of socialization between the people, and the raise of modern social services.
- The ecological threats: the importance of sustainable development.

Bianca (2000) proposed to upgrade the Islamic historical quarters to level not identical but comparable to modern districts, though affording:

- Sufficient infrastructure.
- Social facilities.
- Enhancing the public open spaces.

It's obvious that *Rogers* and *Bianca* agreed on the role of modern social facilities or expectances and the open spaces which are comparable to the ecological considerations, with the influence of the technological modern values and needs in determining the physical environment way of development. This is also comparable to the socio-cultural definition that included in (2.5) and which considers the social activities, means of communications, and level of technologies according to the values as the socio-cultural components which influence the surrounding.

According to that, this study will adapt *Rogers's* points as main pillars to understand the modern social needs and the way it affects the urban form. These points must be reflected in our environment through (Busquets, 2000):

- Sanitary conditions: it means all the modern infrastructural services and
 the public health needs which deeply influenced during the last century
 by the technological development and which must be developed
 according to ecological dimensions.
- Street layouts and open spaces: the technical revaluation raises the importance of the vehicles as a principal social need, which influences the arrangement of the streets layouts. At the same level, the street layouts with the other open areas consists the city open spaces; these open spaces are in deep need for the ecological dimensions which

- reflects the need to escape for secure and private locations (Ward Thompson, 2002), beside the modern meaning of socialization.
- The building: new social life expectances, the change in the family structure and size, and the modern building techniques change the needed activities and the value of the image of the surrounded buildings.

In order to determine the importance of upgrading the Old Cities to a comparable level with the modern suburbs through affording the modern socio-cultural needs, it's important to discuss the challenges of neglecting affording such needs.

3.5 THE CHALLENGE OF NEGLECT AFFORDING MODERN NEEDS IN THE ISLAMIC OLD CITIES

Contemporary trends, which assume to deal with the Old Cities, adapt the upgrading of the historical quarters to reach a comparable level with the modern suburbs (Bianca, 2000). Here it is important to note that the upgrading of the historical quarters to comparable level to modern districts, consider as important point to avoid what can be described as *Urban Apartheid*. Urban Apartheid is the term which used by *Janet Abu- Lughod* in order to describe what the French did in Morocco, the term actually means the separation of the new city parts from the old ones (Abu- Lughod, 1980), The result of that is the ghettoization of the poor class who could not afford to move to the new suburbs, in the old places (Taraki, 2005). It's also a main reason toward the immigration of the elite families to the modern suburbs.

The Urban Apartheid leads also to separate the Old Cities from its surrounding, as the Old Cities in the Islamic Cities operate as the center of the city, such thing guide to fragment the city in unconnected suburbs; this has a direct influence in the city symbolic importance.

The upgrading of the Old Cities to comparable level to the modern districts aimed at enriching the historical cities with modern social needs without any violation of the city's traditional value. The importance of reserving the traditional forms in the city is the believe that such achievement met human needs in a more sensitive way than modern trends, But the interest behind the renewed of the traditional fabric is to translate human modern needs in space (Abu-Laughed, 1992).

3.6 CONCLUSION

The Islamic urban form constructed according to many factors, but the most influential one is the socio-cultural factor. Socio-cultural factors in Islam orientated by the religious and spiritual values. It is also affected by the origin of the community, the political conditions, the pre-existing prototypes, and the influence of other cultures. These lead to conclude that any study for the city form in Jerusalem must be based on understanding these social factors clearly, and the analysis should start from the internal Islamic city structure, which consist of study the functional organization, the space and circulation organization, the urban form components, and the urban pattern. These components can be analyzed using the urban form components, depending on the influence of the perceived urban elements, which cited in the previous chapter.

Understanding the modern needs in the Old City form is essential perspective in order to understand the transformation of Jerusalem Old City urban form, *Rogers* listed three factors that urban designers and architects should be concern about to reflect modernity: the technical revolution, the ecological threads, and the new social transformation. These needs must be accommodated in the sanitary services, the streets layouts and open spaces, and the buildings. Offering such needs will assist to raise the life conditions in the Old City Center to a comparable level to it in the modern suburbs;

this is vital point in order to avoid the Urban Apartheid, which is the important point that leads for the deterioration of the city livability and heritage value.

4 CHAPTER FOUR: JERUSALEM
STUDY SITE; CONTEXT & INFLUENCE
FACTORS

4.1 Introduction

Analyzing the urban form transformations relevant to the socio-cultural changes in Jerusalem Old City should be based on a deep understanding of Jerusalem Old City context. In order to construct a complete knowledge about the city, this chapter will discuss the city location showing the study area, describing the topography, climate, and location characteristics that consider as a factors influence the development of the city form and socio-cultural life.

The chapter will introduce the factors which played the rule in developing and transforming the city's form, this will show the position of the socio-cultural factor between these factors, and the influence of the other factors on it. Moreover, the chapter will discuss the socio-cultural and urban form development of the Old City of Jerusalem, through reviewing the historical eras that had a major influence on the city development; this review will discuss the main influences in each era, which will be useful in order to understand the existing context and its value.

4.2 JERUSALEM: DESCRIPTION & REALITIES

THE POLITICAL CONTEXT...

Examining the geographical and the historical context of Jerusalem leads to conclude the city's position as a line dividing east and west. Through its long history, the Arabic Canaanian city lies under the domain of different states between the east and the west. This affects its historical orientation in addition to stamp its identity. Since the city establishment in the Stone Age (5000 years ago) (Khamaisi & Nasrallah, 2003) until the third century BC, the city dominated by eastern states which typified the city spiritual, cultural and political life to be a part of Asia. After that, transformation in the city historical orientation happened, as Alexander the Great occupied the city,

Jerusalem starts to belong to the west, along the Hellenistic, Roman, and Byzantine periods (Kutcher, 1973). In 637 AD the city returns back to its original inhabitants -the Arabs- after the Islamic dominancy on the city, which extended to 1917 when the British mandate took place. Israel was established on 1948 in the historical Arabic Canaanian lands (AlKhaldi, _____), after the war of 1948 Israel control the west part of Jerusalem city, while the east part with the Old City became under the Jordanian rule. In 1967 Israel occupied the east part of the city which included the historical core, and so, it enforced its administrative dominancy on the city. According to that, the city becomes as one "hot" area that face the plans for "Judaization", through implementing the policies of "land confiscations", "colonies establishment", and "military force to guarantee these activities", these all considered as a main aim of the Zionist plans for the Jewish state in Palestine (Waltz, 1993).

After the Israeli occupation, the city became subject of more than 60 UN resolutions, some of these resolutions mentioned the city in direct way, and others mentioned the city in indirect way. The international law considers the city as "occupied territories"; according to many experts in the international law, the UN resolution 181 that pass in 1947 for the partition of the city give the city a special statue (Welfare, 2004). UN resolution 181 mentioned for the Jerusalem city in part III as:

"The city of Jerusalem shall be established as a "corpus separatum" under a special international regime and shall be administered by the united Nation" (www.un.org/depts/dpa/qpal).

Israel provoke all UN resolution about Jerusalem city, the aim of the Israeli authorities is to change the statue of the city toward *Judaization* (Waltz, 1993). UNESCO urges Israel to preserve the culture, religious, and historic heritage of the

city. In 1981 the city was included in UNESCO world heritage list, and in 1982 added as a world heritage under danger (www.unesdoc.unesco.org).

4.2.1 AREA OF STUDY: LOCATION & TOPOGRAPHY

Jerusalem is located in the central heart of Palestine (see Map 4-1); it is a central part of the mountain axis which extended from Nablus in the north to Al- Khalil in the south. The city which is located on altitude of 750 meters is central in Palestine,



Map 4-1: The location of Jerusalem in historical Palestine (Welfare, 2004).

its position in the center of a historical cities series which extended from Nazareth in the north through Jenin, Nablus, through Jerusalem southward to Bethlehem and Khalil in the south. The centrality of the city emphasized another time through it is central location which link Jaffa in the west to Jericho in the east.

The heart of the city is the historical core which is first established in the Stone Age by the Arab *Canaanian* (Khamaisi & Nasrallah, 2003), it is firstly formed around (1700 BC) near the source of *Um Addarage Jaihoun* at the foot of the *Fouhoud Ofel* in Silwan, it later expanded to the north (Welfare, 2004). The city's ancient border related back to the Roman era, while the present borders related to the Islamic_ Arabic era in which features still sign that. The city

which now divided between the old historical core and the new expanded areas, is politically divided to east Jerusalem and west Jerusalem, our area of study is the historical core which is located in the eastern part of the city, and which defined physically by the Islamic wall (see Map 4-2).



Map 4-2: Old City location within the natural and built Context (Welfare, 2004).

Talking about the topographical situation, the city space is "a plateau on the main watershed of the Jerusalem hills" (Kutcher, 1973). This plateau is surrounded by a steep edge which sharply defined its edge; to the east lays the valley of Juhannam Qadroun separating the city from the olive mountain (see Fig. 4-1). To the west lies the valley of Rababat Hnoum, it surrounds the city from the south where it meets with the valley of Juhannam and Ayoubs (Welfare, 2004) (see Map 4-3).



Map 4-3: The topography structure of The Jerusalem plateau. A the Old City basin; B Line of the watershed; C Central basin of the west Jerusalem (Kutcher, 1973).

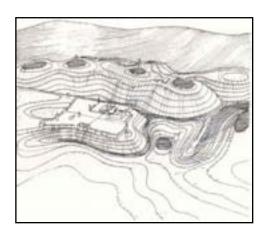


Fig. 4-1: Old City visual space _ view from the south (Kutcher, 1973).

Jerusalem's climate is characterized by short, mild, rainy winter -60 days per year- with blazing summer sun. This is due to the city's location on the knife edge between the Mediterranean region and the desert. The east borders of the city consists both topographical and climatic borders. Average annual rainfall is 550 mm (Welfare, 2004), two miles to the east the line of less than 550 mm is located, and this calm climate considers one of the city importance reasons.

4.3 FACTORS OF URBAN & DEMOGRAPHICAL DEVELOPMENT

Jerusalem passes through many stages of development, which enrich the city urban and demographical statue. As the study emphasized in the socio- cultural and morphological aspects relations, it is a principal fact to mention that the urban and morphological development of the city always affected by the demographical and social development, this development was varied according to the war and peace times in the city. However, it is the first urban organization of the city was due to the Roman-Byzantine Empire, in which the later urban development is expected to be dependent upon.

In all the periods of Jerusalem development, the city was affected by many factors shaped its urban and morphological face, in this direction the factors can be listed depending in *Cohen* (1976) theory as:

- <u>The instrumental factors</u>: Jerusalem city shape response for the economical and environmental issues.
- <u>The territorial factors</u>: the city's response for the political and security considerations.
- The symbolic factors: the city's response for both religious and social considerations.

According to *Welfare* (2004), these factors affected the morphological structure of the city and can be explained in the following points:

- A. The topography: the steep edge of the city toward the east, west and south.
- B. The city walls: it's a vital landmark with its gates; internal roads and external networks.
- C. The historical development: mentioned to the 5000 years, with different nations and their cultural impose in the city.
- D. Ethnic and national construction: the multi ethnic society and the homogeneous quarters.
- E. The religious sites: talking about *Alharam ALsharif*, the *Sepulcher* church and other religious sites.
- F. The urban structure of the Old City: the harmony of this structure with the environment and the city first urban emergence.
- G. Economic capacity and social structure: the deterioration of the city forms by the immigration of the elites out side the Old City.

Actually, these points shaped the city's urban form under the deep influence of the three factors which are listed by Cohen. However, its important to mention that the symbolic factors -religious and social- played an influential role in the city's urban and morphological development, this due to the concept that the city hold the three religions; Judaism, Christianity, and Islam. Another factor that increases the importance of the religious aspect is the consideration that the city current urban and morphological face is related and developed from the Islamic period. As discussed in (3.2.3), religious aspects in Islamic city play the main role in determine the city urban form. In Jerusalem, the church of Sepulcher play a main role in the city development because of the number of churches, hostels, and monasteries, linked to the church (Welfare, 2004). AlHaram AlSharif also play the dominant role in determine the city urban appearance, the courtyards of the mosque works as the main city urban spaces, in which all the other facilities arranged according to it. The levels of space hierarchy, with the organic composition, and the courtyards usage emphasized the concept of religious influence on the city.

Study the city social relation to the urban form in the historical core of Jerusalem city, and to avoid any misleading analysis, the study will analyze the city urban form development in relation to the socio-cultural developments and changes.

4.4 JERUSALEM; CITY FABRIC DEVELOPMENT

After talking about the factors of development in Jerusalem city, and in order to achieve the aim of this study based on understanding the transformations of the urban form according to the changes in the socio-cultural structure, in Jerusalem old city. Accordingly, it's essential to analyze the historical development of the city social and

cultural life, from one hand, and from the other hand, it's also vital to study the urban form development of the city through the history.

The study of the socio-cultural development will be based on the city's historical periods and the main transformation points of its life. In the time that the urban form development of the city will emphasize on both urban pattern development, and architectural styles developments.

4.4.1 <u>CITY SOCIO-CULTURAL DEVELOPMENT</u>

Jerusalem city history, as mentioned in (4.3), developed through multi cultural layers which carried different societies to live in the city. I fact, the area in general was dominated by the Palestinian culture which based on the Canaanian origins, and later, the Israeli trips reach the place as a nomads, and took the others tools (Kenyon, 1966). However, its important to know that except the Egyptian writings in *Tal Elammarneh*, about 1700 BC, which mentioned for the Canaanian existence in the place, there is not enough evidences about the periods which took place in the city before the Roman-Byzantine period, because the city witnessed demolishing for more than eighteen times (Khamaisi & Nasrallah, 2003), and the most influential one was when the Byzantine Empire converted the city to Christianity in the reign of *Constantine* (308- 337 AD) (Welfare, 2004).

During the Byzantine era the city hosted Christian society "The Jews Expelled from the city in 132 AD by the Roman Emperor Hadrian" (Khamaisi & Nasrallah, 2003), this gives the city the social and cultural homogeneity, which leads toward establishing dominant life style based in the Christianity religion and affected by the western civilizations. The establishment of this society produced the construction of the churches, monasteries, and public buildings which are so limited in this time due to the

destruction of many of it by the revenge of history and armies, especially the Persian invasion in 614 AD (Welfare, 2004).

Islamic control in the city starts in the year 637 AD when *Caliph Omar Ibn AlKhatab* reaches the city, as the Islamic state respected the existence of other religions on the city, *Caliph Omar* construct a treaty, which is called (AlOuhda AL-Omariyya) (Welfare, 2004). It's unlike other Islamic cities; the treaty presents the written rules that regulate the relation between Muslims and the other ethical groups. The treaty gives the opportunity for the establishment of homogeneous ethical quarters, each quarter affected socially and physically by the ethical background of its group, it offered all its needs, and it operated in its week ends, commercial activities, and celebrations according to the ethical background of the group.

Jerusalem city, under the Islamic control, witnessed a high degree of interest, but the most significant period in the city Islamic social history was the period under the Mamluk and Ottoman rule between 1253 AD and 1917 AD, because the city witnessed seven hundred years of political stability, the Mamluk era extended in the city from 1253 AD until 1516 AD, the city golden age in this period becomes during the eras of the governor of *AL-Sham Seif Eddin Tankaz Al- Nasiri* (1293- 1341 AD), *Sultan Muhammad Bin Qalaoun*, and *Sultan Qitibay* (1427- 1495 AD), the significance of these periods toward Jerusalem that this governors move there headquarters into Jerusalem (The enter national peace cooperation center, 2003). Mamluk was so interested in architecture; this was the reason that the city construction had activated during this period. Moreover, Mamluk transform the city to become an academic center, they established near 60 schools, associations, and *Khanaqas* to make the city the hub of academic and cultural life in the region (Cohen, 1990). Ottoman era gave

AD, when the ottoman declaration changed the city from *sanjaq* (district) into *motasarfia* (province) that reported it directly to the administration in Istanbul and left it independent from the provincial state of Beirut (AlKhaldi, _____). This is reflected socially through the emergence of new quarters out side the walls, because new network system appears there to contact the city with other regions.

During the Ottoman period, two facts played the role in the city social and physical structure, it was the building of the wall that limited the society in side it, until the second half of the nineteenth century, and the establishment of the *wagf*, which affect people perception to the space.

In fact, the city was developed inside the walls until the nineteenth century, except a few numbers of buildings outside the walls (Al-Aref, 1961). In the second half of the nineteenth century new neighborhoods start to appear outside the walls, this was due to a number of social factors which can be listed as:

- A. European infiltration in Palestine.
- B. The increase of the Jews immigration to Jerusalem and the ottoman permission to allow them to built neighborhoods outside the walls.
- C. The returning of a number of Arab immigrants from Europe to the city and the establishment of transportation network that link Jerusalem to other cities.

The new outside walls neighborhoods influenced the Old City's social structure through the migration of the elite families out side the walls, the Old City occupied by the middle and low classes, and more operated by the commercial facilities. It is important to mention that the Arab expansion outside the walls was adjacent to the walls, whereas most of the Jews neighborhoods were located in the west part mostly in

the road between Jaffa and Jerusalem (The international peace cooperation center, 2003).

During the British Mandatory, the city converted to be the administrative center of the British Mandatory, and the number of Jews immigrants to the city increased, a number of Jews and European institutions established in the city. Between 1922 and 1947 Jerusalem population increased from 62000 to 164000 about 165%, Arab population increases about 132% while the Jews population increases about 192% (Choshen & Shahar, 1997) (see Table 4-1).

Year	1922			1947				
National Affiliation	Arabs	Jews	Total	(%)	Arabs	Jews	Total	(%)
The Old City	16608	5639	22247	35.8	33600	2400	36000	21.9
The New City	11510	28332	39824	64.2	31500	97000	128500	78.1
Total	28118	33971	62080	100	65100	99400	164500	100
% in The New City	40.9	83.4	64.2		48.4	97.6	78.1	

Table 4-1: Population Growth in Jerusalem, 1922- 1947 (Choshen & Shahar, 1997).

The partition of the city after the war of 1948, to east and west Jerusalem caused a radical change in the city social fabric; the west part of the city was dominated by Israeli society, in the time all the Arab community moved to the east part, the Old City stayed under the control of the Jordanian Kingdom. It's important to mention that the movement of the Arabs communities from the west part to the east one lead to the establishment of strong commercial nucleus in *Salah Aldeen* Street and *Sultan Suliman* Street, this considered as the first commercial areas that started to compete the Old City center.

After the war of 1967 AD, the city witnessed its most important social change. Israel occupied the east part; it moved a number of its political, social, services building to the east part of the city. The city in general and the Old City in specific face many social problems which can be classified as:

- The establishment of new Jews quarter in the Old City on the site of number of historical Arab houses, close to *Al-Boraque* wall and part of the Armenian quarter (Pressouyre, 1999), and the expansion of the Jews communities inside other quarters. This lead to the deterioration of the urban homogeneity of the city and the change of its social fabric structure in addition to the occupation of the remaining open spaces of the city.
- The forced migration of Palestinian residents by the ministry of interior "The problem of Jerusalem ID holders which enforce the Palestinian residents to live inside Jerusalem municipality borders which consider as a main problem that cause the over crowded conditions" (Waltz, 1993). Led for the influx of Palestinian residents into the Old City (Welfare, 2004).
- The obstacles the residents face from Jerusalem Municipality to offer there
 modern social life needs. This is exercised thought the complicated policies, and
 the ignorance of the residents needs.

The Israeli attacks on the Old City social structure consider as important factor that lead to the violation of the city's cultural heritage and Arab existence, this social attack beside the other social changes in the city social and cultural history lead to the changes of the city urban form to what we have nowadays. The next part will analyze this development in relation to the social change which we discussed in this part.

4.4.2 CITY URBAN FORM DEVELOPMENT

The city was developed as a line divided east from the west, the influence of this line is obvious in the city urban form development, this form appears as a mixture between western city images that expressed the Mediterranean concepts, which carried to the city through the different occupation waves; and the eastern city image that reflects the *Mesopotamian* concepts (Kutcher, 1973), but finally, the city dominated by the Islamic concepts which existed in the city for a long periods. Understanding this influence on the city urban form will be, by studying the urban development through the city different periods.

4.4.2.1 THE ROMAN-BYZANTINE PERIOD

Evidence from this period (in which the city urban form organization nowadays generated from it) is so limited. However, one important evidence is the Mosaic Byzantine map of Jerusalem in Madaba (see Fig. 4-2), comparing this map beside the existent urban organization pattern, and Roman colonial town from the first century AD, will show the way the Roman constructed the city as a Roman Imperial town-planning (Kutcher, 1973) (see Map 4-4). The city main concept typified by the *cardo* and *decumanus* concept (Ibid) that presents the city main paths, following the street diagram of the city shows that. The path that extend from Damascus gate (*Bab AL-Amoud*) in the north toward (*Bab AlNabi Daud*) to the south present the *cardo*, nowadays this path known through its various sections as (*Sug Khan Alzait*) and (*Sug Alattarein*) (Welfare, 2004). The *decumanus* presented through the path extended from the *King David* gate toward the *Moria Mount (Alharam Alsharief)*. In the Byzantine period, parallel *cardo* axis appears, starting from Damascus gate toward (*Bab*

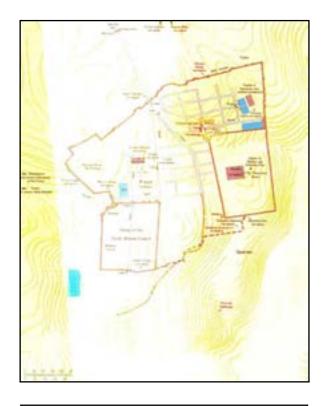
AlMagharbeh) in the south, this axis nowadays known as (Soq Bab AlWad) & (Map 4-5).

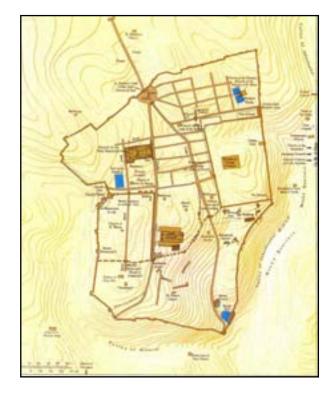
The using of cross axis affects the context through the groups of building and spaces which consist between them in a way reflect the continuity and the axial arrangement and establish the edges of the spaces, the cross axis did not come arbitrary; it reflected a high degree of respect for the topography (Kutcher, 1973).



Fig. 4-2: The mosaic Byzantine map of Madaba (Welfare, 2004).

Talking about the parallel axis which finished with *Moria Mount*, the axis with its end composed from a number of complex concepts, the space of the mountain itself was used to reflect the concept of Roman forum. Accordingly, the Mount space that designed to contain *Herods* Temple (Ibid) considered as the city's main social space and the axis considered as the secondary city social space. The way the temple raised to the top of the mount, reflects the *Mesopotamia* sacred concepts for there temples, which used to be more closed to god. It's important to emphasis that despite of the number of destructions that this period witness, the city later development based as shown, in the ideas of this period.





Map 4-4: The Roman period (Welfare, 2004).

Map 4-5: The Byzantine Period (Welfare, 2004).

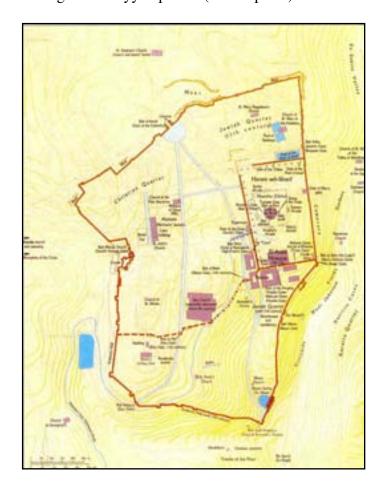
4.4.2.2 THE ISLAMIC PERIOD

Caliph Omar conquer the city in 637 AD, he established his treaty (Alohdeh Alomarea), which affect the urban distribution in the city. The Islamic existence in the city extended through many eras, the most significant ones that affected the city's urban form were:

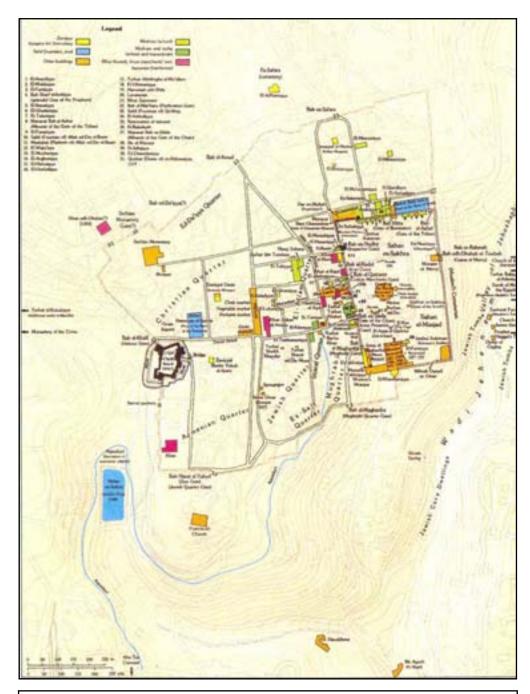
A. <u>The Umayyad period</u>- the city witness a magnificent development during the Umayyad period, the most important activity was the construction of the *Dome of the Rock*, and later the construction of the *AlAqsa Mosque*. The city urban form in the Umayyad period developed in a way depending on the Roman-Byzantine Ideas, looking to urban organization of that period will show the Umayyad development for the *cardo* and the *parallel cardo*, which developed as a main paths that functioned as

markets Soque in that time, these markets consisted an important social spaces, which linked people from different quarters, which were more private, to each others in a public level space. The city was divided to homogenous quarters, in the west north there was the Christian quarter, to the east north the Jews quarter appears in the eleventh century (Welfare, 2004), the other parts of the city was dominated by the Islamic community (see Map 4-6). Moria Mount space, developed to be AlHaram Asharif campus, the concept here was different from the mosque concept in most Islamic cities, as it located not in a central location on the city, but it also played a role as a central social space of the city. Alharam Alsharif composed of the courtyards which contain the significant arcade facades, domes, in addition to the Dome of the Rock and AlAqsa mosque. The campus influenced the surrounding, through the number of houses, markets, public fountains, baths, and khans lied so close to the borders of ALharam Alsharif that often the principle of architectural design of some building were sacrificed in order to build them on a site near Alharam ALharif (Ibid). In these terms, it's essential to mention the visual relation that constructed between the Dome of the Rock as a dominant land mark and the surrounding, in which it gave the most direct expression of the opposites through the balance between rational and sensual, and through its western clarity, Byzantine structure, and eastern colors, ornament and ceramics (Kutcher, 1973). The relation between ALharam Alsharif and its surrounding was also obvious through the different hierarchy levels that lead from the main public space toward the market (the Soque) space through the narrow axis (AlDarb) using special nodes that gives push force and pull force feeling, toward the private zones, which works back to back with the Soque space, this gave the social privacy and assisted in establishing special communities in side the city, it also reflected the Islamic concepts of planning (*ALKhatat*), which discussed in (3.3.4).

B. <u>The Mamluk period</u>- Mamluk move there headquarters to Jerusalem, they transferred the city to be the academic center in the region, (nearly 60 schools and guild were formed to make it the hub of academic and cultural life in the region) (Cohen, 1990). During the Mamluk period, (the four Maathen of the Holy Sanctuary were erected, its Western Rewaq (Hall) was built, markets were established around its periphery and the thirty- three neighborhoods of Jerusalem were given there current shapes and named after the different religions and families) (Drori, 1990). During this period, the road network developed in a way based in the original Roman axis. Looking to the map from that period will mention the way the city area becomes less than it during the Umayyad period (see Map 4-7).



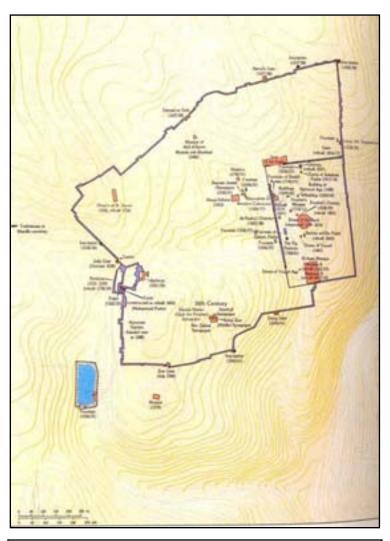
Map 4-6: The early Islamic period



Map 4-7: The Mamluk Period (Welfare, 2004).

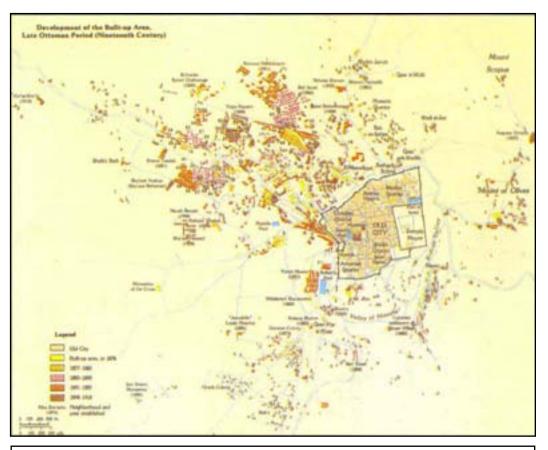
- C. <u>The Ottoman Period</u>- The Ottomans affect the urban development of Jerusalem city through two main periods which are:
 - a. The early Ottoman period that typified by building the city wall. City area which was included inside the wall is about 871dunums; the wall is about

3662 meter long, and between 11.6 meters and 12.2 meter high. There are about 11 gates, seven are in use. The wall consider as important issue in changing the city's development, it limited the residential activity within its walls this also limited the popular expansion (Welfare, 2004) (see Map 4-8). The limitation of building expansion caused the city to be built in five layers during the Ottoman period. This period was magnificent through its arcades or archways style, which appeared because of the wall to provide more space between the houses. This style consisted from unique architectural styles which represented by the stone buttresses and double-arched cross-vaults on a way support the upper floors.



Map 4-8: The early Ottoman period (Welfare, 2004).

b. *The late Ottoman period* this mainly affected by considering the city as a province area. The expansion of the city out side the walls and the appearance of new quarters is important issue of this period (see Map 4-9). Physically as the city occupied an important location in the Ottoman late period, the second after Istanbul, a strong network established in order to link the city with its periphery. This encouraged the residents from the Old City to migrate toward out side areas.



Map 4-9: The late Ottoman period (Welfare, 2004).

4.4.2.3 THE BRITISH MANDATE PERIOD

During this period, special interest was shown toward the Old City of Jerusalem, this became obvious through the issued orders by General *Allenby* in 1917, which panning new constructions within 75 meters of the Old City walls, the order

forbidding any construction higher than the city walls. He ordered the planner *William Mclean* to prepare a master plan under a main objective of preserving the Old City (Welfare, 2004).

Under the same objective, Jerusalem Governor, *Ronald Stors*, passed a low in 4, 1918, for demolishing, improvement, and restoring of any building in the Old City of Jerusalem or around within a radius of 2500 meters from *Bab Alamud* without a written permit (Ibid).

The concentration in preserving the value of the Old City during the British Mandate became clear" *This means that the land use planning for the old city of Jerusalem starts in 1917 with the British Mandate period*" (Welfare, 2004). Five structural plans were prepared because of that, but the implementation of that was so limited, due to the transformations in the political situations.

4.4.2.4 THE JORDANIAN PERIOD

After the war of 1948, Jerusalem city was divided into two part, west part controlled by Israel, and east part controlled by Jordan including the Old City. The partition of the city had a direct influence on its urban and special organization. Before the partition new Arab neighborhoods appears to the west side of the Old City, after the partition, the original Arab citizens were replaced by Jews, the Arab move to the east part, which influenced in establishing new neighborhoods out side the walls to east north side.

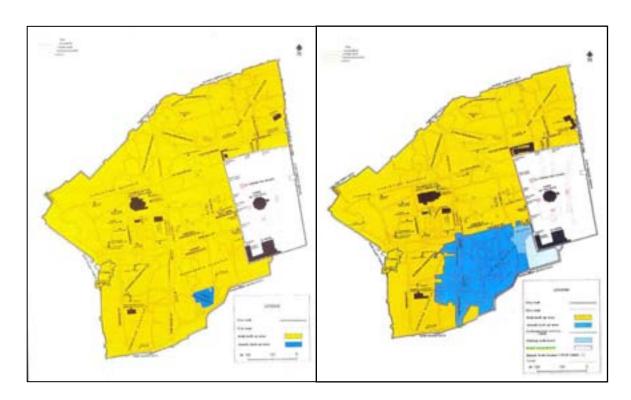
During this period Jerusalem garneted special statue, it considered as the second Jordanian capital, after Amman. This period had a vital influence on the Old City future, the expansion of the city to include the surrounding villages, the appearance of

new commercial zones, and the migration of the elite families out side the walls and toward Amman cause a direct deterioration for the Old City Image.

4.4.2.5 THE ISRAELI OCCUPATION PERIOD

After the war of 1967 AD, Israel occupied the east part of Jerusalem Old City; impose a direct influence on the Old City form, which can be understood through:

• The direct influence after the occupation- in which Israel immediately after the war authorized destroyed al-Magharba, al-Sharaf, and al-Mydan neighborhood to expand the Jews quarter, and building new housing and commercial centers in a place with a high archeological value (Welfare, 2004), the new neighborhood presented incompatible architectural style with the surrounding (Pressouyre, 1999) (see Map 4-10).



Map 4-10: The extension of the Jewish quarter after 1967 (Welfare, 2004).

- The Israeli plan for the Old City which can be considered as a showcase for the urban apartheid approach in which the Israeli polices toward the Old City aim to the diminution of the space allowed for Palestinians to growth through zoning and taxes regulations, and destructing the Old City as the center of the Palestinians Life (Taraki, 2005). According to Amir Cheshin (1999), this aims implemented under two basic principles:
 - To rapidly increase the Jewish population in Jerusalem Old City.
 - To hinder growth of the Arab population and to force Arab residents to make their homes elsewhere.

Amir Cheshin adds "it is a policy that has translated into a miserable life for the majority of east Jerusalem Arabs..." (Cheshin, 1999).

This polices included as a part of Jerusalem master plan start in 1968, prepared under a sit of strategies which are (Welfare, 2004):

- a. The state of Jerusalem under the Jewish religious and cultural heritage.
- b. The historical, religious, and political philosophy, which called Jerusalem as *Sahion* (Zion), consequently Zionist movement based its name on its claimed historical connection of the Jewish people to Jerusalem.
- c. The attempt to link Jewish revival by three components, religious, nationalism, and space.
- d. According to the Israelis, Jerusalem occupied a central geographic and historical position in the Jewish kingdom, a position

which aims to revival today by creating new geopolitical facts on the ground.

The plan was technical completed in 1970; its main objective toward the Old City was the need to preserve the visual value which gives Jerusalem its special value (Welfare, 2004). According to the plan, the Old City will be restricted to the religious institutions, in addition to allow it as a special residential area. The plan proposed to create a road network and service system without penetrate its value. The plan proposed revitalization for the Old City in stages, the first one is the revitalization of the Islamic quarter, later the revitalization of the Christians quarter (Welfare, 2004).

However, these visions toward the revitalization of the Old City based in the general strategies which listed above, and whose actions in the Old City took place in the opposite way to the announced objectives, through the following points:

- a. The construction for new Jewish quarter in the site of *ALmagarbeh* quarter, with massive architectural style which didn't respect the heritage value and the architectural style of the city (Pressouyre, 1999).
- b. The transformation of the Byzantine *Cardo* into a shopping arcade, "which made it a tourist attraction known throughout the world, supplied the belated alibi for a renovation policy, which was not in keeping with the spirit of the Venice Charter" (Ibid) (see fig. 4-3).
- c. Despite the policies of preserving a large area of open green spaces like the area in Burj Laqlaq (Sharon, 1973), the Israeli authorities allowed the settlement policies in these sites through the building permissions it

- gave, such as the permission to built settlement houses in the area of Burj Laqlaq, in the site of archeological value (Pressouyre, 1999).
- d. The absence of sufficient plans that could guarantee the Arab resident's needs the point which considered as the responsibilities of the Israeli authorities-according to the international low-. And the cause of the overpopulation, due to the influx of Muslims families because of the Israeli policies, such as the ID holders polices (which enforce all the Palestinians holding Jerusalem ID to leave their places in the other Palestinian area and to live inside the municipality borders- or punish them by confiscate their ID and forbidden them to be back to their home land) and municipality building polices, led for creating insalubrious conditions, which is used in many occasions to justify the action of demolishing under the "slum- clearance" policies (Ibid).
- e. The change of the archeological sites_ "after years of neglect, the vast area excavated by Professor Mazar has gradually lost the archeological features that showed up so clearly on the old aerial photographs" (Ibid). (Talking about the Umayyad Palaces).
- f. The occupation of Palestinian houses and rising the flags and the Israeli symbols. The action that influenced the social homogeneity and style of the city.

These exercised police, which didn't consider the livability of the Old City and the way of connecting it with its surrounding, leads to the urban apartheid, that appears with the closure polices, checkpoints, and the wall through the following points:



Fig. 4-3: The treatment of the *Cardo* in area in incompatible way with Venice Charter (researcher).

- Loss of primer position as political center of Palestinian life (Taraki, 2005).
- Loss of a center to the city; a city without a center, fragmented into neighborhoods (Taraki, 2005).
- The migration of the elite and original families outside the walls and the influx of low class families inside the walls (Welfare, 2004).
- The migration of the national institutions to Ramallah (Taraki, 2005).

These actions go in harmony with the general strategies which was mentioned before, toward the Judaization of the Old City, it finally lead to the indisputable degradation of the heritage values, which lead to inscribe the city as a world heritage in danger, and which actually influence the livability of the city as a center for the Palestinian communities.

4.5 CONCLUSION

Jerusalem history passed through many political statuses which affected its development, dealing with the city most based in understanding the current political situations and the way it affected the socio-cultural and urban form structure of the city. The vision to understand the problem will adapt UN resolution 181, considered the city under military occupation. The city physical characteristics between its location in a plateau near a steep edge, its Mediterranean climate, and its religious and historical locations played the role with other factors in determine its form. One of the most influential factors in the role of socio-cultural one; the study must deal with this factor in respect to the others.

The social and cultural development of the city passed through many complicated periods, accordingly, the existed fabric seems sophisticated between different groups, but the final output is mostly with Islamic identity. An important influential factor in the city's social life is the existence of new neighborhoods out side the walls that offer modern social needs, this lead to the migration of people from the Old City out side the walls, this caused the replacement of the original community and the function of the city with new one. The Israeli occupation influenced the city urban form and socio-cultural life by destroying some Arabic quarters and replacing it with modern heterogynous groups. At the same time, the master plan of the city that was prepared according to political desires more than the city needs, adapts the polices of *Urban Apartheid* and *slums clearance*, in order to increase the Jews existence in the city, and cause a miserable life conditions for the Arab residents to loose the city place as a center for the Palestinian communities. So understanding these points will assist to understand the transformation of the urban form.

5 CHAPTER FIVE: JERUSALEM OLD
CITY URBAN TRANSFORMATION;
DESCRIPTION & ANALYSIS

5.1 <u>Introduction</u>

Toward constructing a quality vision about the existing urban form in Jerusalem Old City and the transformation of this form according to the modern socio-cultural needs, and in order to assist the efforts of achieving better life quality in the Old City through affording a deep understanding for the modern socio-cultural needs and the city form value, this chapter aim to analyze Jerusalem Old City existed conditions, in order to illustrate the situations as it is, by study:

- The social and cultural existing conditions: this will be based on describing the existing conditions and the factors which influenced these conditions.
- The urban form conditions: understanding the urban form of the Old City through the city form components, (mentioned in 2.2.3), and which are the space between and around the building, the positive and negative forms, and townscape and human awareness. Understanding these components will lead to realizing the transformation influence on the form elements which perceived by human being and which are listed in (2.3.2.2) as, the geometric elements.

This sort of analysis will be useful to outline the transformations in the urban form, which will assist to understand its influence on the human environment relation through the influence on the city perceived elements, which considers according to *Itelson* (1960) as the primary relation between human being and the environment (see 2.3.1). The analysis of the social conditions and the factors influence these conditions; will give a general vision about the factors which influence in affording the city sociocultural needs. Here it is important to mention that this sort of analysis will not lead for

evaluation vision; it will open a discussion about what is going on, and how it mechanizes now.

5.2 EXISTED SOCIO-CULTURAL CONDITIONS IN JERUSALEM OLD CITY

Talking about the social and cultural conditions in Jerusalem Old City should start from clarifying the social fabric in the Old City. The Old City area which consists 0.7% from the total area of both east and west Jerusalem covers 900 dunums (Welfare, 2004), divided into four main quarters, and based on the religious ethnical dimensions. The Old City quarters are; the Moslems to the North East, the Christians to the North West, the Armenians to the South West, and the Jewish to the South. On the ground, there are no physical borders separate the quarters from each others. By the area the Islamic quarter consists 51% of the total area, then came the Christian quarter with 21%, then the Jewish and Armenians with 14% (Ibid) (see table 2).

Name	Area (dunums)	%
Moslem Quarter	430	51.1
Christian Quarter	192	21.3
Armenian Quarter	126	14
Jewish Quarter	122	13.6
Total	900	100

Table 5-1: Quarter's area in the Old City of Jerusalem (welfare, 2004)

Dealing with demographical distribution in the Old City, the Moslem quarter contained the largest number of population with 23700 consisting 70.5% of all the population of the Old City, while the Christian quarter contain 5200 about 15.5%, follow by the Armenian with 2400, about 7.2%, and the Jews with 2300, about 6.8%.

Accordingly the Palestinian inhabitants consist about 93.2% of the total Old City population percentage (Ibid) (see table 5-2).

Region	In thousands	%
Moslems Quarter	23.7	70.5
Christians Quarter	5.2	15.5
Armenian Quarter	2.4	7.2
Total Palestinians	31.3	93.2
Jewish Quarter	2.3	6.8
Sum Total	33.6	100

Table 5-2: population distribution by quarter in Jerusalem Old City in the year 2000 (welfare, 2004).

While talking about the city's population, and before discussing the social dilemma of the city, it is important to mention for some indicators about the population and the social fabric of the Old City, which noted by the Welfare (Ibid):

- The population living in the Old City is considered a young society, this society distinguished by a high percentage of children.
- The city is overcrowded by the number of population it contains according to the statistics; the population density reaching 37.3 persons per dunum, while it is 3.3-13.5 persons per dunum in east and west Jerusalem. This distribution is varied from one quarter to another, for example in the Islamic quarter it's about 51.4 person per dunum, while it is 19 person/ dunum in the Jewish quarter (Welfare, 2004).
- There is a negative migration from the Old City, and unofficial positive and temporal migration into it.

• The family average size in the Old City is larger than it outside the Old City. it reaches about 5.7 persons.

These points give a general indication for the social conditions in the Old City.

However, understanding these conditions will pass through two phases:

- **5.2.1** The social conditions in Jerusalem Old City.
- 5.2.2 Factors played the role on the current social conditions in Jerusalem's OldCity.

5.2.1 THE SOCIAL CONDITIONS IN JERUSALEM OLD CITY

Existed social conditions in Jerusalem Old City influenced in deep by many factors. However, it is the existed social conditions can be described through:

- Over crowded conditions- a high number of people live inside the Old
 City, this produced unhealthy housing conditions, increase the people
 density in the public services, and deteriorate the social life standards.
- *No socialization* this due to two considerations; the new family structure, and the lack of social activities and spaces in the city.
- <u>Crime and drug addicts</u>- this due to the lack of legal authorities. Statistics in the year 1998 show there is about 8000 Palestinians in east Jerusalem who abused various types of drugs, 1300 of them are in the Old City. And the rate is dramatically increased in the Old City (Welfare, 2004).

- <u>The dilemma of the social services</u>- according to the survey done by the Welfare (2000) the city witness deterioration and lack in the following social services (Ibid):
 - a. Shortage of the health services.
 - b. Shortage of the youth centers.
 - c. Shortage of recreational facilities.
 - d. Deterioration of the educational system.
- Shortage in the modern infrastructural system- lack of the telephone, electrical and TV underground cable system, and insufficient transportation system.

5.2.2 FACTORS PLAY THE ROLE ON THE CURRENT SOCIAL CONDITIONS IN JERUSALEM OLD CITY

Current social conditions in Jerusalem Old City produced from a number of factors, which varied between political, social, and economical. However it is, the influence of the three factors are some how overlapped, but the most distinguished fact is that the political conditions which playing the main role in generate the other factors. Nevertheless, each of these factors influences the social conditions in the Old City as the following:

- <u>The role of the political factors</u>- the political conditions influence the Old City life through:
 - The obstacles in which the inhabitants of the Old City face in order to accommodate their life needs, this due to the lack of any plans to offer

such needs, and the existed plan, which prepared by Israeli authorities in 1970, based on Israeli political desires more than the social needs orders (see 4.4.2.5). It aim to increase the Jews existence in the city, and to cause miserable life conditions for the Palestinian residents, in order to establish urban apartheid in the Old City of Jerusalem, by loosing the importance of the center, in a way leads for the fragmentation of the Palestinian neighborhoods. This is important principle toward the *Judization* of Jerusalem city.

- The aggressive settlement policy (Welfare, 2004), through the exercised policies by the Israeli authorities, which is discussed in (4.4.2.5), against the Palestinian residents. In order to rise up the Jews existence in the Old City.
- The absence of a Palestinian authority which could grantee the security for the Palestinian community.
- Jerusalem ID holder's problem which enforces a large number of the Palestinian to go back to Jerusalem municipality borders from west bank areas, this caused overcrowded conditions in the Old City, and it considers a reason for the migration and negative immigration to the city.
- The role of the economical factors— the economical factor has a direct influence on the Old City social life, but it is important to point out that this factor generated due to the political situation in the city. The economical factor influence the Old City social structure through (Ibid):
 - A. Imposition of high taxes. This is a main reason that causing the immigration.

- B. Economic recession in the Old City. Through a number of exercised polices such as closure a number of streets.
- C. High unemployment rate.
- D. Lack of job opportunities, especially for women.
- E. Deterioration of the tourism sector. Through destructing many historical sites, and prevent the availability of tourist services such as hotels.
- <u>The role of the social factors</u> the social factor considered as a main cause of the current situations in the Old City of Jerusalem, it influences the current social conditions through:
 - A. The migration from the Old City_ this considered as important factor influence the social life in the city, it means the migration of the young generation, the relocation of institutions, and exodus of affluent families (Ibid).
 - B. The change in the family structure_ the size, structure, and social position of Jerusalem Old City families, changed during the last decades. This due to the radical political changes which influenced both social and economical status in the city. The elite families replaced with new ones came from different places. The structure of the existed families in the Old City changed also, the families which stayed in the city characterized as extended families, it use to live with each others in one building, but later, due to the factors listed above, these families changed to be characterized by nuclear families, its structure composed mostly by the generation under 15 years and above 65 years (Ibid).

C. The loose of the social and symbolic center that consider as important linkage for the Palestinian neighborhoods out side the Old City.

5.3 JERUSALEM; THE CURRENT URBAN FORM

Studying the current urban form conditions in Jerusalem Old City will be based on analyzing the urban form components that listed in (2.2.3). This will pass into two levels, first, the macro scale level, which means the scale the people start to contact visually with the city and that construct for them the total visual appearance of the Old City. and second the micro scale level, which means the internal structure scale, in which the people recognize the city internal fabric through. The tools which will be used in order to analyze the urban form in these levels and to understand its influence in human environment relation, are the geometric elements (*Lynch* (1960) elements), which are listed (2.3.2.2). Here it's vital to emphasis that the analysis will just sit the transformations which carried out by the residents, it means that the analysis will not consider the massive direct transformations that produced from the occupation, and which are mentioned in (4.4.2.5). This is due to the target of the research to study the transformations under the influence of the modern socio-cultural needs.

Before analyzing the Old City urban form, it's vital to set the following notes:

- Jerusalem Old City is distinguished from its surrounding, this appears through its architectural styles, urban geometric pattern, historical value, walls, and the space remained around the city walls.
- The Old City architectural style can be described nowadays as a mixture between different styles, this due to the different ruling periods in the city, but the most dominant styles now, are the Mamluk and Ottoman styles (Welfare, 2004).

• The physical analysis of the city will be based on data survey done by the Welfare, and the base map will be the map which prepared by the Welfare and which exclude the Jewish quarter (see map. 5-1).

5.3.1 THE SPACE BETWEEN AND AROUND THE BUILDING IN JERUSALEM OLD CITY

The meaning here relates to the streets, the courts, the open spaces, the city nodes, and the gardens, its actually includes all the city open spaces. Observing these spaces leads for the following:

• On the macro scale level

- Looking at the urban fabric in Jerusalem Old City from its skyline, it shows the high density of masses which occupied the most open spaces, people through the last decades expanded to occupy the remain open spaces in the city. This creates the high dense and overcrowded city image, which compose the first impression about the city total form, and which is so sensitive to the additions and subtractions (see fig. 5-1).
- In terms of density, the city can be divided to three main areas which are located around *AlHaram Ashareef*, and near to the *Cardo* and parallel *Cardo* areas (see map 5-2), this influence the total city appearance through its skyline hierarchy, which is more concentrated around the most important landmarks. Accordingly, these high density areas construct the background of these landmarks where many of it starts to be less apparent like the Church of Sepulcher. In addition to that, the edges that created between the areas which differ in its function, social group, and density are not visually clear; this made

the visual movement between the different areas goes without transitions (see fig. 5-2).



Fig. 5-1: Jerusalem Old City sky line, the Occupation of most the open spaces in the city creates the overcrowded Image for the city (researcher).

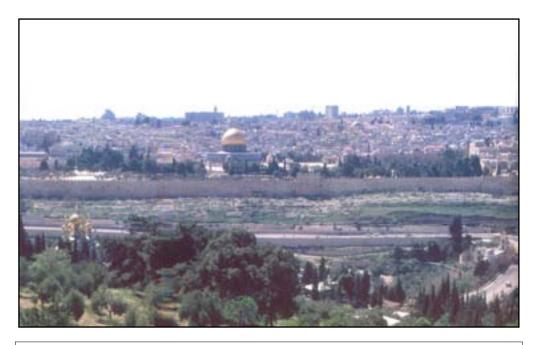


Fig. 5-2: Jerusalem Old City sky line from the east, showing the high dense areas around the main landmarks of the city. And the total overcrowded city image in whole (Welfare, 2004).

• The remained open spaces in the city are separated, in addition to *AlHaram Ashareef* open space which considered as religious open space and used for special group, to the north east district of *AlHaram Ashareef*, and to the far west and south west districts of *AlHaram Ashareef* (see map 5-3), some of these spaces used in the private prosperity, and others not utilized to be integrated to the whole urban fabric, (see fig. 5-3 & fig. 5-4).



Fig. 5-3: The edge of the remain open space in the north east of the Jerusalem Old City, the barrier to integrate the space with the fabric (researcher).



Fig. 5-4: Many residents attack the remain open spaces to use it in their private prosperity (researcher).

• The Old City main gates are considered as the main city nodes; it is occupied by informal markets, in addition to the existence of informal parking lots on the spaces around and closed to the gates. As the relation between any user and the city starts with the relation to the gates (see map 5-4), the first visual impression to the city is dominated by crowded areas with a circulation conjunction, and characterized by unorganized multi functional and multi appearance operations (see fig. 5-5).

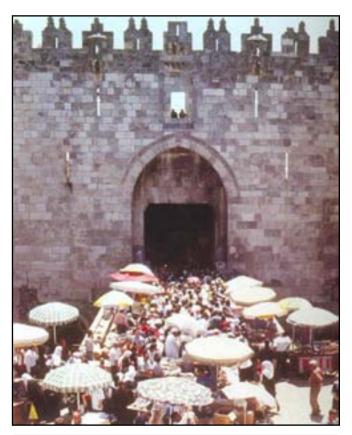


Fig. 5-5: Bab Alamoud as a main gate that operate as a mane node in Jerusalem Old City, the overcrowded approach to the Old City (Welfare, 2004).

• Talking about the paths on the macro scale, it is important to know that most of the paths operate as pedestrian areas, the accessibility for the vehicles is so limited (see map 5-5), and the number of parking is also limited. The need for

service lines cause the illegal entering of the service means to the pedestrian areas (its observed that Jerusalem municipality services vehicles are one of the services vehicles that enter the city and cause this dilemma in the peak our of the days). In addition of that many residents use to leave their cars in these areas, this caused sort of interruption and crowded conditions in the Old City (see fig. 5-6 & fig. 5-7).



Fig. 5-6: The interring of services lines inside the Old City, cause a circulation conjunction and influence the city appearance (researcher).



Fig. 5-7: parking in the pedestrian axis Inside the Old City of Jerusalem (researcher).

• On the micro scale level

• Dealing with the space in the micro scale starts from the streets organizations and relations, the main paths in Jerusalem Old City are the *Cardo* and *Parallel Cardo*, these two paths operating as markets, which varied in its different

sections on its type, it means that such paths differ in its identity according to the different districts it crosses, but in order to present the transformation in the path character, there is also a sort of nodes that operate like a transitional spaces. Another main axis with less importance is the ancient *Documanos* that also operate as a public market. At another level, a sit of sub paths from the main ones operate as a sub markets (see map 5-6). Recently, many changes took place in the way the paths operate in, the first change to talk about is the occupation of these paths by shops owners or the illegal markets, in which they use the path as a way to present there goods, this is a main reason to cause a crowding and unorganized area with a circulation conjunction, this influence the paths meaning in the city as a main social spaces (see fig. 5-8).



Fig. 5-8: The Unorganized occupation of the main path with the marchen goods (researcher).

 Another change took place is the deterioration of the market specialization meaning through the emergence of inhomogeneous shops in the specialized markets, this give more heterogeneous meaning to the markets, which influenced the visual appearance through the existence of unsuitable shops (see fig. 5-9 & fig. 5-10).



Fig. 5-9: The merchant goods leave a limited space for circulation, and socialization in Jerusalem Old City (researcher).



Fig. 5-10: The deterioration of the homogenous meaning of the Soque in Jerusalem Old City (researcher).

- The influence of the covering system which was added to the most markets streets in the Old City (see fig. 5-11). The covering system was used as environmental protection tool; this tool influenced the visual relations inside the markets through different dimensions, the Old City paths organized in a visual relation, which always linked the users to a series of landmarks that consisted from the set of mosques and churches domes and towers, it also depends in the varied feelings of enclosure which are created according to the hierarchy in space between totally open, to simi covered by some buttresses, to totally covered by volts in different heights (see fig. 5-12). The new covering system cut all the visual codes that link the users to the landmarks system in the city paths; it also influenced the space enclosure feeling through interrupted the space height hierarchy (see fig. 5-13). The new covering system influencing the paths edges through hiding the upper elevation parts, which considered as a main pillar of space identity through its elements, the element which is included in the elevation became hidden.
- It is important to mention that the covering system is one principal aspect that encourage the merchants to occupy the paths, the covering limits identify the borders of their shops, it also provided environmental protection for their goods. In addition to that, it assists in keeping the users visions enclosed in the same space this enhancing the relation between the users and the shops. At the same time, there is another covering system done by the municipality, as a security fence to protect the settlers who occupied the Palestinian houses, this fence participate in change the urban form image (see fig. 5-14).



Fig. 5-11: The new covering systems in Jerusalem Old City main Soque (researcher).



Fig. 5-12: The Visual and sensual relations in Jerusalem Old City spaces between covered areas to open (researcher).



Fig. 5-13: The influence of the new covering system in the visual and sensual codes of the open spaces in Jerusalem Old City (researcher).



Fig. 5-14: The influence of the fence covering system, which is prepared by the municipality, in the visual codes of the open spaces in Jerusalem Old City (researcher).

- The other level of spaces is the public courts in the city, it became limited, and some of the remained open spaces were used in a private prosperity, which is not allowed to all the users to interact within. The other remained open spaces are totally neglected; these spaces are not utilized as interaction areas, and there is no trend toward utilizing these spaces as green zones, which is limited in the Old City (see fig. 5-1).
- The last level of open spaces which is the open courts inside the buildings; there is a new orientation toward covering these spaces by new masses or covering system (see fig. 5-15), which is actually illegal. Already about 80 one were covered (Welfare, 2004) these courtyards are sitting in bad physical conditions, this appears through the conditions of its edges, floors, and way of utilization.



Fig. 5-15: Covering the open courts with new masses and covering systems in Jerusalem Old City (researcher).

5.3.2 THE POSITIVE & NEGATIVE FORMS IN JERUSALEM OLD CITY

The meaning here concern with the masses and its relations to the space, it basically deals with the masses shapes, volumes, and identity. Discuss this issue will be achieved through:

• On the macro scale level

- The most significant issue in this term is the building additions, which goes into two directions, vertical additions and horizontal additions. According to (Welfare, 2004), about 550 units had horizontal additions, 208 had vertical additions, and about 170 units had the both. This means that about 44% of all the real state in the Old City had additional construction during the second half of the twentieth century; this actually influenced the city total volume (see map. 5-7).
- The influence of that in the macro scale level is obvious through:
 - a. *Using incompatible building materials*_ these materials are varied in its texture and color from the original structures, in a way caused misbalance in the hierarchy between the new and the old. In addition to the variety in the building materials between the new buildings expansions itself (see fig. 5-16 & fig. 5-17).



Fig. 5-16: The expansion in Jerusalem Old City using different building materials (researcher).

b. *Using incompatible building style*_ the expansions are illegal, carried out by the users themselves, the users influence by the building topology that is existed in other parts of the city, and which ignored the city heritage and history (see fig. 5-18).



Fig. 5-17: The influence of the new expansions with the new materials in the existed style in Jerusalem Old City (researcher).

• The expansion in the vertical direction influence the city image through the building heights, as the building heights originally are two to three stories heights, the new expansions start to change this to four and five stories heights. In this direction the city image hierarchy started to change, a worth point to be discussed is the new building hierarchy around the main landmarks and the influence on them (see fig. 5-1, fig. 5-2, & fig. 5-18).



Fig. 5-18: The influence of using new building styles on Jerusalem Old City total Image (Welfare, 2004).

• On the micro scale level

• The influence of the changes in the city massing composition on the micro scale starts from the transformation in the visual codes; the new additions cut or reduce the visual relation between the user and the city elements such as the landmarks, the facades, and the nods.

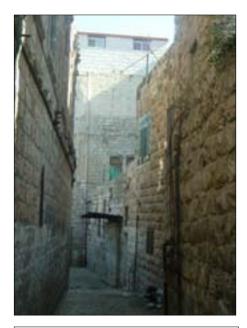


Fig. 5-19: Changing in the meaning of enclosure through the change in the façade heights in Jerusalem Old City (researcher).

The new additions influenced the meaning of space enclosure, this comes through closing some spaces, or changing the heights of others, as the building height changed the façade height which consist the space edge changed too, this influence the feeling of space by changing its proportions and environmental conditions (see fig.

5-19).

• The new expansions influenced the space identity through the materials and styles mixed image the users got in the space.

5.3.3 TOWNSCAPE & HUMAN AWARENESS IN JERUSALEM OLD CITY

The third level of analysis in Jerusalem Old City is the physical appearance of the Old City through the new added elements, and the people satisfaction of that.

• On the macro scale level

• A general view for Jerusalem Old City, either through the city sky line or the image of the user, will show the influence of adding modern services to the form of the city. These additions include the addition of TVs cables, electrical wires, and water storages. In fact the additions comes in arbitrary way, which influenced the city total image through produce a exhausted composition with too many elements besides its influence on the city main landmarks through creating a chaotic background around them (see fig. 5-20, & fig. 5-21).



Fig. 5-20: The added modern services which influence the total city sky line in Jerusalem Old City (researcher).



Fig. 5-21: The added modern services which influence the total city form in Jerusalem Old City (researcher).

Another modern element that added to the city and influenced its total image was the new roofing systems, the new expanded building varied in its roofing system between level and pitched (see map 5-8), in the both types it covered by different materials such as the concrete, the red roof tiling, and the metal sheets. While the original roofing system consists from level and dome system and covered by stone and mud. The new system caused a high contrast which seams odd, this related to the wide distance in the materials textures and color between the original and the new (see fig. 5-22 & fig. 5-23).



Fig. 5-22: Using different roofing systems between pitched, domed, & flat roofs in Jerusalem Old City (researcher).



Fig. 5-23: Using different roofing materials which influence the whole city image in Jerusalem Old City (researcher).

• On the micro scale level

• The new add elements, disrupted all the city façades and enclosed the city spaces; it added many elements that are totally varied in its texture, color, and appearance from the original elements (see fig. 5-24). It also influences visual code in the space; it cut the continuity in the visual relation with the city landmarks, nodes and elements (see fig. 5-12 & 5-14).

•



• On the micro scale there is another important

Fig. 5-24: The incompatible add elements by the settlers to the original facades in the Old City of Jerusalem. (researcher).

elements which are add to the city and influence its shape such as the city signs, ducts, public telephones, and air conditioning (see fig. 5-25).



Fig. 5-25: The Added signs, ducts, and air conditioning, which influence the whole city image in Jerusalem Old City (researcher).

• The new way off adding windows, doors and the fencing to the city existed opening influence the original image of the building forms, through the influence on the building façades, beside that add a modern material cause a wide difference between original and new (see, fig. 5-26, fig. 5-27).



Fig. 5-26: The influence of new added steel windows in Jerusalem Old City (researcher).



Fig. 5-27: The influence of new added steel fences in Jerusalem Old City (researcher).

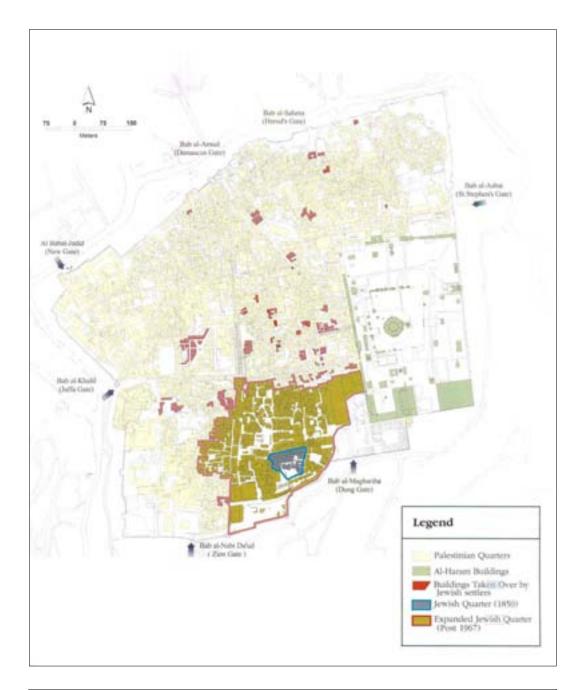
• The new added balconies, which didn't go with both the city form as it was added without any harmony to the existing (see fig. 5-28). In addition to the violation of the privacy meaning in the city.



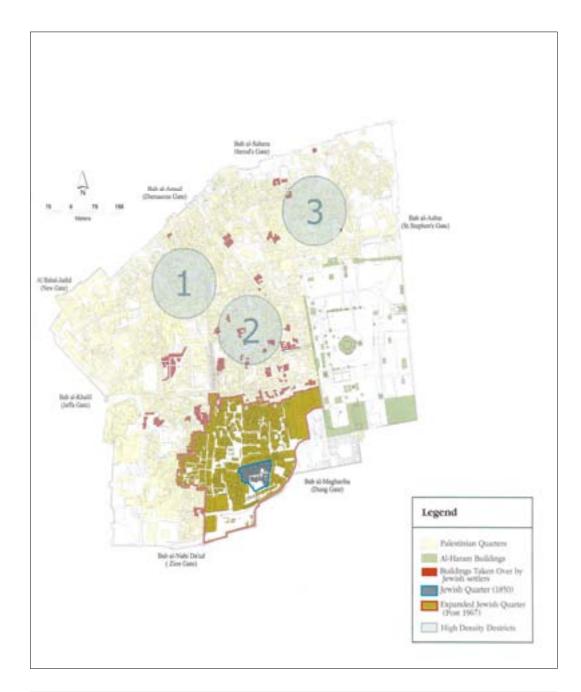
Fig. 5-28: The add balconies to the city form in Jerusalem Old City (researcher).

According to the discussion that is carried out in this part, Jerusalem Old City urban form witnessed a set of transformations during the last decades, which impacting the first aspect of human environment relation, as mentioned by *Itelson*, and which is the human perceived image. This influence took place through a set of transformations which can be listed as the following:

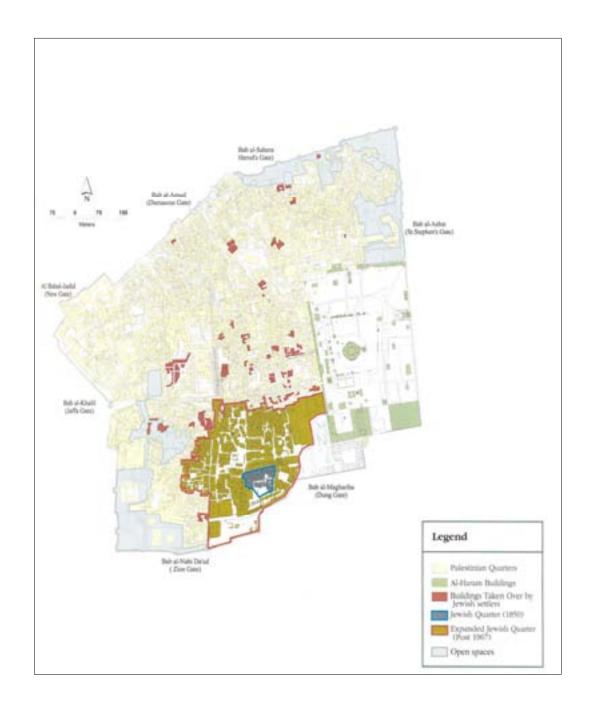
- a. The vertical and horizontal expansions.
- b. The occupation of most public open spaces in side the Old City.
- c. The action to close most the open courts inside the houses.
- d. The circulation conjunction due to the entering of vehicles and the lack of parking lots.
- e. The occupation of most the social spaces (markets and gates) by the merchant goods.
- f. The using of inappropriate building materials and styles.
- g. The additions of modern infrastructural services (telephones, power cables, water tanks ...etc) in chaotic way.
- h. Using inappropriate townscape elements (covering systems, fences....etc).
- i. Changing some building functions, and markets specializations.



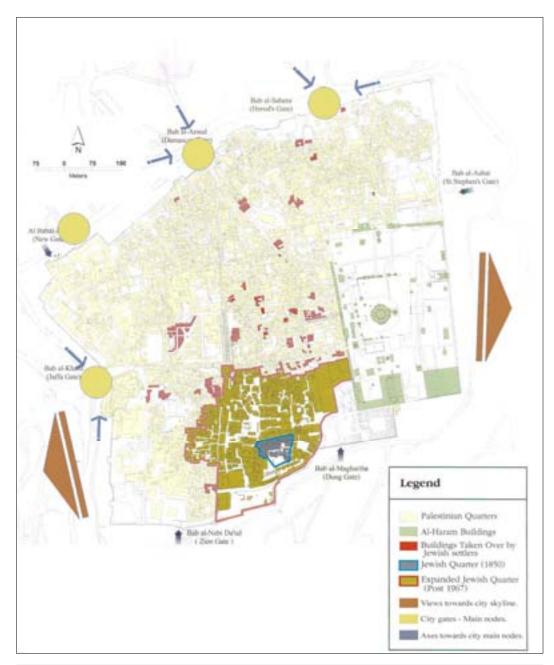
Map 5-1: The base map of Jerusalem Old City with the excluded Jewish quarter (Welfare, 2004).



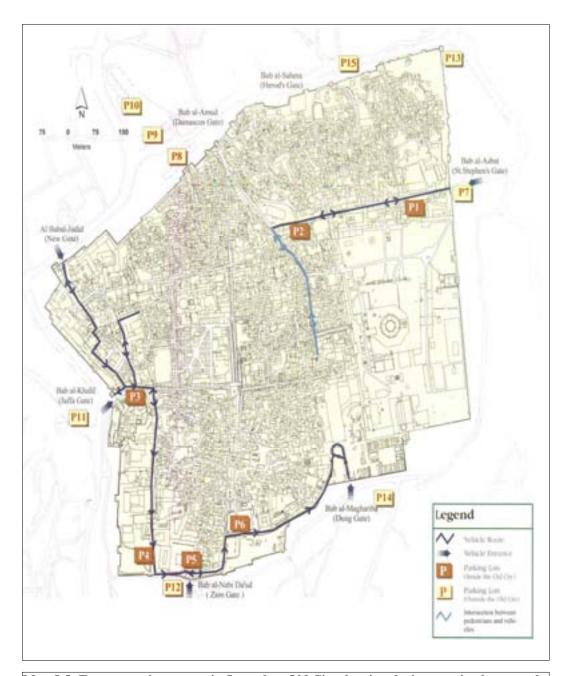
Map 5-2: The map which shows the high density zones in the Old City of Jerusalem (Welfare, 2004) (edited by the researcher).



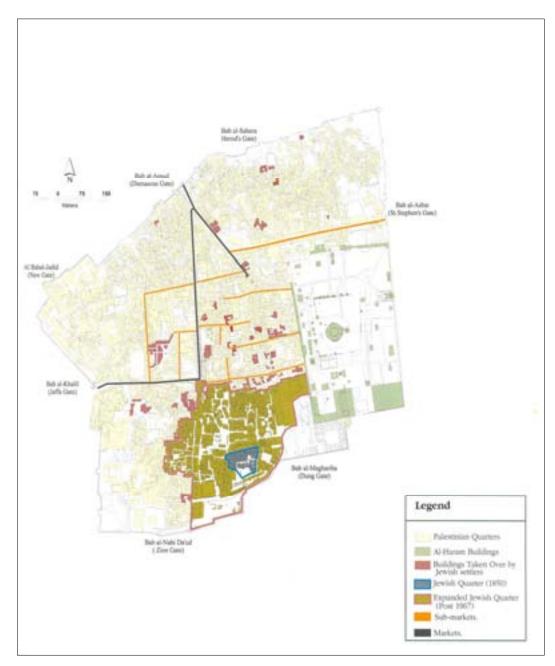
Map 5-3: Jerusalem Old City remain open spaces and its relation to the whole urban context (Welfare, 2004) (Edited by the researcher).



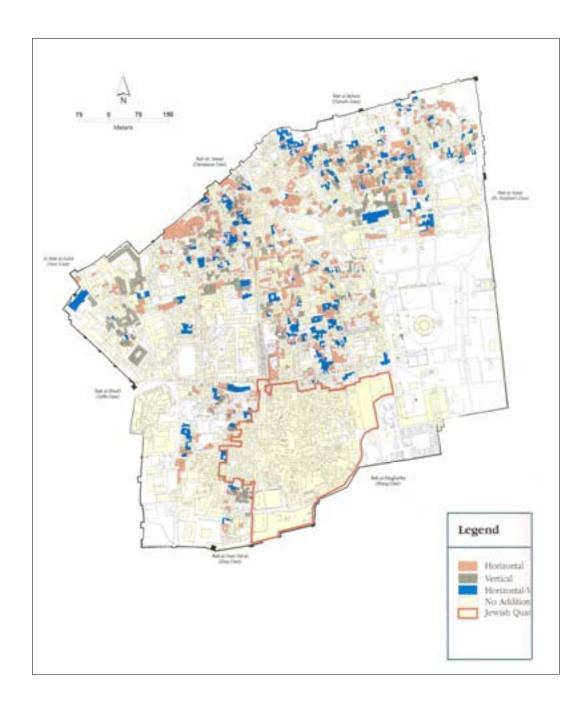
Map 5-4: The first visual relation between the users and Jerusalem Old City through the main nodes (the Gates), or the sky line image from the east and the west (Welfare, 2004) (edited by the researcher).



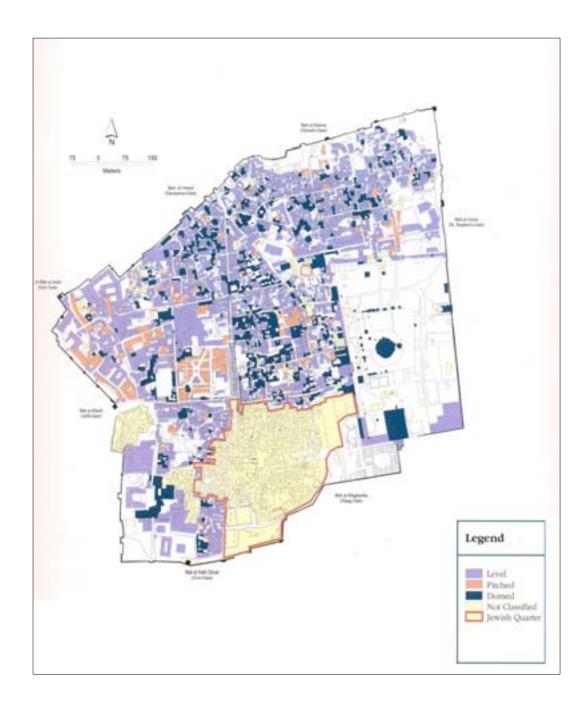
Map 5-5: Transportation system in Jerusalem Old City showing the intersection between the service vehicles axis and pedestrian axis (Welfare, 2004) (edited by the researcher).



Map 5-6: The main and sub markets in the Old City of Jerusalem, which consider as a principal open spaces in the city (Welfare, 2004) (edited by the researcher).



Map 5-7: Building expansions in Jerusalem Old City during the second half of 20th century (Welfare, 2004).



Map 5-8: The new roofing systems, which influence the total image of the whole city image in Jerusalem Old City (Welfare, 2004).

5.4 CONCLUSION

Jerusalem Old City in the last decades, witnessed a radical transformation in the both social and urban form aspects. The transformations in the city socio-cultural life took place through a number of the social problems which occur currently, these transformations influenced deeply by political, economical, and social factors, however it is, the role of the political factor becomes the most influential one between the three (see 5.2.2.1).

At the same level, the city influenced by a set of transformations in its urban form, through its visual impression, and functional mechanism. These transformations influenced the human perceived image, which considered as the first point *Itelson* mention about the human environment relation (see 2.3.1), this influence comes through the effects on the city perceived elements which is cited by *Lynch* (see 2.3.2.2).

6 CHAPTER SIX: DISCUSSING

JERUSALEM OLD CITY

TRANSFORMATIONS; BETWEEN

REASONS & EFFECTS

6.1 Introduction:

After citing the transformations which took place in Jerusalem Old City urban form, and in order to understand this dilemma through observing the factors which caused it, and the influence of that on the city's appearance, mechanism, and social life, the study will adapt the analysis of the existing conditions, to understand the problem through explore the relation between the transformation of Jerusalem Old City urban form and the change in the city modern socio- cultural structure. The analysis will be passed through three stages, which are:

- 6.1.1 The theoretical approach_ using Rogers's (1999) theory about the human modern needs (see 3.4), which intersect with Bianca (2000) theory about the same issue. Then to discuss the socio-cultural mechanism of the produced city form, using Rapoport (1977) theory about the socio-cultural meaning in the urban form (see 2.5). These will lead to determine the way the modern needs derive the residents toward changing the city urban form and social mechanism, in addition to its relation to the social problems which took place in the city.
- 6.1.2 The cross reference approach_ talking about form issues based into two pillars, the influence of the different forces in the form, and the personal influence of the designers in the form. In order to achieve better personal understanding for the problem, a cross reference will be used (Toledo Old City), where rehabilitation plan implemented in, under the purpose of integrate modern socio-cultural needs with the existed city urban form. This will give the opportunity to examine the proposed modern needs with the

implemented plan in Toledo. From another perspective, the comparison will be useful in order to determine the factors which have a direct influence in offer modern expectances in Jerusalem Old City, and which role in transform the urban form of the city, it will also serve to clarify the place congruent to the modern needs in Jerusalem Old City.

6.1.3 The questionnaire approach_ this will be used as another tool, in order to examine the modern socio-cultural needs, which determine by Rogers (1999), from the users point of view. In addition to study the influence of the current transformations in the level of livability in Jerusalem Old City, and the influence of the proposed modern needs in the same factor in Toledo Old City.

Addressing these approaches, and back to Jerusalem city, will assist in giving a vision of understanding of the current transformation in the city's urban form, and the influence of these issue in the city social life.

6.1.1 Causes of the Current Situations; Theoretical Approach

Lord Rogers in his urban task report (see 3.4), determine three points as the pillars of change in modern life and which must be concerned by the architects and the urban designers, these points are:

- The technical revolution.
- *The social transformation with life patterns.*
- *The ecological threats.*

From *Rogers's* point of view, these points represent the people modern expectancies from there places, these points; reflected physically through the sanitary conditions, the

streets layouts, and open spaces, and the building, through its form and mechanism (see 3.4).

As the study adapts the architects view about the human social relation to the built environment, which concerns with the form as the primary component. The built environment developed according to *self conscious*, and un_{-} *self conscious* design, according to *Itelson* (1960), people need to adapt and integrate there needs in the built environment. The absence of these needs will derive the residents toward transforming there surrounding to offer there needs in a way influence the existed urban form and mechanism, this can be consider as un_{-} *self conscious* design.

Looking to the physical situations in Jerusalem Old City, the people use to enforce their modern needs in a way cause the transformation in the urban form of the Old City, this can be classified under the concept of adapt and integrate people modern needs through the *un_ self conscious* design. Dealing with that through the modern socio-cultural perspective, the transformations in the urban form of Jerusalem Old City can be classified according to *Rogers's* theory under the following categories:

6.1.1.1 THE TRANSFORMATION IN THE OLD CITY FORM ACCORDING TO THE ABSENCE OF THE MODERN TECHNICAL MEANS

Rogers included the technical revolution as a main modern need; the technical revolution here influence both the sanitary services through, the TV systems, electrical, telephone, infrastructure, and other modern services, the street layout through the transportation means, and the building topologies and mechanism through the modern materials, and structural systems.

In Jerusalem Old City, there is obvious absence of the technical means in the total city appearance and services, which influence the level of livability inside the Old

City, and push the people to enforce there needs on the form in a way, could be discussed as the following:

- The absence of vehicles axis and parking lots inside the Old City walls, and the deficiency of a public transportation system inside the Old City, which lead for the existence of illegal parking around the gates (the main nodes), and the entering of services vehicles to the main axis, in a way cause a circulation conjunctions in the main paths.
- The absence of sufficient TV, Telephone, and Electrical underground cable systems. These push the people to construct network systems in arbitrary way, which didn't consider the Old City original image.
- The absence of sufficient public services, such as public telephones, which lead to the appearance of public telephones that founded by the merchants, which is incompatible with the city original form.
- The ignorance of the public ducts, air conditioning systems, and signage systems in a way leads for the appearance of new systems which cause the change in the city form.
- The absence of sufficient water and drainage systems, this lead to the appearance of water tanks and outside instillations.
- The use of modern building materials, and roofing systems, that is flexible to use and visible, in a way influence the original appearance of the city.
- The use of modern structural systems, which influence the total appearance through the building heights and expansions.

6.1.1.2 THE CHANGE OF THE OLD CITY FORM ACCORDING TO THE SOCIAL TRANSFORMATION & THE INCREASING OF THE LIFE EXPECTANCIES

According to the theory, the second modern consideration is the transformations which took place in the social patterns and the increasing of the life expectancies. Social pattern in Jerusalem city changed during the last decades (see 4.4.1), under a set of factors, one of these factors is the modern influences. Items such as the change in the family structure, the modern socialization meanings and relation between the different ethnical quarters can be classified under this aspect.

The influence of this aspect in Jerusalem Old City urban form can be understood as the following:

- a. The change of the family structure from extended family to nuclear family and the need for new meaning of socialization. This modern social change consider as the a main factor, besides the increasing of the number of population according to political aspects, in changing the massing composition inside Jerusalem Old City, it influenced both the building and the open spaces in the city. The Old City houses designed as court houses which based on the extended family structure, the change of the family structure with the growing of the number of population increase the houses needed area from one hand, and from the other hand it changed the social needed houses prototype, this is a main reason for:
 - The horizontal expansion which lead to the space occupation. Either the public spaces that surround the building or the private spaces inside the building, and its influence in the city macro and micro urban form.

- The vertical expansions which influence the city urban form through its spaces and masses and through its sky line, and the influence of all that in the city perceived components.
- The lack of the social spaces and markets open spaces after the horizontal and vertical expansions_ as the open spaces mostly occupied, and the markets changed to crowded public spaces, the need for open spaces which could offer the social, recreational and commercial public spaces increase. The lack of these spaces pushes the people to locate the informal markets as public commercial spaces, and the construction of roof terraces or the open balconies as a substitution from the private open spaces. These spaces existed in a very arbitrary way.
- b. The influence of the modern life expectances_ as the modernity increase the life expectances through the level of services and the space appearance which reflects the modernity capabilities, it becomes a main criteria the people use in order to evaluate their places. In Jerusalem Old City this factor influence the urban form as the following:
 - The absence of modern social centers_ there is a lack of social centers which offer the life socialization in a modern life patterns (see 5.2.3.4).
 - The need for using a modern building techniques_ using modern building techniques and materials became more compatible for the users, this due to the opportunities it offers, like the vertical expansion, in addition to the availability of these materials and its suitable prices.
 - The need to reflect the modern technical appearance_ the technical appearance became one value that determines the people satisfaction from there places appearance. In Jerusalem Old City, and in order to reflect this appearance, the

people use to add some townscape elements such as the modern windows, doors, fences, covering systems and roofing system. It is vital here to mention that these townscape elements added according to the modern life needs factor from one hand but it also comes as a result for another important factors which are not covered under the research subject.

6.1.1.3 THE INFLUENCE IN JERUSALEM OLD CITY URBAN FORM ACCORDING TO THE ABSENCE OF THE ECOLOGICAL DIMENSION

The ecological dimension here means the green built and its influence in the total surrounded environment. In general the need for green zones rose up after the appearance of the technical means, which separate the human being from his natural roots for more mechanical sphere in a way cause a sort of interruption for human private life (Thompson, 2002), according to the same reference, the green zones in our modern life offer more private, social and secure places. Looking to the problem in more specific, Jerusalem Old City suffer from the lack of the social open spaces, the city suffer from the deterioration of the private and the security meaning. Accordingly, the need for these green zones rose up and its absence inside the Old City consider as one important factor which influence the city current situations.

According to the cited analysis, the people in Jerusalem Old City derive toward adapt and integrate there modern socio- cultural needs in the place under the *un_self* conscious rule, this cause the radical transformations in the city urban form and mechanism.

6.1.2 TOLEDO AS A CROSS REFERENCE

The research adapt the cross reference approach as another level of analysis, this gives the opportunity to see another case that has similar situations like Jerusalem Old City, and which had a vision to deal with the modern needs in its old places. The importance of adapting this approach classified under the idea of dealing with form issues which depends in some levels on the personal understanding of the form concepts, which will be improved through looking for another cases, and this approach give the opportunity to examine the adapted modern social needs in the analytical part, the old places congruent to that, and the obstacles which face Jerusalem Old City toward offering these needs.

Toledo Old City, which is located in Spain, will be the research cross reference case. The reasons for choosing it are classified under the following:

- a. The heritage value of the Old City in Toledo, which push to include it in the UNESCO world heritage list (www.unesdoc.unesco.org).
- b. The physical conditions, and the city form, which looks relatively similar to the conditions in Jerusalem Old City through:
 - The city urban pattern- the city existed urban pattern considered as a Moorish urban fabric that superimposed on the existing city, the city organized under *Alkhatat* concept of planning, where the different social groups can distribute within the arbitrary organization with the space hierarchy that gives the opportunity for the movement from the private to the public spaces, the streets of the city organized according to the Islamic concept of *AlShari*, *Aldurub*, *and AlAzikka* (Busquets, 2000) (see fig. 6-1 & 6-2).

The informal movement to organize the city as headquarter of the Catholic Church, which gave the city its similarity to Jerusalem Old City "from the late meddle age to the end of the Ancient regime, all the great Christian cities tried to become the forerunner of heavenly Jerusalem" (Corboz, 1991).



Fig. 6-1: Toledo Old City top view showing *AlKhatat* Planning concept on the macro scale level (Busquets, 2000).

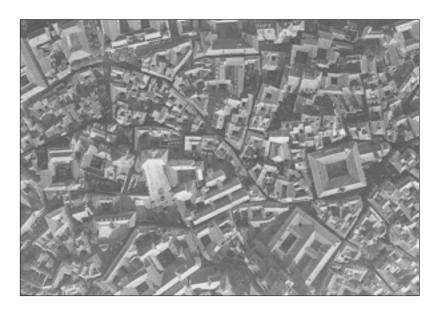


Fig. 6-2: Toledo Old City top view showing *AlKhatat* Planning concept on the micro scale level (Busquets, 2000).

• The geographical situations which are some how similar to it in Jerusalem_ as the Old City located in a plateau of mountain surrounded by valleys from three directions and covered by almond and olive trees (see fig. 6-3).



Fig. 6-3: Toledo top view showing the city geographical conditions (Busquets, 2000).

- The social fabric- the city form developed under a mixed social ethnical fabric between Christians, Moslems, and Jewish.
- The urban renewal and rehabilitation plans- which developed according to a main vision of increasing the viability of the Old City through solving the question of the modern needs within the old fabric, which is the research main question. This vision gives a pioneer solution to this case (see appendix 3).

It is important to mention that dealing with Toledo case will be in general view to understand the total concept, without going in deep to examine the conditions and

the detailed solutions, this is important limit for the research, due to the concentration in the research main topic and to a void any misleading analysis.

6.1.2.1 TOLEDO OLD CITY, ITS SITUATIONS & FUTURE VISIONS

Toledo city located in the middle of Spain, about 70 km south of Madrid. The city considered as important location in Spain due to many reasons, started from its history, location, and current consideration as the capital of Castlla La Mancha territory.

The city, which is included in UNESCO world heritage list (www.unesdoc.unesco.org), witnessed urban rehabilitation efforts (see fig. 6-4), and the reasons of spending these efforts can be listed as the following:

- a. The new administrative and economic activity of Toledo which help to reactivate the center- As the general change to an open territorial system which took place in the last thirty years served to redefine the historic center as a part of the whole. This in turn led to a need for increased access to the center and a new relation between the center and its territory (Busquets, 2000); this is achieved through rise up the level of services and accessibility inside the Old City.
- b. The demands of modern life have created new and different uses for the historic center in Toledo; accordingly it's vital to found solutions, which enable these often contradictory interests to co-exist (Busquets, 2000).
- c. The inhabitants leaving the Old Center in search for more comfortable way of life they have not been able to find in the city, statistics show that there is a decrease in the number of population for more than 10% since 1950s (Busquets, 2000).

d. The need to preserve the cultural heritage value of the Old City, which consider as a part of the city renascence movement which took place in Europe in the 1970s, toward rehabilitate the Old Centers instead of replace it with new buildings.

According to the listed situations, rehabilitation and urban renewal plans prepared for the Old City of Toledo under the following general objectives:

- a. The need to define a "new culture for the historic center"_ the various urban planning and recovery measures based on this "new culture" must be aimed at modernizing and updating the cultural and environmental value of the medieval city (Busquets, 2000), the new European reality is now looking back at the medieval period in search of a point of reference for its modern innovative thinking.
- b. The development of multicultural initiatives which led to the acceptance of the



Fig. 6-4: The sign which related to the rehabilitation project in the city (researcher).

"three cultures" of Toledo (Busquets, 2000).

In order to achieve these objectives, the project based on a strategy which promotes activities that are compatible with the historic center and which allows for a mixture of residential and services activities. Furthermore, it must ensure the continuity of both of the unique monumental heritage of Toledo and the city's active role as the center of a large territory and its modern life needs (Busquets, 2000).

6.1.2.2 JERUSALEM; COMPARISON WITH TOLEDO CASE

Toledo rehabilitation plan objectives, which are described in (6.1.2.1), carried out through adapting a process of motion than to cause a radical change, this is achieved through modifying the existed Old City between its heritage value and modern expectances rather than transforming it. This plan consider as a successful example according to two aspects:

- a. It is expected that after the last stage of implementing these objectives, the Old City Viability will rise up, and the number of the inhabitants will be increased (Busquets, 2000), these expectations based on the current statistics which show improvement in the number of population in Toledo Old City.
- b. The field studies about the solutions in Toledo Old City, which based on the people points of view, through the personal interviews and the questionnaire, which will be discussed in (6.1.3). The residents in the city show a high degree of acceptance for the efforts headed in the city.

According to these two points, Toledo project achieved a satisfied solutions for the subject of integrate the modern life expectances with the Heritage value of the Old City, in order to understand that in relation to the situations in Jerusalem Old City, general comparison will be done between the situations in Jerusalem and it in Toledo, this will give a good vision about the place congruent to the modern needs, the factors which serve in implementing it, in addition to the modern needs itself, with the levels of implementations which can be shown as the following:

a. Sanitary conditions:

• <u>In Toledo Old City-</u> Toledo witnessed improvement in the sector of public health services, through improving the conditions of the water supply, the

drainage system, the swage, lighting the streets, providing adequate services to houses, providing public telephones and reducing mortality rate (see fig. 6-5 & fig. 6-6).



Fig. 6-5: The absence of any sanitary system that could interrupts the building facades in Toledo Old City (researcher).



Fig. 6-6: The underground swage system inside the Old City of Toledo (researcher).

Accordingly, there is no violation for the total urban form with any pipe system, tanks, incompatible public services to the total form, or public telephones. At the same time, there is still a need for a sufficient underground electrical, telephone and television cables, that these systems cables still affect the total city form (see fig. 6-7 & fig. 6-8).

• <u>In Jerusalem Old City</u> as discussed in (5.3), Jerusalem Old City suffered from inadequate infrastructure and sanitary conditions which considered as a main reason that influence the total urban form of the city.



Fig. 6-7: The public services in the Old City of Toledo (researcher).



Fig. 6-8: The electrical cable systems in Toledo Old City (researcher).

b. Streets layout:

- <u>In Toledo Old City</u>- there is a comprehensive vision toward solving the streets layout concept through:
 - a. Vehicles axis_ in which the residents, employers, and services means are allowed to enter the Old Center, where the tourists vehicles are not allowed to enter, there is a sufficient public transportation system inside the Old Center, that link it with the new neighborhoods (see fig. 6-9 & fig. 6-10).



Fig. 6-9: The sufficient public transportation system in Toledo Old City that link it with the new neighborhoods (researcher).



Fig. 6-10: The entering of vehicles inside the Old City of Toledo (researcher To Left) & (Busquets, 2000).

b. Vehicles parking_ there is a sufficient public parking inside the Old Center, in addition to the private parking inside most of the houses, which considered as one requirement for the rehabilitation of the residential buildings (see fig. 6-11 & fig. 6-12).



Fig. 6-11: Public parking inside the Old City of Toledo (researcher).



Fig. 6-12: Parking inside the houses in Toledo Old City (researcher).

c. Pedestrian axis_ axis were developed in order to provide pedestrian movement without any interaction with the vehicles axis, in

addition to that, pedestrian axis developed to contact the Old Center with activities out side (see fig. 6-12 & fig. 6-13).



Fig. 6-13: Using high- tech (electrical stairs) means in order to offer pedestrian axis from outside tourist parking to inside the Old City of Toledo (researcher).



Fig. 6-14: Connecting some public services from outside the Old City of Toledo by modern axis (researcher).

• <u>In Jerusalem Old City</u>- It is clear, that the street layout in the Old Center contain a limited number of vehicles axis and parking lots, this is as mentioned in (5.4), consider as a main reason that influence the urban form and the social dimension in the city

c. Buildings:

• In Toledo Old City-

- a. The allocation of services building inside the Old City, which promote different social groups to integrate within the Old Center, and which provide a new social areas to interact within. The services buildings in the Old City consisted from Universities, Governmental buildings, and passive and active culture centers.
- b. The services building are treated in two ways, either to preserved its heritage value, and integrating it with modern materials and building styles form outside like the school of translators, or from inside like Castlla La Mancha University (see fig. 6-15), by allowing the additions or the allocation of a totally modern construction inside the Old City (see fig. 6-16). This gives the modern appearance within the total heritage of the city, or by conservation the building with the old spirit (sees fig. 6-17).





Fig. 6-15: The modern addition within the Old appearance, the school of translators, Toledo Old City (researcher).

Fig. 6-16: The modern style and materials building inside the Old City of Toledo (researcher).

c. The spread of the residential units all over the Old City, and the treatment of these houses units with modern residential needs through its facilities,

expansions, and the use of modern building materials and technologies. It's important to mention that the modern expansions of the residential buildings respect the old value of the existed buildings through its style and shape (see fig. 6-18).



Fig. 6-17: The conservation of the old building considering its old style in Toledo Old City (researcher).



Fig. 6-18: The treatment of the House units and its new expansions in respect to the heritage value of the Old City of Toledo (researcher).

• In Jerusalem Old City-

a. The existence of the service buildings inside the Old City become limited, this influenced the level of socialization within the Old Center.

b. The houses didn't offer the modern life requirements, and all the new expansions go in arbitrary way which influenced the total urban form (see 5.3.2).

d. Open spaces:

• In Toledo Old City-

a. The open spaces inside the Old City becomes limited, but the new trend toward preserving the open courts inside the buildings, which considered as the lungs for all the urban fabric (Busquets, 2000) (see fig. 6-19).



Fig. 6-19: The private court in Toledo Old City houses, towered green internal zones (Busquets, 2000).

b. To preserve all the remain open spaces inside the Old City, and to enhance the green open spaces, through the public open spaces inside the Old City or the green gardens in the edges of the Old City which consist a place to escape to the nature(see fig. 6-20 & fig. 6-21).





Fig. 6-20: The public green open spaces inside the Old City of Toledo (researcher).

Fig. 6-21: The open Gardens as escape to nature green zones in Toledo Old City (researcher).

• In Jerusalem Old City-

- a. There is a trend toward occupied most the open courts inside the Old City.
- b. The open spaces are limited due to the horizontal expansions, and the green zones are also limited inside the Old City.

According to the statistics and the field investigations (as mentioned in this part), the rehabilitation efforts in Toledo Old City success in raising the level of livability and preserve the heritage value of the city. According to that, depending on the physical analysis of the city, and based on the discussed similarity points with Jerusalem Old City, the following points can be concluded:

a. The improvement of the level of livability in Toledo Old City based in developing the Old Center to a comparable level to the modern neighborhoods, by implementing the modern needs which reflects the modern technical level, the new social expectances and transformations, and the need for ecological dimension. This occurs through dealing with the city sanitary services, street layouts, buildings and open spaces. The success of these solutions in Toledo Old City, show the role of these needs in transforming the urban form in Jerusalem Old City, it proves the *Rogers* adapted theory in (6.1.1).

- b. The efforts carried out in Toledo Old City, in order to offer the modern needs, try to consider the heritage value of the city urban form through preserving the human perceived elements through:
 - The total city appearance, through its sky line, and Main gates approach, appears in harmony, nothing interrupts' the total appearance, no crowded composition, and the total hierarchy is clear (see fig. 6-22).
 - The streets organized in a compatible way, and it is used as social spaces inside the Old City.
 - The landmarks are clear; both in macro and micro scale levels, and nothing interrupt its clearance.
 - The streets facades are treated in a way compromise between the modern appearance and the heritage value of the city.
 - The open spaces through the gardens, the open courts, the public courts, and the streets work as a social spaces, it consider as the lungs of the total urban form.
 - As the Old City of Toledo expresses its heritage value, it also present the time concept through the modern facilities and treatment it includes, accordingly it's treated in a comparable way to the modern neighborhoods.

These points present the importance of preserving the city total urban form through preserving the elements which perceived by human being. It also

- shows the place congruence in to offer the modern needs in a way which don't influence the heritage value.
- c. It is vital to mention that the success of the efforts headed in Toledo Old City project, related to the governmental efforts to:
 - To preserve the heritage value of the city.
 - To offer the social needs.
 - To solve the economical problems.

These points take place through:

- The headed efforts toward preparing and approving the Special Plan for the Old Quarters of Toledo (P.E.C.H.T), which based in the aim of affording the modern needs and services, and preserving the heritage value of the city. This is achieved through the council that corporate efforts between public institutions like the municipality and private entities.
- The implementations of the plan through three stages which are:
 - a. Applying the new regulations.
 - b. Carrying out work on infrastructure and major facilities.
 - c. Refurbishing housing.
- The establishment of new organizations and foundations which raise the awareness and give the funds for preserving the city buildings.
- Promote the public institutions, such as the universities some governmental organizations to be located inside the Old Center.

In Jerusalem Old City the same components play a negative role toward transforming the city urban form, because of the absence of the governmental

efforts toward these responsibilities, which considers as the Israeli authorities responsibilities (according to the international low- see 4.2). In the contrary, Israel authorities neglected the deteriorations of the Old City heritage value to make excuse for the "slums clearance" policies, and promoted the colonization efforts toward the "Judaisation" of the Old City of Jerusalem (as discussed 4.4.2.5). It also promotes the development of the Old City in incomparable way to the modern neighborhoods, the issue that cause the urban apartheid for the Old City.

6.1.3 USERS VIEW; BETWEEN JERUSALEM & TOLEDO

In order to examine the discussion about the success of Toledo project, the resident's considerations about the influence of the new transformations in Old City form, and the place congruent to that in the both cases, the questionnaire technique will be used. The questionnaire was distributed in both Jerusalem Old City and Toledo Old City aimed at:

- a. Determine the users' view about the headed efforts in Toledo Old City through their evaluation of the physical conditions in comparison with the same conditions in Jerusalem Old City.
- Understand the users' perception about the modern socio-cultural needs in both cities.
- c. Highlight the strong and weak points of the two cities from the users' point of view, in a way give another view about user's satisfactions from the planned transformations in Toledo city, and the unplanned transformations in Jerusalem old city.

The questionnaire mostly designed in the same format for the two cases, it consists of two parts, the first part includes the factual questions as introduction to the questionnaire. The second part divides to two sections consists from structural experience questions, the first section of this part includes questions about the physical conditions of the both Old Cities, and the second part includes questions about the social conditions with questions about people's satisfaction of the total conditions (see appendix 1 & appendix 2). The two questionnaires which implemented in both Jerusalem and Toledo in 2005 compared in order to evaluate the results of the second analytical approach and will help in understanding the research questions in depth.

In the both cases the target group consisted of merchants, employers, workers, and students. The total sample of each case consisted of fifty questionnaire, this is due to the shortage of time and the problem of accessibility for the both cases, this sample arranged in Toledo to fifteen residents, fifteen merchant, ten student and ten employers, the sample targeted different age groups and from different quarters in the city. In the time that the sample in Jerusalem Old City was arranged between residents and merchants, and it was distributed in most the quarters except the Jewish quarter which excluded from the study due to political considerations.

6.1.3.1 QUESTIONNAIRE; GENERAL DESCRIPTION

By a general view to the first part of the questionnaire the following can be noted in Table 6-1:

# of	Jerusalem Old City	Toledo Old City
question		
1	About 66% were males, while	52% males and 48% females.
	34% were females.	
2	The sample includes a high	• The sample includes a high ratio
	percentage of people born in	of frequencies that's born in
	Jerusalem, it shows that about	Toledo, about 64% of the entire
	76% born inside Jerusalem city,	sample, 26% in other Spanish
	while 24% of the sample born in	city, while 10% born outside
	another Palestinian city.	Spain.
3	Most of the frequencies in the	• The academics occupied the
	sample works as merchants, they	highest ratio of the sample with
	consist about 40% of the entire	58%, the merchants 20%, while
	sample, 20% are employers, while	the other frequencies distributed
	the lowest ratio are the academics	between workers, employers
	with 4%.	and residents.

Table 6-1: comparison for the questionnaire factual questions between Jerusalem Old City & Toledo Old City (researcher).

Accordingly, the first part of the questionnaire, through its factual questions, starts to give a general view about the conditions on the ground for each case; it gives indications for the ID holders problem through the number of sample who born inside the city, the dominancy of the commercial zones in the Old City of Jerusalem, it also shows the mixed zones in Toledo through the ratio of merchant, employers, residents and academics. From another perspective this statistics shows some differences between the two cities in its current conditions, for example it indicates the lack of the academic institutions in the Old City of Jerusalem while it indicates the high percentage

of these institutions inside the Old City of Toledo through the number of academics who answer the questionnaire.

• USERS VIEW ABOUT THE PHYSICAL SITUATIONS IN GENERAL

Before talking about the physical conditions in Jerusalem Old City it's important to note that according to the questionnaire about 60% of the real states are used in a rent statue, 36% as ownership, while 4% of all the real states included in the sample are charity, the represent the unoriginal families which stayed in the city. Looking to table number 6-2, and in order to achieve users' view about the headed efforts in Toledo Old City through their evaluation of the physical conditions in comparison to the same conditions in Jerusalem Old City, the following can be noted:

# of	Jerusalem Old City	Toledo Old City
question	j	
6	About 62% of the entire sample	About 84% of the entire sample
	describes buildings structural	describes the structural conditions
	conditions between average and	of the buildings between good and
	bad, while 36% of them describe it	very good, while just 16% describe
	between good and very good.	it between average and bad.
7	About 64% of the users decide that	About 74% of the entire sample
	the aesthetic conditions of the	describe the aesthetic conditions of
	building are between averages and	the real states between god and very
	below, whereas 32% of them say it	good, while 26% of them describe
	is between good and very good.	it between average and bad.
8	The sample includes about 52% of	The sample shows that 80% of the
	the users who say that the building	entries describe the building

	materials are between averages to	materials between good and very
	bad conditions, where 32% of them	good, whereas 20% of them
	say that these materials are in good	describe it between average and
	or very good situations.	bad.
9	About 60% of the sample describes	About 82% of the users describe the
	the functional mechanism of the	functional mechanism of the real
	building between average and bad,	states between good and very good,
	while 40% of them describe it	while 18% of them describe it
	between good and very good.	between average and bad.

Table 6-2: Comparison for the questionnaire physical conditions questions between Jerusalem Old City & Toledo Old City (researcher).

According to the listed answers about the physical conditions of the real states in the both cases, it's obvious that Jerusalem Old City residents describe the total physical conditions in general between average and bad, while most of Toledo Old City residents describe the total physical conditions between good and very good. This expressed the spend efforts in Toledo in order to rehabilitate the physical conditions to fit level for people expectances, in parallel to that, it present the inadequate physical conditions in Jerusalem Old City which suffer from the lack of rehabilitation treatments.

• USERS PERCEPTION ABOUT THE STRENGTH AND THE WEAKNESS POINTS

In order to determine the strong and weak points of the headed efforts in Toledo Old City and the transformed situations in Jerusalem Old City, Table 6-3 & Table 6-4 show the followings:

# of	Jerusalem Old City	Toledo Old City
question		
10-1	56% describe the social	About 50% consider the social
	relations as a strong point.	relations as strong point.
10-2	64% describe the building	28% consider the building coasts as a
	coasts as strong point.	strong point.
10-3	32% consider the public	66% consider the level of public
	services as a strong point.	services as a strong point.
10-4	48% consider the relation to be	58% consider the relation closed to
	close to there Job as a strong	job as a strong point.
	point.	
10-5	92% considers the relation to be	32% considers the relation close to
10-3	92% considers the relation to be	32% considers the relation close to
	close to the market as a strong	market as a strong point.
	point.	
10-6	36% consider the building	52% decide that the environmental
	environmental conditions as a	conditions of there built environment
	strong point.	are a strong point.
10-7	28% samples consider the	52% consider the aesthetic
	building aesthetic conditions as	considerations as a strong point.
	a strong point.	

Table 6-3: Comparison for the questionnaire strength points questions between Jerusalem Old City & Toledo Old City (researcher).

# of	Jerusalem Old City	Toledo Old City
question		
11-1	52% consider the lack of area as	20% consider the lack of area as a
	weak point.	weak point.
11-2	60% consider the building	16% consider the physical conditions
	physical conditions as a weak	of the buildings as a weak point.
	point.	
11.2	(000 11 11 1 1 1 1 1	
11-3	68% consider the lack of the	This question wasn't included in
	public spaces as a weak point.	Toledo Questionnaire.

Table 6-4: Comparison for the questionnaire weakness points questions between Jerusalem Old City & Toledo Old City (researcher).

The answers illustrate that in Jerusalem Old City, despite the modest ratio which considers both the social relations and the buildings coasts as a strength point, and the high percent which consider the relation to be close to the market as a strength point. A low percent of the sample see the level of the public services, the relation to be closed to the job, the building environmental conditions, and the aesthetic conditions of the surroundings as a strength points. These answers express the strong social fabric which still operates as one unit, unless all the influences, which present the miserable physical conditions that seems unsatisfied for the residents. In the same level, people of Toledo city considers the social relations, the environmental conditions, the aesthetic conditions, the relation to be closed to the job, and the level of services as a strong points, despite the unsatisfied relation to be closed to the market, and the real state coasts. This means that the users in Toledo are some how satisfied from the

rehabilitation operations, through the level of services it offers, the building environmental and aesthetic treatments, and the spatial organizations, but they are in need to complete the efforts toward improving the economical dimension.

From another perspective, Jerusalem users considers the lack of area, the building physical conditions and the lack of the public spaces as a main problems in the city, this emphasis the research analytical results which considers these factors as a major problems in the city, due to the occupations and changes of the most physical spaces in the city.

The last part of the questionnaire examines the people social relations, and there level of satisfaction on the efforts through the social diminution, in order to go a farther step toward examines the success or failure of the implemented plan in Toledo. This comparison shows that about 64% of the people in Jerusalem Old City consider this relation as a good relation. While about 74% of the residents in Toledo Old City consider this relation as a good relation and the others consider it as a normal relation. One of the aspects which influence this ratio is the physical context and the separation of the public areas from the private ones which still existed in Toledo and start to be violated in Jerusalem. The question about the groups that interrupts the social life privacy in both cities, emphasis this idea, in Jerusalem Old City about 50% of the entire sample decided that people from other ethnical groups, or visitors to the Old City are the main source of interrupts the social life privacy, its obvious that the idea of missing the privacy meaning, the miss of clear edges between the quarters, and the violation of the homogeneity areas meaning areas produce this problem. While in Toledo Old, just 2% of the entire sample considers the others as a main interruptions point.

In the same direction another question camper the two cities under the question of which places gives you the social security, just 44% of the entire sample in Jerusalem considers the Old City as a secure area, whereas 64% of the entire sample in Toledo considers the Old City as a secure area, this due to the existed physical conditions in Jerusalem.

In spite of the all addressed problems in Jerusalem Old city, which is determined by the users through the entire sample, about 80% of the sample prefer to stay in the Old City in there next future, while 76% of the entire sample in Toledo prefers to stay there. This is due to the social, cultural and religious position of the Old City of Jerusalem.

6.1.3.2 THE QUESTIONNAIRE FINDINGS

The questionnaire objectives, which try to establish knowledge for the users view about the headed efforts in Toledo Old City through their evaluation of the physical conditions in comparison to the same conditions In Jerusalem Old City, in addition to examine the users view about their modern needs through listing the weak and strong points in each place. These objectives through the questionnaire three sections show the followings:

A. Jerusalem residents evaluate their physical environment conditions between average and bad, this verify the research analysis about the radical change in the total city form which took place by the residents in the last decades, and which didn't consider the balance between the original city form and the modern social needs. Whereas Toledo residents evaluate there physical environment conditions between average and good, this become combatable (as explained in 6.1.2) with the total efforts which took place in the city in order to accommodate the modern social

- needs in the city without violating the total city urban form, it prove the success of the carried efforts in the city.
- B. The physical analysis of Jerusalem Old City, discuss the urban form transformations which took place in the city in the last half of the twentieth century, the questionnaire shows that the residents consider such transformations as a bad influence, a low percentage of the city residents consider the physical, aesthetic and public services as a strong point in the city, while a high percent of the residents considers the physical conditions with the lack of area as a main weak point. Toledo Old City, residents consider the contrary in a way show the place congruent to the carried efforts in order to offer the modern needs. This is obvious through the ratio of the resident's acceptance for the people from other groups which are less in Jerusalem Old City than it in Toledo, and which is due to the influence of the physical transformations that affects the city social meaning.

In spite of the modest physical conditions, in addition to the weakness and bad level of services in the Old City of Jerusalem, most the people prefer to stay in the Old City Because of political, religious, and historical value. This means that the immigration of the residents outside the city mostly come from a very strong factor, in which the bad physical and aesthetical situations play the main role on it.

6.2 THE INFLUENCE OF THE PHYSICAL CHANGES ON THE SOCIAL MEANING IN JERUSALEM OLD CITY URBAN FORM

According to *Amos Rapoport* (1977) (as explained 2.5), the socio-cultural aspects influence the physical city meaning through the group clustering between homogenous and heterogynous, and through the clustering aspects and characteristics. Under this concept, and in order to understand the influence of the transformations in

the city form in the social fabric meaning on Jerusalem Old City, the following changes can be addressed:

- a. The Change in the group clustering between homogenous to heterogynous zones_
 the Old City of Jerusalem was organized according to the group homogenous
 areas, in which each quarter includes people from the same ethnical background,
 in the same time the markets was organized according to homogenous markets
 which based on the specialization of each market, the social and urban form
 changes influence these meaning through:
 - The replacement of the original inhabitants with new, which establish heterogynous clusters with some overlap between the ethnical quarters.
 - The deterioration of the market specialization meaning through the appearance of inappropriate shops in some markets.
- b. The influence on the aspects that define clustering schemes_ the social changes, with the urban form transformations, influence the clustering schemes through its aspects which is determine by *Amos Rapoport* as the following:
 - *The influence in the private public domain:*
 - The public private domain in the Old City of Jerusalem organized according to the Islamic city patterns, this aspect deteriorated through the last decades by the followings:
 - The replacement of the original families with new families which are
 different in its origins, accordingly, the private public space which was
 defined by the court which connect many houses together, changed to be
 define by the private space inside each house.

- The vertical expansions in arbitrary way, which open the visual relations between some unites and the private spaces of the others in a way violate its private meaning.
- The horizontal expansions, which occupied some private spaces and change the space shape which was organized in a way to provide the hierarchy meaning between public and private.
- The addition of some townscape elements, such as the balconies, which interrupts the privacy of some units.
- One important aspect influence the meaning of privacy inside the Old City
 of Jerusalem is the security cameras which is added everywhere in the Old
 City.

• *The influence on the behavioral setting system:*

Jerusalem Old City includes different behavioral settings, it vary between religious, commercial, residential, to educational. These behavioral setting influenced by the current situations according to the following:

- The change in many building functions, which change the identity of all the surroundings.
- The horizontal expansion which changes the size and shape of the space, this has a direct influence in changing the space mechanism and then its behavioral setting.
- The new mixed groups which took place in the city and which gave a different perception to the space behavioral setting.
- The expansion of many residential areas toward the commercial, religious, and residential areas.

• *The influence in the house settlement system:*

The house settlement system in Jerusalem Old City, which influences the total urban fabric, changed from a court house system, depending in strong kinship relations, mechanizing in harmony with the other quarters, to apartment house system, contains mixed groups, with no direct kinship relations. This radical change in the house settlement system produced from:

- The change in the family structure from extended family to nuclear family.
- The replacement of the original families with new families that has weak kinship relations.
- The need for more spaces which resulted in occupation of the houses courts.

These set of changes in Jerusalem Old City urban fabric and social mechanism, caused a number of social problems which can be addressed as the following:

- Crime and drugs addictions_ the city contains different places with no social monitoring; lees place attachment, and no clear function. This is due to the loss of place homogeneity, privacy, clear behavioral sitting, and group social relation to each other and to the place.
- The no socialization_ the residents of the city loss the feeling of social security, with the absence of the social places in the city. This is due to the deterioration of the private domain meaning, and the homogeneity meaning.

• The over crowded situations_ which due to the occupations of many city spaces that change the private meaning and the house settlement meaning.

These social problems can be consider as a main reasons that influence the livability of the Old City, and which deteriorate its heritage value.

6.3 CONCLUSION

Jerusalem Old City in the last decades, witnessed a radical transformation in both social and urban form aspects. These transformations which are due to political, economical, and social factors change the city total appearance in a way can be understood through its influence on the city spaces, masses, and the total townscape elements. It is also recognized through the elements which are perceived by human being.

The changes which can be classified under many factors come from one side as a reaction for the people modern socio-cultural needs. These needs can be addressed according to the theory as the need to present the technical means, the new social patterns, and the need to overcome the ecological threads, it influenced both the sanitary services, the streets layouts, the buildings and the city open spaces. The absence of these expectances, push the people toward changing their surrounding, under the un-self conscious design theory to offer the people needs. This is due to many factors such as the social transformations, the economic threats, and the absence of any plans that could offer the modern life expectances in the Old City of Jerusalem, all these factors are generated from the influence of the political situations, in which the Israeli authorities aim to push the situations to this critical point in order to cause a miserable life conditions for the Palestinian residents in the Old City of Jerusalem. This

point serve the Israeli authorities to implement the *slums clearance* polices from one hand, from the other it assists in fragmentize the relation between the Old Center and it periphery to produce the *urban apartheid* polices.

The transformations in the city socio-cultural and urban form aspects influence the social meaning of the space, this influence change the way the city mechanized socially, in a way cause another change in the social fabric behavior.



Fig. 6-22: Building top views in Toledo Old City gives a harmony image (Busquets, 2000).

7 CHAPTER SEVEN: CONCLUSION &

RECOMMENDATIONS

7.1 RESEARCH FINDINGS

The discussion carried out in the research different parts illustrate the transformations in Jerusalem Old City urban form under the influence of the modern socio-cultural needs. This is in order to achieve the research aim of understanding this dilemma, which is affected by a set of factors between political, economical and social ones. These transformations, which manipulate *Lynch* urban elements that perceived by human being, took place through:

- a. The transformations in the urban spaces between and around the building on both the macro and the micro scale by the influence of the vertical and the horizontal expansions, the changes in the spaces surrounded activities, the added elements, and the new utilization of the space itself.
- The change in the city positive and negative forms through the addition on the existed masses.
- c. The influence of the new added townscape elements to the existed urban fabric.

The transformations in the Old City urban form took place in parallel with the changes in the social fabric of the city such as the change in the city families' structure, size, and social class. In order to understand these transformations from socio-cultural perspective, it's important to cite:

- The factors which cause the transformation in Jerusalem Old City urban form.
- The influence of the transformations in Jerusalem Old City urban form on the Physical and social fabric of the city.

There are many factors role in transforming the urban form in Jerusalem Old City, one of these factors is the modern socio- cultural needs. Modernity role in transforming the socio-cultural life, this influence the life expectances which has a reflection on the city urban form, in this orientation *Rogers* (1999) determine the central driver factors of urban change in general, by making a projection of these factors on the situations in Jerusalem Old City, it becomes evident that these transformations come as a reflection of:

- The absence of the modern technical means.
- The social transformation and the increasing of the life expectancies.
- The absence of the ecological dimension.

These three factors drive the residents toward transforming the city urban form; under the influence of *un-self conscious* design theory. However, this took place because of two aspects which are:

- A. The absence of sufficient plans that could recognize the city modern expectances, due to political situations.
- B. The change on the level of social awareness and community level of interests which is due to the replacement of the original communities, the loss of the central importance for the Old City, and the immigration of the national institutions, in addition to other social factors.

Both of these aspects are classified as domino effect of the political conditions which affected Jerusalem Old City in the course of the following:

A. The existed plan, which prepared by Israeli authorities in 1970 AD, based on Israeli political desires more than the social needs orders (see 4.4.2.5).

- B. The aggressive settling policy (Welfare, 2004), through the practiced policies by Jerusalem municipality against the Palestinian residents (see 4.4.2.5).
- C. The absence of a Palestinian authority which could guarantee the security of the Palestinian community.
- D. Jerusalem ID holders' problem which enforces a large number of the Palestinian to go back to Jerusalem municipality borders from West Bank areas, this cause the overcrowding in the Old City.

This aims to raise up the number of the Jews residents in Jerusalem, and to cause a miserable condition for the Palestinian residents, in order to give the excuse for the slums clearance polices on one hand, and for the urban apartheid policy on the other hand. However, these transformations influenced the city's social mechanism, which are determined by *Rapoport* as the following:

- a. The Change in the group clustering between homogenous to heterogynous zones in Jerusalem Old City.
- b. The influence on the aspects that define the clustering schemes, such as the private public domain, the behavioral setting system, and the house settlement system.

Under the influence of political considerations, the transformations on the city social mechanism, which is produced as discussed from the transformations in the city physical and social life, cause a set of social dilemmas which can be determine between the overcrowded conditions, the no socialization, the crime and drug addictions, the inadequate social services, and the shortage on the modern infrastructural systems.

These all points consider as main points toward influence the level of livability and the heritage value in Jerusalem Old City.

7.2 Suggestions & Recommendations

Understanding the process of transformations of Jerusalem Old City urban form relevant to the change in the socio-cultural perspective of the city, lead to many suggestions that can be carried out on different levels, and which could rise up the livability of the Old City from one hand, from the other hand it will assist in enriching the visions towards developing the planning policies, that could preserve the heritage value of the Old City, the suggestions can be addressed as the following:

• ON THE OFFICIAL LEVEL:

- To establish a special council consisted from different official and private institutions that aim at preparing and implementing a (Special Plan for the Historical Center of Jerusalem), this plan must consider all the Old City residents and conditions needs. the plan must be prepared under a general theme of rising the level of services in the Old City of Jerusalem to a comparable level of the modern neighborhoods, and in a compatible way with the heritage value of the Old City.
- Develop the visions towards determining the modern socio- cultural needs in the Old City of Jerusalem, and the way of integrating new systems into its existed heritage value, and develop a framework of development implementation for the Old City physical conditions through a *slow modification* rather than a *radical transformation*.

- Develop a framework in order to define a set of activities in the Old City
 of Jerusalem which will assist in transforming the city from commercialresidential area to multifunctional area; this is in turn to achieve the
 livability of the Old City spaces.
- To determine a general policy, which must guarantee the feeling of security through improving the conditions of the physical environment and its open spaces, improving the level of socialization, reducing the level of the social crowded conditions, and controlling the crime and drug addictions in the Old City.

• ON THE PUBLIC USERS LEVEL:

- To rise up the public awareness toward the importance of the cultural heritage sites on the city, and the way of dealing with these sites.
- To establish a framework in order to determine the public modern needs through examine their expectances by different ways.
- To study the ethnical fabric of the Old City in order to enhance the homogenous roots of the city.

• ON THE CITY PHYSICAL LEVEL:

• To develop the visions toward improving the physical conditions in the city through considering the modern technical means, the transformations in the city social fabric, and the modern needs for the ecological

dimensions. This will be carried out through three main factors which are:

- a. The buildings: to upgrade the physical conditions of the building, either the residential or the public, through considering the modern expectances this will be reflected through the building appearance and the building activities.
- b. The street layouts: improving the street conditions through two directions, the first will assist in offer pedestrian axes that will accommodate social sitting, and the other will deal with the vehicles accessibility either the services or the others without any interruptions between the two components.
- c. The sanitary conditions: to improve the public health conditions by constructing sufficient water supply and drainage systems, lighting the streets, and providing adequate hi-tech services to the houses.
- To develop a way of modifying and relocating the public buildings, through suggest a set of activities between passive public buildings and active public buildings.
- 7.2.1.1 To improve the quality and number of the open spaces inside the Old City as the lungs of the city.

These recommendations, which are cited above could be an inspiration for the decision makers in order to improve the quality of the planning policies, it will assist in achieving the quality of the places in Jerusalem Old City through the regulations that will enrich the upgrading process through create a balance between preserving the

heritage value of the city from one hand, and involved the social modern needs from the other hand. In this way the quality of the space will be a main reason to rise up the level of space livability.

According to the idea of understanding the transformations in the Old City urban form from modern socio-cultural perspective, and its sequences, and the suggestions which based on that, all these will push to conclude:

- The process of transforming the urban form in Jerusalem Old City relevant to the changes in the socio-cultural needs can be considered as one component that is influenced by the political situations of the city. The residents move forward transforming their physical environment in a radical and chaotic way, this is in order to create new facts on the ground that will lead to empty the city, in order to achieve political desires.
- Any upgrading process or cited policies for the Old City must consider the
 addressed points about the relations between form issues and socio-cultural
 modern needs as a pillar for the improvement of the life conditions in the Old
 City.

7.3 <u>RECOMMENDED TOPICS TO BE COVERED</u>

The study through its theoretical and practical chapters, open the visions toward different fields of study to be covered in another researches, this field can be cited under the following topics:

• FIRST TOPIC

A comparison study about the changes on urban form between the Arabic and the Jews quarters in the Old City of Jerusalem after the war of 1967,

based on the changes which took place in the elements which are perceived by the human being and which are determined by *Kevin Lynch* (1960) as the paths, the nodes, the landmarks, the edges, and the districts. This is in order to understand deeply the influence of the political conditions in transforming the physical form of the city.

• SECOND TOPIC

To study the way of integrating the modern socio- cultural needs with the existed urban form on the Old City, in a way that will preserve the heritage value of the city from one hand, and will accommodate these needs from the other. The modern needs must be between the technical means, and the ecological needs in respect to the social transformations. This topic consider as a farther step that could starts from the results of this study.

• THIRD TOPIC

A theoretical study about the influence of the integrated modern needs in the Old Cities urban fabric, on the meaning of the *Sense of Place* with its different parts which are included in its definition as "in general sense of place is the meaning attached to spatial setting by a person or a group" (Jorgensen & Stedman, 2001), the study shall cover topics such as, the place identity, the place dependence, and the place attachment.

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APPENDIXES:

Appendix (1) The Study Questionnaire of Jerusalem (Arabic).

Appendix (2) The Study Questionnaire of Toledo (Spanish & English).

APPENDIX 1: THE STUDY

QUESTIONNAIRE OD JERUSALEM [IN

ARABIC]

الأخوات والإخوة الكرام:

أرجو التكرم بتعبئة هذا النموذج الذي يمثل استبيان جهز كجزء من دراسة أكاديمية تعد في برنامج ماجستير هندسة التخطيط والتصميم العمراني في جامعة بير زيت, حول التحولات في الحياة الاجتماعية وما يرافقها من تغيير في النمط العمراني في البلدة القديمة في القدس. الدراسة تهدف الوصول إلى تصور أفضل للحياة الاجتماعية في البلدة القديمة من خلال تطوير الشكل العام للمدينة.

من المهم الإشارة إلى أن جميع المعلومات المعطى ستعامل بالسرية التامة و للأغراض العلمية فقط.

الباحث

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أ- أسئلة شخصية تعريفية:

0	أنثى□ ذكر	بنس	1. الج
- السطين	بة أخرى□ القدس خارج ف	ان الو لادة مدينة فلسطيني	2. مک
-	□ أكاديمي □ طالب	هنة عامل□ موظف غير ذلك□ تاجر	3. الم
- -	ة بصفة □ طالب غير ذلك□ تاجر	ت متو اجد في البلدة القديم ساكن□ موظف	4. أنن
		ئلة حول موضوع البحث ناء (العقار) الذي تتفاعل	
□ ھبة	ملكية□ استئجار	فة استخدام العقار هي:	5. ص
_ _	ع الإنشائي للمبنى بأنه □ جيد جدا على ذلك□ سيء	للممكن أن تصف الوضر متوسط جيد لا استطع الحكم	6. مز
_ _	ت جيد جدا	للممكن أن تصف الوضي متوسط□ جيد لا استطع الحكم	7. مز
_ _	□ جيد جدا	للممكن أن تصف وضع متوسط¤ جيد لا استطع الحكم	8. مز
	الوظيفي للمبنى بأنه حجيد جدا على ذلك= سيء	، الممكن أن تصف الأداء متوسط□ جيد لا استطع الحكم	9. مز

10. أرجو تحديد وجهة نظرك في تواجد نقاط القوة التالية في العقار الذي تتفاعل به

لا يوجد	نسبي	جدا		
			العلاقات الاجتماعية	1
			التكلفة	2
			الخدمات العامة	3
			القرب من مكان	4
			العمل	
			القرب من السوق	5
			الاعتبارات البيئية	6
			الاعتبارات الجمالية	7

11. أرجو تحديد وجهة نظرك في تواجد نقاط الضعف التالية في العقار الذي تتفاعل به

لا يوجد	نسبي	جدا		
			نقص المساحة	1
			الوضع الفيزيائي	2
			للمبنــــى ســــيء	
			(رطوبة الخ)	
			ارتفاع التكلفة	3
			نقص الفراغات	4
			الخارجية	

12. ما هو السبب الأساسي الذي يبقيك على علاقة مع المدينة السوق العقار الذي تتفاعل معه المدينة والثقافية للمدينة الحياة الاجتماعية في البلدة القديمة المدينة المدينة الحياة الاجتماعية في البلدة القديمة

• الحياة الاجتماعية في المدينة:

- 14. أي من هذه العوامل تزعج خصوصية حياتك الاجتماعية السياح السياح السكان من المجموعات العرقية الأخرى المحموعات العرقية الأخرى المحموعات العرقية الأخرى

الأشخاص من المناطق المحيطة بالبلدة القديمة -آخرون-

- 15. من وجهة نظرك الخاصة, أي من الأماكن التالية تحقق لك الاحتياجات المطلوبة للمعيشة و الأمن الاجتماعي المطلوب المحيطة بالبلدة القديمة الخارج الأسوار) البلدة القديمة المدن الاخرى المدن الاخرى من وجهة نظرك الخاصة, البلدة القديمة بحاجة إلى جهود أكثر في المجال التالي الستكمال أعمال الترميم الترميم الترميم الترميم التطوير الاجتماعي الخدمات العامة الحديثة عير ذلك التوعية الاجتماعية الاجتماع الدين الدين الدين الاجتماع الدين الدين الدين الاجتماع الدين الدين الاجتماع الدين الاجتماع الدين الدين الدين الدين الدين الدين الدين الدين الاجتماع الدين ال
- 17. من وجهة نظرك الخاصة, نسبة توفر متطلبات الحياة الاجتماعية الحديثة في البلدة القديمة هي
 - جيدة□ جيدة جدا سبئة □ متوسطة □
 - 18. في المستقبل أنت ترغب في البلدة القديمة البقاء في مكانك في البلدة القديمة الرحيل إلى الأماكن المحيطة بالبلدة القديمة الرحيل إلى مدينة أخرى المحيطة المدينة أخرى المحينة أخرى المح

في النهاية ارغب بتقديم الشكر الجزيل على الوقت الذي قدمتموه مؤكدا أن هذه الجهود ستكون سببا أساسيا في إثراء هذا البحث العلمي.

APPENDIX 2: THE STUDY

QUESTIONNAIRE OF TOLEDO [IN

SPANISH]

Estariamos muy agradecidos si contestara a este cuestionario, que forma parte de un estudio academico sobre la transformaci6n de la vida social y la estructura del casco antiguo de la ciudad.

El estudio se centra en dos casos concretos: las ciudades de Toledo y Jerusalen y el prop6sito de construir un puente de intercambio y conocimiento entre las diferentes civilizaciones, con la intenci6n de aumentar la calidad de los espacios urbanos del casco antiguo.

Se trata de llevar a cabo un estudio que contemple ademas de los aspectos formales de cualquier investigaci6n, las experiencias de los habitantes del casco antiguo de la ciudad de Toledo.

Todos los datos recogidos en este cuestionario son confidenciales y seran usados exclusivamente con fines academicos.

Investigador Yasid Abed Rego M6vil: 661 194869 e-mail: YELRIFAY@birzeit.edu

A. Datos sociodemoQn3ficos:

1. Genero:

Femenino

Masculino

2. Lugar de nacimiento

Toledo

Otra ciudad espanola

Fuera de Espana

3. Formacion

Titulado/a universitario/a

Bachillerato

Formacion profesional

Otros

4. Actividad en el casco antiguo

Estudiante

Residente

Empleado/a

Comerciante

Otros

- B. <u>Datos sobre regimen de vivienda (conteste solo si reside 0 trabaia en el casco antiquo)</u>
 - 1. Indique su regimen de vivienda

Alquiler

fropiedad

Caridad

Otras

2. Indique las condiciones estructurales (seguridad, estabilidad, etc)

de su vivienda

Muy buenas

Buenas

Medias

No sabel no contesta

3. Indique las condiciones esteticas de su vivienda

Muy buenas

Buel1as

Medias

No sa bel no contesta

4. Indique el estado de

vivienda

Muy bueno

Bueno

Medio

No sabe/ no contesta

5. Indique el grado de funcionalidad de su vivienda Muy

bueno

Bueno

Medio

No sa be/ no contesta

6. Indique su posici6n con respecto alas siguientes ventajas en relaci6n a su vivienda

Nada	Poco	M ucho	
			Relaciones sociales (vec
			comerciantes, etc)
			Gastos de la zona
			Servicios publicos
			Cercanfa al trabajo
			Cercanfa a supermercados
			Condiciones ambientales
			Consideraciones estetica

7. Indique su posici6n con respeto a los siguientes inconvenientes en relaci6n a su vivienda

Nada	Poco	Mucho	
			Superficie de la vivienda
			Malas condiciones ffsicas
			(humedad, etc.)
			Elevados gastos

8. CuEil es la raz6n que le mantiene vinculado/a al casco antiguo

Relaciones sociales

Residencia

Trabajo

Valor hist6rico

Otros

9. GComo clasificaria sus relaciones sociales con personas de otras

influencias etnicas?

Muy buenas

Buenas

Normal

Malas

No sabe/ no contesta

10. LCual de estos aspectos altera mas su vida social y privada?

Los/as turistas

Personas de otras etnias

Residentes de nuevas zonas urbanas

Otros

11. Desde su punto de vista, Gque zona es mas

segura? El centro historico

Las nuevas zonas urbanas

Otras ciudades

12. Desde su punto de vista, la ciudad necesita mejoras en:

Conservacion

Servicios publicos

Desarrollo economico

Educacion integral

Otros

13. En su futuro proximo le gustaria:

Quedarse en su lugar de residencia

Cambiar su residencia a nuevas zonas urbanizadas Cambiar

su residencia a otra ciudad