Envisioning the Future of Jerusalem

The International Peace and Cooperation Center

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This is the second volume in the IPCC Series on Strategic Planning for Jerusalem. The Olof Palme International Center provided funding for the research underlying the series. The research, conducted from 1998 through 2002, initially resulted in over thirty papers on Jerusalem issues. A selection of these papers made up the first volume in the series, The Jerusalem Urban Fabric: Demography, Institutions, and Infrastructure. The four studies offered in Envisioning the Future of Jerusalem is a further selection from the original thirty. A third volume, Jerusalem on the Map, is forthcoming in 2003.

The Friedrich Ebert Stiftung provided generous support for the publication of our research. Their help has been crucial in disseminating our research findings to a much wider audience than would have been otherwise possible.
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Preface

This volume is about the future of Jerusalem, the City and the District. It is a rare metropolis: over the ages, a complex interaction of geographical, historical, religious, cultural, political and spiritual factors have produced a unique city; and the causes and consequences of the current long-running conflict between Palestinians and Israelis adds to its singularity. Together, these forces require that Palestinians assert their legitimate interest in the city and lay out their perception of its future. That task brought together an IPCC team of Palestinian and international planners whose goal was to envision the future of Jerusalem. They employed the Strategic Action Structural Planning method, a multidimensional approach that analyzes Jerusalem's political, social, urban and economic processes from four perspectives: its past, its present, and its short term and long term futures.

The IPCC team looked at the city as a living museum, given its religious, historical, and cultural significance, and as a city in transition, a city which must empower itself to become a City of Peace, the Capital of the Future Palestinian State (with East Jerusalem as its capital and West Jerusalem as the capital of Israel), and a World Center.

The harsh reality of Jerusalem under the Israeli occupation—more and more military check points, hideous walls of separation, the withholding of infrastructure services and tax revenues, and the restrictive policies on Palestinian development which are applied every day—has not deterred us from thinking about the future of the city and envisioning what we Palestinians want Jerusalem to become. Nor has it deterred us from thinking about how the vision can be achieved, and that question inevitably led to another-How will Palestinians and Israelis live side-by-side?

Envisioning the Future of Jerusalem is the second volume in an IPCC Strategic Planning Series on the city. It presents a futuristic urban planning strategy and a conceptual model developed by the IPCC team.

The first chapter, "Vision 21-Ahlan Wa Sahlan" offers a broad, exciting Palestinian plan for the City of Jerusalem and its District. It is a vision which is the result of an intensive, scientific and creative process of strategic thinking involving many Palestinian stakeholders.
Map 5: Planned Land-Use of East Jerusalem
Chapter One

Ahlan Wa Sahlan

Vision 21

Planning Jerusalem for the 21st Century:
Balancing Ancient Images with the Challenges of Peace-making
Ahlan Wa Sahlan -Welcome- The Vision 21 Model

Sometime in the near future, around year 2020, Jerusalem will be characterized as follows:

- The City of Jerusalem will be the unique capital of two states: East Jerusalem, the Capital of Palestine, and West Jerusalem, the Capital of Israel. As an open and undivided city it will ensure equality and diversity. There will be a free flow of people, goods and values between East-and West Jerusalem. Citizens from both sides will have equal opportunities, while enjoying the social, cultural, religious, archaeological, ecological and topographical diversity in Jerusalem. There will be a situation of peaceful coexistence.

- The urban area will offer qualities that are people-friendly, socially just, ecologically sustainable, politically participatory, economically productive, culturally vibrant and aesthetically attractive. Jerusalem (see Map 1) will seek to achieve these qualities, which have their origin in the principles articulated in the United Nations Habitat II Declaration.

- The Old City will continue to be the "the crown jewel" that inspires people to create new objects for the benefit and appreciation of their societies. The Old City will be the greatest living museum on Earth. Its internal qualities will continue to be linked to the archaeological, architectural and religious wonders of the region.

- Jerusalem will have become part of the global network of world class cities, combining the strengths of its cultural and religious heritages with tourism, financial services and information technology - based economic activities. Jerusalem will have achieved a position as a center for knowledge development and exchange and for expertise in conflict resolution.

- A modern and aesthetically attractive physical infrastructure will be offered to the highly qualified citizens to generate a competitive performance level.

Starting Points

The Old City will be one of the main sources of inspiration to create new urban structures and elements for shaping the available space. New infrastructure in Jerusalem (as that area is defined by the Palestinian National Authority) will be prioritized to serve approximately one million Palestinian citizens. High on the list will be the development of 120,000 housing units of different quality levels to satisfy the needs of Palestinian citizens.

The diversity in built-up areas, living environments and neighborhoods will contribute to provide a unique cosmopolitan atmosphere that will attract international organizations and global companies to establish offices here. These investors will require modern business and information and communication facilities.

This atmosphere will also attract tourists from all over the world, who need appropriate recreational and health-tourism centers. Cultural, archaeological, architectural and religious itineraries along good roadways will increase the tourist's average length of stay. Organizers of international conferences and exhibitions will feel attracted by the special characteristics of the city. A modernized Al Quds Airport will serve the national and regional transportation network.

The Parliament, the Supreme Court, the residence of the Presi-
dent and several government offices will be established in Jerusalem, symbolizing its capital status and providing the people access to these centers and services.

The white and grey colored stone and concrete objects in the urban landscape will be counterbalanced by beautiful, rich green spaces to bring people in harmony with their surroundings. New landmarks will be created to mark the transition from one functional zone to another zone and from urban to green. Landmarks will also be created within the urban zones. Diversity in the height and the density of buildings and built-up areas will contribute to structured but harmonized visual lines that are rich in contrasts.

The specific and comparative advantages of each neighboring city, such as Ramallah, Nablus, Jericho, West-Jerusalem, Bethlehem and Hebron, will be exploited and accessible to all. The continuity of Palestinian areas, from east to west and from north to south, will be ensured as well as the social and physical mobility between them. The physical mobility will be facilitated by the existing road network that will have been improved and adjusted to function for Palestinian development. In addition a clean and sustainable mass rapid transport system will be developed to ensure efficient transportation of commuters. Recreational and sports facilities will complete a package for citizens seeking these social activities.

In the growth and evolution of Jerusalem, no Palestinian citizen will be moved or resettled by force. Through participatory approaches and ownership of developments, citizens will become part of a peaceful decision-making system.
Assumptions

Let us begin our discussion of the model, then, by sharing its assumptions.

- Vision 21 will be acceptable to all key stakeholders and will rest on an agreement for Jerusalem based on a peaceful co-existence between Palestine and Israel.
- There will be a decentralized system of local authorities within Jerusalem that ensures the effective participation of people in the management of their neighborhoods. A system for strategic urban management at a larger scale for the whole of Jerusalem will also be functioning. Its goal will be the wise management of the common interests of the area.
- The allocation of resources, such as water and energy, will not form any obstacle for developing the urban areas within Palestinian Jerusalem (i.e. the City and the District). In principle it is assumed that there will be a solution to balance demand and supply of water and energy for all people living in Jerusalem. Modern technologies will be available to deal with these scarce resources.

Limitations

If these admittedly positive assumptions were met, obstacles would nevertheless remain for the realization of Vision 21. Let us consider the most salient limitations that hinder the fulfillment of the vision. These limitations occur in the short and the long term:

- Vision 21, or any other Palestinian vision, may contradict existing Israeli plans, or may become inconsistent with elements of the final peace negotiations. The Israeli occupation and its negative impact (most especially the Israeli Settlements) could thwart the main aspects of this conceptual model.
- The unclear registration of land, together with the existing land-use and existing built-up areas, will dampen the speed of development.
- Financial resources are needed for the development of the area, and these mainly depend on the level of involvement of international support agencies and investors.
- The growing regional competition (e.g. Ramallah in the north, Amman in the East, and West Jerusalem and Tel Aviv in the West) will slow the development of Jerusalem.
- Jerusalem is confronted with a negative image: it is widely seen as a city with an unstable political atmosphere.
- Historical, archaeological and topographical limitations will arise when planning and constructing infrastructure.
- The private sector has many difficulties which detract from its potential viability.
- The existing weak institutional system could slow down the development process. Not the least of these is a higher education system capable of providing cadres of trained personnel.
- The preservation of the landscape may not be viable in the long term.

The actual impact of these limitations probably cannot be accurately gauged until a final status agreement is agreed and the development process begun. However, there is greater certainty regarding the economy that must fuel Vision 21.
Economic Engines

Three core economic engines will power development of the city and the district: tourism, services and clean industries. These sectors will ensure the inflow of capital and the generation of employment, not only for the economy of the city, but also for Jerusalem’s outlying district communities.

The tourism sector development will be based on providing professional and marketable "products", such as religious and spiritual theme parks, cultural festivals and events in the city. Jerusalem will be marketed as the largest living museum in the world; a place where "east" meets "west" in the cultural sense; recreation marketing will link the desert and dead sea environments; and all of these products will support the draw to Jerusalem as an international conferencing center. Tourism packages will offer Mecca-Medina-Jerusalem connections for large Islamic communities in the world. For Christian communities packages will be available to also visit Bethlehem and Rome. Archaeological packages will offer adventures to Jerusalem, Bethlehem, Petra, Luxor and the Pyramids in Giza.

The services sector will be developed in such a way that it will make intensive use of modern information and communication technologies. Transport services will be strengthened to make Jerusalem a distribution center in the region. Financial companies will provide the full range of services, from auditing, insurance policies and mortgages to investment loans and credits. The presence of the Palestinian Government centers, such as ministries and other agencies, will ensure the provision of typical public services. Jerusalem will become a place that provides high quality social and educational services.

Jerusalem will be an area with clean industries employing highly educated and skilled labor; the industries will be linked to the knowledge centers in the city and the immediate region. Industries based in the information technology field (e.g. software for programming, operating systems, analysis, communications) will be actively stimulated. Another clean, light industry - the production of sophisticated handicrafts - will provide the markets with high quality products.
Shop in The Old City
Utilization of Space

The existing urban development of Jerusalem can be characterized by two linear axes. One axis of development is arrayed along a North-South corridor running through Ramallah-Jerusalem-Bethlehem. The second, this in the East-West direction, connects Biddu and Ar Ram to Ras al A’mud and El ‘Eizariya.

Without any intervention of urban design and planning, these linear developments will continue. And when we "plug in" to these axes the projects envisioned earlier in our discussion of "Starting Points", a counter balance to urbanization, in the form of a "green space" can be created. This "green space" will not merely contain trees and plants, but areas of high ecological value.

To avoid further urban dispersion, and the massive and non-aesthetic merging of the built-up areas of Ramallah, Jerusalem and Bethlehem, and to maintain the different qualities given by the landscape, new spatial concepts have been studied. These are in addition to the classical concepts for urban development (e.g., the Linear City, the Concentric City, the Radial City, the Satellite City, and mixes of these concepts).

With those land use goals in mind, we derived from our research the following design principles for Jerusalem and its Palestinian District:

- The concept of the spatial structure of the Old City, specifically the image of the Gates.
- The creation of a counter balance between the natural setting and the human activities.
- The creation of new and specific international functions for Jerusalem to become one of the World Cities, that is a city of high value to the world, and one that maintains a well-balanced combination of financial services, tourist attractions and information-based activities - in the mode of such cities as Beirut, Paris, Amsterdam, London, and Cairo.
- The creation of new gates for the Jerusalem District, these on a grander district scale to mark the transition from urban to ecological areas and their respective spatial qualities and functions.

The Green Crescent Model

Using these classic models of urban development and the exemplar Old City, and principles we have just reviewed, the concept of the Green Crescent model emerged. This model for urban development contains a mix of the linear, the radial and the concentric models with the Old City as the central point. The new gates of the "Green Crescent Model" are radially positioned in the green zone. The main spatial elements of this model are:

- The Old City.
- The Small Crescent Zone, immediately around the Old City, will contain parks and plazas, and will not contain buildings. This will protect the shape of the Old City by not allowing it to merge with the new built-up areas around the walls. Also here a "full green circle" can be made by stopping construction of infrastructure on the western side, the area near Jaffa Gate and Road No. 1.
- The Central Zone (the oval-shaped dark purple colored zone on the schematic map (see Map 6)), is the zone of a densely populated area from north to south and partly from east to west of the Old City. It will have a high urban quality containing shopping areas, markets, business areas and residential areas.
- The Main Zone (the oval-shaped medium purple colored zone on the schematic map (see Map 6)), is the zone with a lesser density than the Central Zone.
- The East Zone (the oval-shaped light purple colored zone on the schematic map (see Map 6)), is the new zone with a low-density population and with a higher residential quality.
- Projects or spatial interventions which will destroy the characteristics of the Old City surroundings should be immediately stopped.

- Promotion of the application of guiding principles on the growth of Palestinian villages and Israeli Settlements as presented in this vision document. Immediate action is required to stop further expansion of Israeli settlements, such as Ma'ale Adummim, which will completely destroy the qualities of the eastern entrances to Jerusalem, and Givat Ze'ev which will obstruct the north-western entrances.

- Stop immediately Israeli plans that will destroy and waste valuable land and the landscape for the purpose of allowing further growth of a car-based society.

- Initiate micro-level development to create opportunities for the development of the Palestinian private sector.

- Initiate housing and infrastructure projects to satisfy the immediate needs of Palestinian citizens in Jerusalem.

- Mobilize international support for the upgrading the existing education and knowledge sector in Jerusalem, and to establish new vocational training centers to support the tourism, services and the industrial sectors.

- Make agreements on a professional basis with Israeli non-governmental organizations and professional groups on principles for urban planning and management, economic strategies and a system of civil society.
Chapter Two

Architectural Image Quality Study of Jerusalem

Amin Amin
Preface

Uniqueness is one of the most important characteristics of Jerusalem, and it is experienced in every aspect of the city's life. This uniqueness explains why, throughout its long history, Jerusalem has been fought over so many times, and why it is still at the center of an ongoing conflict, not only in the Middle East, but also in the world as a whole. This study has been carried out as a special assignment for the International Peace and Cooperation Center (IPCC) within the framework of Jerusalem Strategic Planning Series. Its goal is to develop a set of strategic images of Jerusalem that can serve as guiding principles for the protection of culturally important historic areas, and to outline a set of aesthetic values that can be applied creatively to any development project.

This is a challenging assignment especially for a city so rich in history as Jerusalem. This history can be read in the architecture and urban heritage of the city, and in excavations of buildings from earlier periods. Our building projects today will shape the perception of the city for coming generations, and sensitivity and care are needed if we are to preserve Jerusalem's rich heritage for the future.

This study will succeed if it provides inspiration for architects, planners, and decision-makers involved in shaping, preserving and protecting this deeply loved city.
1. Introduction

Jerusalem, one of the oldest cities in the world with a history of more than 4000 years, is at the heart of three major religions: it is also a place where the West meets the East. Jerusalem cannot be seen as a city for any one group, whether Palestinian, Israeli, Arab, Jew, Christian or Muslim: it is a city for all of them, and for the whole human race.

Jerusalem is a very precious part of our human heritage which has to be preserved, protected, and developed wisely to enable future generations to enjoy its uniqueness. It is a pressing responsibility to allow this city to preserve its unique heritage during this period when it also has to grow.

Existing Dangers

Over the last 4000 years Jerusalem has been both home and battleground to different cultures, religions and civilizations: war, devastation and political conflict are all well-known in this city.

The present battle in Jerusalem is with time: it is a harsh battle and has been raging for the last 50 years. The battle will have disastrous consequences if no immediate action is taken to the interests of the city itself. Almost every aspect of life in Jerusalem has been subject to dramatic changes on account of the painful conflict between Palestinians and Israelis, because the city itself is one of the main issues of dispute, and also one of its principal victims. The Israeli annexation policy in Jerusalem is the best illustration for many of the processes of change that are afoot in the city.

On the Israeli side the main ideological objective has been to secure Jerusalem (both East and West) as the undivided capital of Israel. The cost of this objective has been continuously the interests of the Palestinian population on the one hand, and those of the city and its future development on the other. The Israeli strategy has been to create new facts on the ground in order to change the demography of the city it has promoted policies to increase the numbers of Israelis in the city and to minimize the size of the Palestinian population.

Over the last 30 years the implementation of these policies has been demonstrated in the large-scale building of new Jewish settlements, especially in the eastern parts of the city. The Jewish settlers are given priority in the allocation of urban services, while the needs of the Palestinian population receive little attention. In such a political situation, the urban and architectural claims of the city itself receive scant consideration.

The Palestinian neighborhoods, for example ArRam, Al 'Eizariya, Abu Dis and Al Dahlah, are growing in an unplanned way, giving rise to chaotic architectural images, whereas the new Israeli settlements, for example in Ramot, French Hill, Pisgat Ze'ev and Neve Yalaqov are in a style much too uniform. The development of these settlements takes precedence over any other zoning or planning considerations.

Today we have reached a situation in Jerusalem, where an immediate action is crucial for the city's continuity. Every new day brings new dangers with it. The situation is so deteriorated that unless there is immediate intervention we can lose the city in the coming decades. This is why strategic planning is a fundamental tool in providing Jerusalem with new chances to survive. Urban planning and architecture image policies are essential components for such development.

Cultural and Religious Heritage

The cultural and religious heritage of Jerusalem will always be its primary attribute, and it should be used to create more opportunities for the city. However, this heritage alone provides only limited momentum for the development of the city. It is a key component that can only function if other elements are present. It is the responsibility of the city planners to prepare Jerusalem to develop in the third millennium as a World City. How can this be done? What are the elements that are needed for such development? This study is an attempt to
answer these questions and to explore and explain the elements necessary for aesthetically sound development.

**Jerusalem, City of Contrast**

Contrast is the main characteristic that emerged from intensive fieldwork conducted in Jerusalem. This city is one of marked contrasts, many of which are unique. In every small corner of the city contrast and diversity can be experienced.

The rich cultural heritage, the unique topography of the area, and the existing political situation combine to produce the variety of images and the high level of contrast experienced by all who visit or live in Jerusalem. Contrast can be found in many different forms, for example between old and new, Palestinian and Israeli, desert and mountain, urban and rural, oriental and western, and so on.

How should we evaluate and appraise this richness of contrast in Jerusalem? What is the relationship between contrast as a theme and this study of image quality? These were the main questions posed at the beginning of this study.

The first starting point was the classification of contrast into two types, positive and negative. Positive contrast is accepted and promoted; meanwhile negative contrast is rejected and avoided. Positive contrast is harmonious, continuous and organized. It is the model of rich diversity that serves the harmony, continuity and organization of the city images. Within the framework of these forms of positive contrast that is based on rich diversity, the city's architectural images, urban functions and institutions can gain fresh impulses providing new opportunities for the city development and continuity.

**Jerusalem as One City**

The second starting point was to appraise Jerusalem objectively as a city, putting out of mind as far as possible the political context. While this may arguably be seen as an impossible feat, it serves to highlight the unfairness of allowing the political context alone to determine the future of the city.

Jerusalem has one of the longest and most interesting histories of any city in the world. Political conflicts of the past and present show how different interest groups develop their own claims to the truth, to serve their particular interests. One event may be recorded in at least three different versions, each of which may contradict the other versions. In the case of well-known places, the situation can become even more interesting. For example the Bab el Rahmeh or the Gate of Mercy near the Haram Ash-Sharif is referred to as the Gate to Judgement Day in Judaism, Christianity and Islam, but the details are different. This serves to show that rather than becoming embroiled in never-ending argument about historical claims, it is essential, if the interests of the city itself are to be met, for planners to look at Jerusalem as an undivided whole and to make that a starting point for development.

**Continuity**

Jerusalem is a city of the past and present, and of the future. In all the decisions about the development of the city, a respect for, and an understanding of the past and the present are needed in order to anticipate and prepare for the future. Jerusalem uniqueness demands all efforts to guarantee the city continuity in the future.

**Jerusalem as a Bridge**

A consequence of the current political conflict is that there is neither cooperation nor coordination between the two main population groups in Jerusalem. The Israelis exercise their power to its maximum extent to serve their own political agenda. This situation has to change immediately to enable both sides to work towards a common goal: an undivided city. Any plan which involves the division of Jerusalem can only be destructive.

Jerusalem is the only city where Palestinians and Israelis live be-
side each other, and as such it can become the bridge of cooperation and coordination between the two nations. The Israeli recognition of the Palestinian legitimate rights in Jerusalem and granting the Palestinian population their equal rights comparable to those enjoyed by the Israeli population is the first step towards achieving a cooperative model.

Once the two sides can work as partners, the interests of the city itself can be served. Cooperation and coordination can be undertaken in a wide variety of sectors including housing, infrastructure, services, the environment, human resources, higher education, tourism, information technology, and most importantly in terms of this study, urban and architectural policies.

**Infrastructure**

In this study special attention has been given to the impact of the developing infrastructure in the city. The cultural and religious heritage of the city attracts large numbers of people. This leads to increased demand on the service sector, and a need for easy accessibility to all parts of the city by large numbers of people. In response to these needs, major infrastructure projects such as the building of Road Number One are changing the character of the city and the quality of life within its boundaries. While such projects are inevitable if Jerusalem is to develop as a modern city, the task of the planner is to ensure that such development does not harm the character of the city. Roads, for example, should follow the natural contours of the landscape rather than mutilating and destroying it.

**Rehabilitation**

A great deal of work needs to be done to rehabilitate the architectural and urban features of Jerusalem's cultural heritage. Immediate action is needed to rescue and rehabilitate what is in a state of deterioration and decay. It is important to emphasize that rehabilitation is to be understood as a comprehensive term: it is not only the renovation of old buildings, but the rehabilitation of institutions, human resources, infrastructure, and ultimately of the city itself.

**The Crescent Urban Model**

After a review of several urban models, a new urban model has been developed for the future Jerusalem. We have designated the new model as **The Crescent Urban Model**. This model has seven city gates and is based on the Old City urban model.

**Finally**

This research into architectural image quality is to prepare Jerusalem for the next millennium. Its source of inspiration is the cultural and religious heritage of the city, and its goal is the development of a modern city with a high quality of life. Many features of the city's cultural heritage need to be rehabilitated, and integrated by means of sensitive development into a modern city.

The Old City is the core of the city's cultural heritage and provides both the historical catalyst and the main source of inspiration for new development. In this study images from the Old City have been used alongside modern images from all over the world creating a new set of reference images for the future development of the city architectural image model.

The principal guideline in this study has been the search for more harmonious, continuous and organized contrasts in the architecture images and urban textures of Jerusalem. It is hoped that the aesthetic values and dimensions explored in this study will help to determine the contours of Jerusalem's architectural and urban images in the third millennium.
2. Methodology

This architectural image quality study will be a tool for strategic planning; thus there was a need to look at and understand the city of Jerusalem in its general and wider context, rather than in a segmented and fragmented way. Finding the right method for evaluating the current image qualities and deriving from that relevant guidelines for the future was not easy. With its rich cultural heritage and the place it occupies in the hearts of millions of people, Jerusalem is unique and therefore the subject of image quality is very sensitive.

The search was made for objective scientific criteria with which to assess existing architectural image qualities and at the same time serve as bases for the development of future images. This search was based on the premise that image quality is neither a subjective issue nor a matter of taste, but that it should be possible to find a method that can be systematized.

The methodology adopted arose from the premise that the criteria should be based on the unique and specific features of Jerusalem. Criteria used elsewhere would not be fully applicable in Jerusalem which requires its own unique image assessment criteria. This approach entailed the careful study of the city to understand its unique features.

Intensive fieldwork was carried out to record the city’s different images. On the basis of this work the following were identified: eight themes, five basic functional sectors, and five basic image elements. Together these features play a crucial role in the construction of the total image model of Jerusalem.

The eight image themes are: contrast, harmony, continuity, rehabilitation, skyline, topography, infrastructure and green space. The five basic functional sectors are: commercial areas, low-cost housing, high-quality housing, industrial areas, and open space. The five image elements are the Old City walls, the golden colour of the Dome of the Rock, olive trees, natural stone, and lastly, arches.

Having categorized the images in this way, three possible approaches were defined:

1. Analyzing the city on the basis of the image themes outlined above, describing the strengths and weaknesses evident in each theme.
2. Dividing Jerusalem into zones, and describing the image qualities in each of them.
3. Analyzing the city on the basis of both the image themes and the functional sectors outlined above, and describing strengths and weaknesses in both.

The first option was chosen as the most suitable approach within the overall framework of strategic planning. This choice was made despite the constraints of time and resources of this study.
3. Strategic Image Quality and Contrast

Again, contrast is the main image characteristic of Jerusalem and it can be seen in almost every tiny corner of the city: Jerusalem can therefore be described as "the City of Contrasts".

What does "contrast" mean? "To compare in respect to the difference between things having comparable natures", or "the comparison of similar objects to set off their dissimilar qualities" - these are perhaps the most common definitions.

However, contrast in architectural images provides a model of diversity. Diversity is adventure and as human beings we search daily for adventures in our visual contact with our surroundings. If diversity is low then our visual surroundings are uniform. An architectural and urban context with such low diversity turns into an uninteresting visual experience that is no longer enjoyable.

The strong contrasts evident in present-day Jerusalem demonstrate the potential of the city to develop within the framework of a very rich architectural image model. As a strategy it was therefore decided to encourage and promote a model of Jerusalem based on architectural image contrast.

Contrast as a model of diversity can be sub-divided into positive and negative contrast. The former has three main features: it is continuous, harmonious and organized. Conversely, negative contrast is non-continuous, discordant, and disorganized.

As we have stated above, a basic theme of this study is Jerusalem as a city of contrast. In the following schemes (1, 2, 3) this concept is elaborated so that it can be translated into practice. Each theme will be amply illustrated by photographs.

For the translation into practice of this model, five broad themes have been chosen: topography, skyline, rehabilitation, infrastructure and green space.

In order to clarify the explanation illustrations will be given of the positive images that should be promoted in the future, and of the negative images that should be rejected. These latter should, of course, be changed and improved wherever possible.

Jerusalem's rich potential should be utilized in a systematic way. Positive contrast has to be encouraged and promoted in order for the city to maintain its image diversity. The high levels of harmony, continuity and organization in the diverse images that are generated will guarantee that every step in Jerusalem will be a new adventure.
Scheme 1: Jerusalem City of contrast

Jerusalem City of Contrast
Why?

Rich cultural heritage, in the past and present the Center of Religions

High level of Contrast in Architectural and Urban images

Present political conflict

Topography & Landscape, location on 7 hills in the Center of Palestine

What should be our Attitude to Contrast?

Encourage/ Promote

Discourage/ Prevent

Diversity

Uniformity

See scheme 2
Scheme 2: Translation into practice (a)

Diversity

Positive Contrast

Continuous

Organized

Harmonious

Translation into Practice of the Chosen model

See scheme 3

Negative Contrast

Non-continuous

Disorganized

Discordant

Architectural & Urban Images that takes no account of:

- Cultural Heritage
- Topography
- Surroundings
- The Interests of Jerusalem as a City

Rejected Model
Scheme 3: Translation into practice (b)

Translation into Practice of the Model to be Promoted

Architectural Image Sectors
- Commercial Areas
- High quality housing
- Low-Cost housing
- Industrial Areas
- Open Spaces

Architectural Image Themes
- Focus of this Study
  - Topography
  - Rehabilitation
  - Skyline
  - Green Space
  - Infrastructure

Architectural Image Elements
- For next phase
  - Old City Walls
  - Golden Dome
  - Olive Trees
  - Natural Stone
  - Arches

Used for the development of the Crescent Urban Model (Chosen model)
Why Select Contrast as a Theme for Jerusalem?

Contrast is one of the main characteristics of almost all images in Jerusalem. This high level of diversity is immediately apparent and is manifested in different forms.

Contrast can be seen between old and new, Palestinian and Israeli, urban and rural, desert and green, open space and developed, light and dark, Muslim and Christian and Jewish, and Eastern and Western.

Types of Contrast

The following examples illustrate images of different forms of contrast in Jerusalem. Each image is unfolding a certain contrast quality in the city.

Image 5 Jerusalem, City of Contrast

Image 6 Old and New

Image 7 Religious Contrast, Muslim and Christian (Haram Al Sharief)
3.1. Positive Contrast

In the analysis of the architectural and urban images in Jerusalem, three main elements were selected to serve as criteria to evaluate the quality of contrast in the city.

Continuity, harmony and organization are the qualities that determine whether contrasting images are positive or negative.

These three qualities enable us to relate as individuals to the images around us. This sense of affinity is experienced when our surroundings evoke a feeling of identity with our cultural heritage, or, more generally, an appreciation of what we see.

We do not need to be architects or planners to be able to appreciate the quality of images around us.

We constantly seek to identify with our surroundings: to find this affinity there has to be continuity and harmony in the images we perceive. These elements will only be experienced if we find some degree of relation and organization between the different images.

If we fail to find them we will feel alienated from our surroundings. Conversely, when we find relation and organization, we enjoy the images we perceive and feel secure and at peace in our surroundings.

This means that positive contrast provides us with the adventure (tension moments) we continually seek. Paradoxically, it also provides us the enjoyable peace surroundings that we need as human beings, bringing us the desired inner peace in our daily life.

On the contrary if the features of continuity, harmony and organization are absent, the result will be chaotic images which function separately from each other in a disorganized way. It is not possible for us to identify with such surroundings.

In a city such surroundings create in us a feeling of alienation, and we feel strangers in our own world.

The contrasts in Jerusalem are beneficial to the city when it can be identified as a model of organized diversity; conversely, they are detrimental when they are disorganized and chaotic.

Organized contrast has to be promoted in the architectural images of Jerusalem. The new model for the city should promote both harmony and continuity with the city's existing images, and must have deep roots in the city's architectural and urban heritage. All individuals, whether inhabitants of Palestine or visitors, should be able to find affinities with the new model based on positive contrast. In the long run this model will become an important tool for a fascinatingly diverse visual adventure.
Positive Contrast: Examples

Image 18 Continuity of Paths in the Old City

Image 20 Contrast of Forms

Image 19 Old and New, At Tellcieh

Image 21 Old and New Building Structures, Old City

Image 22 Palestinian and Israeli

Image 23 Oriental and Western
3.1.2. Continuous Contrast

The standard definition of continuity is an "uninterrupted connection (succession), or uninterrupted duration".

Cities with deep historic roots have been able to acquire a rich architectural and urban heritage over thousands of years. During this long process different images have been generated at different times by different generations in this evolving process.

In these cities it is impossible to ignore the three time components of the past, present and future, and the dynamic generated by them. This dynamic is the result of the continuous interplay of many factors and elements that affect all aspects of life in these cities, including the architectural and urban images that are generated.

In such cities, therefore, intensive research and analysis is necessary to determine whether the dynamic is positive or negative. The positive needs to be preserved and promoted, whereas the negative needs to be halted and changed.

Such an approach demands an understanding of the past and present in order to be able to plan for the future.

.... and Jerusalem?

How does this approach apply to Jerusalem? Jerusalem is undoubtedly one of these cities. It is not possible to deny the city's cultural heritage nor the rich contrast that has evolved over the centuries. The city's own dynamic is ancient and a witness to the generations which pass through in their short life span.

The current dynamic in Jerusalem is negative and working against the interests of the city. If the images of the Old City are compared with the new images generated over the past twenty years, especially in Ar Ram, Beit Hanina, El Azaryyah, El Isawiya and Silwan, the difference between the old and new dynamic is immediately apparent. Development currently in progress shows little awareness or understanding of the cultural heritage of the city, and it is very difficult for individuals to relate to their surroundings in these new neighborhoods.

Continuity as a theme has therefore been chosen as a theme for new development in Jerusalem today. A strong relationship has to be achieved between what already exists and what is new. The precise nature of how to relate the past to the present and the future will be entrusted to the creativity of architects and planners, as long as the concept of the contrast continuity is foremost in their plans for new development. The Old City is a treasure of rich images where continuity is maintained. Within the Old City we feel relaxed and secure in surroundings which are diverse but integrated into a whole. Outside the Old City, on the other hand, the picture is completely different.

It is very difficult to find any sense of continuity between Shu'fat and nearby Anata, between Beit Hanina and the new development in Ar Ram, or even more obviously between the Palestinian neighborhoods and the Jewish settlements. Jerusalem is becoming a series of fragmented architectural images where the contrast is strong but the internal dynamic that links and connects is entirely missing. In the newer neighborhoods it is almost impossible to recognize the sense of continuity that is so evident in the Old City.
A sense of continuity is felt by Anata, a new development, previously being lands and the becoming of internal images entirely it is also a sense of the Old City.
3.1.3. Organized Contrast

Image 33 Organized Contrast: Open and Green Space, Skyline, Damascus Gate

Image 34 Organized Contrast: Different Building Elements, Al Mustrara

Image 35 Organized Contrast: Skyline, Colors, Old and New
3.2. Negative Contrast

Image 36 Negative Contrast: New versus Old, Ras Al 'Amoed

Image 37 Disorganized Contrast: It is Difficult to Identify any Growth Pattern, Mount Scopus

Image 38 Negative Contrast: Uniformity- the Same Square Boxes, Dahiyyat al Bareed

Image 39 Negative Contrast: Uniformity- Building Boxes, Al 'Isawiya,
Image 40 Negative Contrast: New Buildings versus Old, Jewish Quarter Old City

Image 41 Negative Contrast: Open Landscape and Building Boxes, Al Shayyah

Image 42 Negative Contrast: Car Salvage Yard, Middle of a Housing Area, Wadi Al Joz
3.2.1. Discordant Contrast

Image 43 Discordant Contrast: New versus Old, Bab Al Khallil

Image 45 Discordant Contrast: New versus Old versus Landscape, Ar Ram

Image 44 Discordant Contrast: Building and Roofs, Wadi Al Joz

Image 46 Discordant Contrast: Architectural Forms versus Open Space, Sheikh Jarrah
3.2.3. Non-Continuous Contrast

Image 47 Discontinuity of Skyline and New versus Old, Mount of Olives

Image 48 Discontinuity of Architectural Forms, Bab Al Khail

Image 49 Discontinuity at the Old City's Most Important Entrance, Damascus Gate

Image 50 Discontinuous Contrast: Complete Disregard of the Landscape, Al Shayyah
3.2.3. Disorganized Contrast

Image 51 Disorganized Contrast: Many Mixed Elements with Slight Integration, Jabal Al Makkabber

Image 52 Chaotic Urban Forms, Abu Dis

Image 53 Disorganized Contrast: New versus Old

Image 54 Chaotic Urban Patterns
3.3.4 Contrast: International Examples

Image 55 Positive Contrast: Old versus New in Architectural Forms, the Louvre, Paris

Image 57 Negative Contrast: Old versus New in Form and Material, Rokin, Amsterdam

Image 56 Positive Contrast: Architectural Form, Material and Function, Port Vell, Barcelona

Image 58 Negative Contrast: Architectural Forms, Material and Expression, Thames, London
4. Translation into Five Strategic Themes

How can we approach the city architecture and urban image model in a comprehensive way? This was one of the most crucial questions to be addressed. It was essential to find a method that enables the city to be viewed as a whole rather than as a random collection of separate fragments. The method presented here outlines five separate themes that enable us to look at the city as a whole. These themes are also crucial as strategic guidelines for the city future development.

These five themes are:

- Topography and Landscape
- Rehabilitation
- Skyline
- Green Space
- Infrastructure

These themes will be explored through an examination of different images. First the theme itself will be defined, and then the impact of these themes on the architectural and urban image qualities of Jerusalem will be illustrated. The images will be classified into two main categories: positive and negative.

At the conclusion of each section, the positive and negative categories will be illustrated by international examples. It is hoped that the positive examples of development will point the way for Jerusalem and the negative examples demonstrate what should be avoided. These analyses will form the basis of the later conclusions and recommendations.

It is important to emphasize that the themes are discussed at the macro level. During the course of research it became obvious that scale plays an important role in determining the quality of architectural images. Thus it was found that a panoramic view yielded positive images, but a closer inspection of details gave a negative impression.
4.1. Topography and Landscape

Landscape can be defined as a picture representing a view of inland scenery or the art of depicting such scenery.

Topography and landscape are physical factors that have always played an essential role in urban and architectural development. Historically, many examples can be found of respect for these elements in the design and construction of buildings, towns and cities, and this respect resulted in the integration of architecture with nature. This process was taken further for example by the famous Spanish architect, Gaudi, for whom nature was the main source of inspiration in the development and design of architectural images.

Conversely, other architects and planners have ignored topography and landscape, and the resulting construction has appeared aggressive and antipathetic in relation to its surroundings. In these cases, the constructed element is of paramount importance, and it is erected without consideration for the surroundings. This approach is surely narrow-minded and egocentric, with the focus of attention solely on the architect's or planner's designs. The necessary relation to nature and built-up surroundings is lost, and the city image model is marred.

... and Jerusalem?

Topography has played an important role in the development of Jerusalem throughout its history. Situated in the center of Palestine the city developed in importance as a meeting point of trade routes in the region. Its setting on seven hills provided the city with natural defenses, and the valleys provided a variety of agricultural produce. These natural features of the city have played and important role in the past, and are still important today. The unique topography and landscape can provide an unlimited source of inspiration for planners and architects and might serve as tools for beautification and rich diversity.

The topography and landscape have their own unique characteristics, images and features. It is these features that have to be respected by architects and planners, and when planning any development these unique surroundings have to be the primary consideration.

It is interesting to compare architecture and urban images in Jerusalem in the past with that of today. While our predecessors respected the topography and landscape in their building activities, these important features have been almost completely ignored over the past fifty years.

In the following examples the obvious differences between what was built in the past and present-day are illustrated. There are many examples of architectural and urban images that are integrated with its surroundings, and are in harmony with nature. Most of these objects date from the past.

Meanwhile during the past fifty years most of the new architecture and urban images in Ar Ram, Beit Hanina, Abu Dis, Shu'fat and Beit Safafa were undertaken with little regard to landscape and topography. Indeed, the overriding impression is often one of aggression and violation of nature.

In the future great attention should be paid to topography and landscape to ensure that Jerusalem develops its full potential both architecturally and as a city. Natural elements should be seen as a source of inspiration for architects and planners, rather than as obstacles to construction. Integrating nature in the new architecture and urban activities in Jerusalem can only provide the city with high quality images that increase the city's beauty.
Topography and Landscape: Positive Examples:

Image 60 The Role of Topography in the Development of Jerusalem

Image 61 Monastery: Integration with Landscape and Topography
Image 65 The Old City Built on a Plateau on one of Jerusalem's Seven Hills

Image 66 Jerusalem's Unique Landscape, Western Mountains

Image 67 Jerusalem's Unique Topography, Jabal Al Mukkabber
Architectural Image Quality Study of Jerusalem

Topography and Landscape: Negative Examples

Image 68 Construction against Topography, Boxes System, Al 'Isawiya

Image 69 Construction against Topography, Boxes System, Ras al Amud

Image 70 Construction against Topography, Boxes System, Jabal Al Mukkabber

Image 71 Construction against Topography, Boxes System, As Sawahira ash Sharqiya
Topography and Landscape: International and Regional Positive Examples

Image 72 Building on Terraces, Integration with Landscape, Stockholm, Sweden

Topography and Landscape: Regional Negative Examples

Fig 74 New Building in Ramallah, constructed without considering the Unique Topography

Image 73 Building Terraced for Sea View, Tel Aviv

Fig 75 New Building in Ramallah, Constructed without Considering the Unique Topography
4.2. Rehabilitation

Definition: "To rehabilitate is to present or use again in another form without substantial change but with improvement." Rehabilitation is the most important tool for preserving architectural and urban heritage. Our concept of rehabilitation should be comprehensive: it should include not only the restoration of old buildings and neighborhoods, but their restructuring to suit contemporary functions and needs.

The demolition of old buildings and neighborhoods to make room for new ones is no solution for today's needs and requirements. The continuous destruction of our architectural and urban heritage is disastrous especially when the historical buildings and urban forms being destroyed are an important facet of our cultural identity in the present. In a wider context, therefore, the protection and preservation of this heritage is a responsibility for all humankind.

Not only is there the expertise available to preserve old buildings and neighborhoods, but there is also the technology to adapt these historical architecture and urban forms to serve modern needs. A creative approach towards the preservation of our architectural and urban heritage often means that buildings and neighborhoods can be adapted to serve modern functions, while their wider cultural significance is retained. Thus, in the long term, this rehabilitation and preservation enhances the urban context.

It is very important that the physical rehabilitation of buildings and neighborhoods occurs in parallel with their social and institutional rehabilitation. There is a need for change in the current attitude of Palestinians towards their architectural and urban heritage: the importance of this heritage has to be recognized alongside the rich possibilities inherent in its rehabilitation, if there is a concurrent broadening of the social and institutional framework for this heritage.

... and Jerusalem?

With a history of 4000 years, the city's cultural and religious heritage is its most important characteristic, and the heritage has become a major feature of the cultural and political identity of the Palestinian people.

The Palestinian people affirm Jerusalem as the capital of their future independent state. A counter claim is made by the Israelis who argue that Jerusalem is their undivided capital. These rival claims should not obscure the importance for both sides, and for the international community, of the preservation and rehabilitation of the architecture and urban heritage of Jerusalem. This unique heritage is a precious treasure for all humankind.

The rich heritage of Jerusalem cannot provide the city with sufficient momentum for its future development. It will only be through comprehensive rehabilitation that maximum utilization of the heritage will be achieved. Within such a context of rehabilitation, the city will be able to develop and will have more opportunities for survival.

Jerusalem has to be prepared for the third millennium: it should be given the opportunity to preserve its past and at the same time to develop for the future as a World City. To this end rehabilitation should be comprehensive, and integrated between both the micro level of individual buildings and neighborhoods, and the macro level of the city as a whole.

If it is possible to use an historic building for contemporary purposes, then it is also possible to use the architectural images of the Old City as our main source of inspiration for today's expanded city. The same approach can be taken towards the use of urban space, with historic urban models furnishing the ideas for today.

The Old City

In such a framework, the Old City has a very special role. It is the heart of Jerusalem's architectural and urban heritage: any attempt to create new images in modern Jerusalem will have to draw their sources of inspiration from the Old City. This does not entail a dogmatic copying of architectural elements and images, but rather the using of the Old City as a source of creative inspiration.
Rehabilitation: Positive Examples

Image 76 Richness of Historical Buildings: Preservation of the Dome of the Rock Mosque

Image 77 Positive Rehabilitation: the Courtyard of the American Colony Hotel

Image 78 Positive Rehabilitation: the Jewish Quarter in the Old City
Image 79 Turning Damascus Gate into One of the Busiest Open Spaces in Jerusalem

Image 80 Positive Rehabilitation: the Romans Cardo in the Old City

Image 81 Respect for Heritage: a Splendid and Busy Old City Souq (Market)
Rehabilitation: Negative Examples

Image 82 Shape and Material of new Roof Uns suited to Original, the Old City

Image 83 New Extension: Aggressive Contrast with Original, Ath Thuri

Image 84 Demolition of Historic Building, Salah Eddin Street
Rehabilitation: Positive International Examples

Image 85 Rehabilitation of Old Buildings to meet New Functions, Kalve Towers, Amsterdam

Image 86 New Space Integrated into Original, Enkhuizen Historical Museum, The Netherlands

Rehabilitation: Negative International Examples

Image 87 Splendid Old versus Inappropriate New, Main Entrance of Gamla Stan, Stockholm

Image 88 Complete Disregard of Neighboring Building, Antwerpen, Belgium
4.3. Skyline

Definition: "Skyline is the apparent juncture of earth and sky or an outline against the background of the sky."

One of essential elements in a city image model is the skyline of the city horizon. It is one of the important features that combine all different images of a city in one total image model. A skyline study provides the opportunity to analyze the image qualities of the city on a macro level, while disregarding the micro details to a certain degree.

Our idea of skyline is often associated with high-rise buildings, especially those of Manhattan or Tokyo. If skyline is considered in a more catholic way, it will include low-rise as well as high-rise buildings, green areas and other open spaces, as well as elements of infrastructure. As such it includes all the architecture and urban features that make up a city image model in any part of the world. Therefore any serious architectural image quality study should include an analysis of skyline as a major topic.

The question arises as to how skyline quality is to be analyzed. If a similar approach is taken to previous topics then skyline can be categorized as either positive or negative. What are the characteristics that produce a positive skyline that would empower the city image model and those that produce a negative skyline that result in weakening this model?

A skyline that emphasizes the features of high contrast and at the same time it is continuous, harmonious and organized is a positive skyline. These are the qualities to be promoted in Jerusalem to enhance the image quality of the city.

The opposite qualities produce a negative skyline. Thus a skyline with limited contrast, or one that generates a non-continuous, discordant or disorganized contrast is to be avoided, and changed where it exists.

... and Jerusalem?

If Jerusalem is viewed from different vantage points, then diverse images are experienced, and this is especially true of the skyline. If Jerusalem is viewed from the Seven Arches, then our perception will be completely different from a perspective from Beit Safafa, Ar Ram, the Tel Aviv Road, At Talbieh, or Hezma and the Eastern Mountains.

The contrast that is found in other aspects of Jerusalem is also found in its skyline, and as with these other features the positive elements need to be promoted and the negative avoided and changed.

A further important feature of a positive skyline is the existence of landmarks system which facilitates orientation within the urban context. As individuals we search for reference elements in our surroundings that serve as orientation points. Such points of orientation are important as they enable us to feel secure in our urban surroundings. Such feeling is independent from the place and time factor, which means no matter where or when we are standing in Jerusalem we should be able to feel familiar and secure.

A landmark can take various forms: it can be a building with a special character; for example it might be very high, or of a certain color, or situated at the end of a prominent axis. A landmark can also be an open space such as a park, a sculpture, or even a feature of the city's infrastructure. It should be possible to include these different elements in one structured system, which should be continuous, harmonious and organized. In this context it is important to emphasize that the golden color of the Dome of the Rock, and the towers and minarets are crucial landmarks in Jerusalem. These features have to retain their prominence in any future development.

There follows examples of positive and negative skylines both from Jerusalem and international locations.
Skyline: Positive Examples:

Image 89 Positive Skyline: the Dome of the Rock and the Minarets and Towers of Jerusalem

Image 91 The Dome of the Rock and the Non-Continuity of West Jerusalem Skyline

Image 90 Continuous Skyline: the Western Mountains of Jerusalem

Image 92 Positive Skyline: the Dome of the Rock and the Minarets and Towers of Jerusalem
Image 93 Panorama View: Continuous Skyline on Macro Level, Mount Scopus I

Image 94 Panorama View: Continuous Skyline on Macro Level, Mount Scopus II

Image 95 Panorama View: Continuous Skyline on Macro Level, Jabal Al Mukkabber

Image 96 Panorama View: Continuous Skyline on Macro Level, Seven Arches, Mount of Olives
Skyline: Negative Examples:

Image 97 Panorama View: Non-Continuous Skyline on Micro Level, Mount Scopus I

Image 98 Panorama View: Non-Continuous Skyline on Micro Level, Mount Scopus II

Image 99 Panorama View: Non-Continuous Skyline on Micro Level, Mount Scopus III
Image 100 Old City Skyline Distorted at Micro Level by New Development in West Jerusalem

Image 101 Uniform Skyline of the New Palestinian Neighborhoods in North Jerusalem

Image 102 Uniform Skyline of the New Palestinian Neighborhoods in Beit Hanina

Image 103 Uniform Skyline of the New Palestinian Neighborhoods in Al 'Isawiya
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Skyline: Positive International and Regional Examples

Image 104 New York Skyline

Image 105 Continuity of Skyline in Gamla Stan, Old Stockholm, Line of Different Towers

Skyline: Negative International and Regional Examples

Image 106 Chaos of the London Skyline

Image 107 Chaos in Ramallah's New Skyline
4.4. Green Space

Definition: "Space containing any of the different sorts of vegetation, starting with a city park and ending with a dwelling garden."

Green areas have been considered an essential part of urban life since planning of cities first began. This may be accounted for by our desire as human beings to be close to our roots in the natural world: Green spaces enable us to feel secure and relaxed in natural surroundings.

Our urge to create green areas in our cities can therefore be regarded as part of our human instinct; alternatively, it can be seen as a reflection of our deep need to escape from the pressure of our daily lives in cities and find the peace and tranquility we seek in nature. Whether either or both of these explanations are chosen, they help to explain the crucial importance of green space in modern cities.

Modern cities are growing in size and becoming more and more overpopulated and congested: mega-cities such as Bombay, Cairo, and New Mexico are becoming the norm. This rapid urbanization is swallowing up our open and green spaces. Buildings themselves are being constructed with little space between them. Our perception is of relentless and aggressive urban development: green spaces mark oases of peace where nature can still be enjoyed.

Open spaces in general and green areas in particular are the lungs of our cities. It is through them that the cities themselves and we, their human inhabitants, can breathe, for they provide oases of fresh, less polluted air. This is why more attention has to be paid to such areas in urban planning and development.

Green areas can be of diverse type and sizes: on the larger scale a green area can be a natural or an ornamental and recreational park; and on the smaller scale a small city park or public garden. It can also be a private garden or a green area on the side or in the middle of a road: in other words, any area for vegetation which we are able to create in our urban context.

... and Jerusalem

Jerusalem is one of the world's cities that has experienced a huge amount of development over the past fifty years, and this is still continuing. Development has encroached more and more on open and green spaces; and the building projects have been of high density, leaving little breathing space essential for the city and its inhabitants.

The political situation in Jerusalem has contributed to the drastic changes that have taken place. The Israeli expansion policies in East Jerusalem have given slight attention to the need for green areas, as the chief and overriding issue at stake in this conflict is control over and annexation of Palestinian land.

The situation is no better under Palestinian hands: firstly because no authority is responsible for planning, establishing and maintaining public green spaces; and secondly because there is modest consensus within the Palestinian population over the importance of such spaces.

All these factors make clear why there is such a dearth of green spaces in the whole of Jerusalem, and in particular in the new Palestinian areas of the city. This shortage is definitely acute on the Palestinian side of the city.

This is a matter of urgency and the issue should be given immediate attention. By acting now not only will planners be providing a basic human need, but they will also be enhancing the city itself and making it more attractive.

It is therefore recommended that a system of green zones be established. This process could begin with a green buffer zone to protect the Old City. At the same time awareness of the importance of green areas needs to be raised, along with the necessity for incorporating them into any development. Campaigns should be launched to educate not only individuals but also the relevant authorities.
Green Space: Positive Examples

Image 108 Green Space: Park near Old City, Jabba Al Mukkabber under Israeli Maintenance

Image 110 Ma'ale Adummim, Israeli settlement

Image 109 Windmill near Old City in Israeli Neighborhood

Image 111 King David Hotel, near Old City, Israeli Neighborhood
Image 112 Bab al Amud, Damascus Gate, Green Space (Micro Scale)

Image 114 Courtyard at the American Colony Hotel (Micro Level)

Image 112 Ath Thuri to the West (Macro level).

Image 115 Salah Eddin Street (Micro Level)
Green Space: Negative Examples

Image 116 Shu'fat Refugee Camp: High Density Building, No Green Spaces

Image 117 Silwan, High Density Building, No Green Spaces

Image 118 Dahiyat al Bared, New High Density Palestinian Neighborhood

Image 119 Ras al Amud, Limited Attention to Existing Green Space
Image 120 Al 'Isawiya: Scarcity of Green Spaces, High Density Building

Image 121 Wadi Al Joz: Use of Green Space for Car Workshops, Middle of Residential Areas

Image 122 Al Zahrah Street, a Main Commercial Street, no Green Spaces

Image 123 Al 'Ezariya: Scarcity of Green Spaces, High Density Building
Green Space: International and Regional Positive Examples

Image 124 Al Hamra Gardens: Enjoyable Open-Green Space, Granada, Spain

Image 125 City Centre, Enjoyable Open-Green Space, Barcelona, Spain

Green Space: International and Regional Negative Examples

Image 126 Recent Development, High Density Building, Limited Green Spaces, Ramallah

Image 127 Rehabilitation of Old Neighborhood, no Green Space The Hague, The Netherlands
4.5. Infrastructure

Infrastructure can be defined as "the system of public works of a country or the resources required for an activity".

The world's population is increasing dramatically and this increase is being felt most acutely in our cities. Population growth is paralleled by a growth in economic activity, which is reflected in an increasing demand for more and better transport to and within cities. Mobility and accessibility of a city has developed into a precondition for any modern economic development. In addition to a need for more and better roads, there is a corresponding need for an increase in capacity and efficiency in services such as electricity, water, sewage and communications.

The installation of the needed infrastructure affects both the architectural and urban image quality of a city as well as environment. In many cities throughout the world attention is given only to the functionality of the infrastructure and its potential aesthetic impact is neglected. This failure of vision can have disastrous consequences for the environment in general, and for individual locations in particular, as scarce urban space is often completely taken up by infrastructure. In the developed countries this problem is now beginning to be addressed; in the less developed countries it is still largely ignored.

On a more positive note, there are an increasing number of examples from all over the world of infrastructure functioning as sculpture in our cities. Rather than spoiling the urban environment, infrastructure can improve and enhance the appearance of our cities. This can only take place when a creative approach is taken whether during the design or the installation of infrastructure works.

...and Jerusalem?

Infrastructure is a sensitive issue in Jerusalem, where the possibilities of it having a negative impact on the environment is heightened by three additional factors:

1- Jerusalem is a center for world tourism and pilgrimage on account of its special cultural and religious heritage. If this important economic sector is to flourish and develop, there will have to be easy accessibility to the city and places of interest within it. A growth in tourism will create an increasing demand on infrastructure whether roads network or the service sector, which in turn will increase the demand for better, larger and more efficient infrastructure services.

2- The present political conflict also affects the infrastructure. In East Jerusalem the Israeli policy is to build new Jewish settlements around and between Palestinian neighborhoods in order to change the demographic balance in the city to Israel's advantage. New bypass roads are being built by the Israelis so that settlers do not have to travel through Palestinian areas; hence a massive and totally unnecessary system of double infrastructure is developing and eating into the precious urban space of Jerusalem.

3- Jerusalem's unique architectural and urban heritage is not being given sufficient protection, partly because of the political situation. Some of the major work on infrastructure projects in Jerusalem is undertaken with limited consideration for the impact it will have on heritage and historical locations: the recent development work near Bab Al Khalil in the Old City is a good example of this.

In conclusion, infrastructure should not only be considered as fulfilling a utilitarian function, but also as providing an opportunity for the creative enhancing of the image of the city. In Jerusalem itself the impact of major schemes for infrastructure should be reduced: in the case of roads possible solutions might include sunken (semi underground) road networks, tunnels, and ring roads. The present Israeli policy of building a double infrastructure network should be stopped. In any work on infrastructure elements the aim should be to provide continuity features and to avoid creating barriers.
Infrastructure: Positive Examples

Image 128 Bridge as Beautiful Sculpture, West Jerusalem

Image 129 Ramallah Road, Beit Hanina: Positive Attention to Green in Street Profile

Image 130 At Talbieh, West Jerusalem: Attention to Green Furnishing in Street Profile
Image 131 Infrastructure as Sculpture, Supreme Court, West Jerusalem

Image 132 Road Tunnel Bab Al Khalil, (Disadvantage is Proximity to Old City)

Image 133 Al Talbieh, West Jerusalem, Beautiful Street Profile

Image 134 Sheikh Jarrah, Positive Attention to Green in Street Profile
Infrastructure Negative Examples

Image 135 New Bypass road, Duplicate Infrastructure, Beit Hanina

Image 137 New Infrastructure Project Very Close to Old City, Bab Al Khalil

Fig 136 Continuation of Road Number One Bypass road, French Hill

Image 138 Nablus Road Close to the Old City, Bab al Amud (Damascus Gate)
Infrastructure: International and Regional Positive Examples

Image 143 Beautiful Sculpture in Urban Context, Erasmus Bridge, Rotterdam

Image 144 Beautiful Street Profile, Mouda'in

Infrastructure: International Negative Examples

Image 145 Road Infrastructure, Amsterdam

Image 146 Gas Supply Infrastructure, Almaty, Kazakhstan
5. Recommendations and Follow up Actions

Jerusalem is a unique city because of its history, location and cultural heritage. The question addressed in this study was how these features might be used to enable the city to preserve its unique character and develop as a city for the region and for the world in the new millennium. The question was tackled not in a romantic way but through practical and realistic study and analysis.

As part of the strategic planning for Jerusalem for the new millennium, the study aimed to develop guidelines for making the architectural and urban images of Jerusalem more attractive. The approach to the task was designed specifically for Jerusalem, and was based on the assessment of the existing strengths and weaknesses of architectural and urban images, in order to be able to provide guidelines for the future. The study aimed to encourage and promote what was positive, and to transform and develop what was negative. The city was treated as a whole and not as fragmented parts: this approach was considered the most suitable for Jerusalem.

In this section of the study, themes will be taken up and discussed, along with conclusions and recommendations for further action.

Jerusalem as One City

Jerusalem is a city that cannot be divided from an architectural and urban images viewpoint. This study clearly shows that it is in the interest of the city itself to remain undivided. It is not possible in a study of image quality to stay within political boundaries. If one stands on Jabal Al Zeitoun, the Mount of Olives, one cannot look at the Old City without seeing West Jerusalem in the background. While looking at an architectural or urban feature it is not possible to use a filter that allows us to see X detail and not Y detail if X and Y are in close proximity. In other words, development in either East or West Jerusalem must take into consideration the impact on the other side.

Recommendation: The political agenda must not alone determine the future of the city. In any decision making, the interests of the city itself should be paramount. There should be concrete levels of cooperation and coordination between Palestinian and Israeli planners and policy makers with respect to architecture and urban planning. Only a relationship that is based on equality, mutual respect, recognition of Palestinian national rights in Jerusalem and the interests of Jerusalem itself as a city will guarantee the city's healthy development and provide the city with new opportunities for the future.

Contrast

After an intensive field study, it was concluded that contrast is the most important quality in the city's architecture and urban image model. Contrast means diversity, diversity means tension moments, and hence diversity fulfils in part our need for adventure. Thus diversity in our visual surroundings is more attractive than uniformity. It is therefore essential that we promote diversity in the development of the city images to make it more attractive to its inhabitants and to visitors.

Not all contrast is desirable, however. In this study specific criteria were designed to evaluate the quality of contrast in Jerusalem which was then classified as positive or negative. While a wide range of diversity should be promoted in the architecture and urban images, this should be within the context of positive contrast: this should be continuous, harmonious and organized. If contrast lacks these three essential elements, the result will be a chaos of forms and images which will be experienced negatively, and the city will be less attractive to live in and to visit.

Recommendations: Contrast as a model of image diversity has to be chosen a major theme for the future architectural and urban development of the city. Contrast is a rich quality that should be fully promoted and utilized; it should be harmonious, continuous and organized. Its converse, uniformity, such as is witnessed in the new neighborhoods of Al Dahiah and Beit Hanina, should be avoided in the future.
Topography and Landscape

Jerusalem’s location on seven hills and its stunning landscape provide superb opportunities for architects and planners if a sensitive approach is taken. There is significant opportunity to positively enrich the city’s architectural and urban images when the task is approached correctly.

Unfortunately, today very little consideration is given to this unique topography and landscape, and instead of seeing it as an asset for the city, these features are often regarded as undesirable obstacles to construction. This attitude accounts for much of the aggressive building activity and abrasive development that has taken place.

Recommendations: Instead of ignoring or working against the unique topography and landscape, architects and planners should see these features as important assets for the city, and should strive for the integration of construction with the landscape and topography. This will add new values to the city architecture and urban images and will provide the city with extra positive contrast and diversity. For example, the buildings should be constructed on terraces to enable the architecture to blend in with the natural surroundings. Such an integrated approach will enhance the image of the city.

Rehabilitation

The preservation and development of Jerusalem’s architectural and urban heritage will strengthen the city’s aesthetic qualities adding new qualities to its architecture and urban images.

Jerusalem is unique because of its cultural and religious heritage, and this is the source of its strength for the future, gaining a more competitive position regionally and internationally. Its preservation is therefore essential for the future of the city.

The population of the city is growing rapidly, and there is pressure on space for housing and infrastructure. In that environment, historic buildings and urban heritage are the most likely victims.

Rehabilitation can reverse this trend by protecting the rich heritage and also by adapting it to meet contemporary requirements. The technology is readily available to enable historical architectural and urban forms to be adapted to modern functions.

Recommendations: Rehabilitation must become daily practice in Jerusalem. The term has to be interpreted in its widest context as the rehabilitation of buildings, urban features, city images, political structure and social institutions. There should be no compromise at all that alters the city’s architectural and urban heritage.

The heritage should be a source of inspiration for every architect and planner in their work on any project for the city. They should also take on responsibility for creating obvious continuity between what is constructed today and what has been constructed throughout the city’s long history. This has to be achieved in a creative way, not by copying what has been built in the past, but by understanding the past to find inspiration to meet the needs of the present. Features of the Old City for example should not be copied, but related to creatively to produce new forms and images that are in a contrast which blends the past and present.

Skyline

Jerusalem’s skyline is where all the different architectural and urban images of the city come together to form one total picture. The skyline profile of the city is a macro image of the city, and so the same criteria for positive image qualities in the city should be used in determining the quality of the skyline, namely the profile should reveal a contrast that is continuous, harmonious and organized. In addition to these qualities, the skyline should also have an obvious set of landmarks that facilitate orientation within the city.

Although the skyline of Jerusalem can be regarded as generally positive on the macro level, a different focus reveals many negative qualities at the micro level. This means that there is discontinuity at the skyline level, and this needs to be rectified. It is also important to
emphasize that outside the Walls of the Old City, there are few prominent landmarks, so orientation is difficult.

**Recommendations:** Planning and development projects should be continuously monitored for their impact on Jerusalem's skyline, as this is the mirror that reflects the image of the whole city. While diversity is to be encouraged, bearing in mind that Jerusalem is one city with diverse images, there should nevertheless be continuity between the micro and macro levels and it should always be possible to find coherence between different images when looking at the skyline. To achieve this effect, the contrast to be promoted should be harmonious, continuous and organized. At the same time much effort and energy should be invested in developing a set of landmarks in Jerusalem, to make orientation easy from any part of the city.

**Green Space**

Green spaces are essential for the architecture and urban images of Jerusalem. They are the lungs of the city; the open built-in space in the middle of the dense urbanized space; they satisfy our deep human need to be close to nature. They are also the lively green spots that color the architecture and urban images of the city and provide additional positive contrast. As the population of Jerusalem increases, the need for the provision of green spaces becomes more vital for the city. The quality of the architecture and urban images of Jerusalem in the future will depend to a large extent on the provision of these green spaces.

**Recommendations:** Existing green space in Jerusalem should be protected and conserved and new ones should be created. In any program of urban development, the provision of green areas should be a top priority. A policy to create and protect green zones should be adopted, and this should take precedence over any political considerations. This is crucial for the beautification of the city and a better architecture and urban image qualities. Concretely, we should be able to see more green spots in the images and maps of Jerusalem. This should also include a campaign to make the general public and the respective authorities more aware of the vital importance of green spaces.

**Infrastructure**

Infrastructure in Jerusalem has to become a means of enhancing the beauty of the city that should be reflected in the qualities of the city architecture and urban images. The service sector is becoming more important in the economy of the city, and this trend will continue if Jerusalem continues to develop its potential as a world city. Developing this potential means that infrastructure in Jerusalem must be able to accommodate an increasing number of visitors as well as an increasing pressure on the accessibility of the city itself and of its sites of importance. This means that in the long term infrastructure will take up more of the available open space in Jerusalem, and will become more dominant in the image of the city.

The present political conflict and the Israeli policy and development plans of separate or duplicate infrastructure for its Jewish settlements in East Jerusalem, irrespective of the original existing system in the Palestinian neighborhoods, heightens the urban and environmental problems created by these huge construction projects. These projects already threaten the city's architectural and urban heritage. Little attention is being paid to aesthetic impact of infrastructure projects, and this is having a very negative impact on the qualities of the city architecture and urban images.

**Recommendations:** Infrastructure should not only be functional but should also be aesthetically attractive; it should become part of the city's positive contrast, and contribute to better qualities of the city architecture and urban images. It should be constructed in such a creative way that it can be regarded as sculpture elements within the urban context.

Work on infrastructure needs to be planned in great detail to avoid unnecessary loss of space or distortion of the city's image. An underground (sunken) road system connected to a ring road network with
use of tunnels system will facilitate the more efficient use of the city's scarce space and cause minimal damage to its heritage and images. The Old City should gradually become a car-free zone. At the same time the area surrounding the Old City should become a green zone free from the congestion of traffic. The Israeli policy of double infrastructure should be stopped immediately as it is an unjustifiable use of precious space and it has only negative impact on the image qualities of the city.

**Follow-up Actions**

This study is only part of the multi-disciplinary work being undertaken by IPCC for the strategic structural plan. As well as this architectural image quality study, there is also an urban spatial study which appears elsewhere in this volume. These two studies could form the foundation of the city's future detailed structural plan.

The city's global importance makes reaching peace in the region conditioned on attaining peace in Jerusalem. Without resolving the disputed issue of Jerusalem, stable and sustainable peace will not be reached and the region will continue to suffer endless circles of violence and conflict. Jerusalem will either be the bedrock for secured sustainable peace in the Middle East or a source for eruption of violence and wars.

The al-Aqsa Intifada of late 2000 began in Jerusalem with the provocative visit of Israeli Prime Minister Sharon to the Harem El Sharif in the Old City. Peace discussions at Camp David failed when the negotiations turned to the issue of Jerusalem. Recognized as a thorn in the Middle East Peace Process, the issue was postponed for the final phase of negotiations. To date these discussions have yet to take place and the cycle of aggression and violence has continued. However, even though the future looks very gloomy in Jerusalem, sooner or later Palestinians and Israelis must return to the negotiation table and reach a peace agreement that satisfies the basic needs of their people. But for various reasons, in the near term, finding a resolution of the Jerusalem issue seems to be only a distant possibility. And, until discussions resume, we need to be mindful that a comprehensive peace will only be reachable when it is based on mutual equality, recognition of Palestinian national rights, ending the occupation and its aggression and achieving respect between Palestinians and Israelis. There can be no one dominant party in the city.

Either during the final status negotiations or after the establishment of peace, the Palestinians will need to present their plans for the future development of the city, based upon its needs and potential. If the long-awaited comprehensive peace in the region is achieved, a detailed structural plan of Jerusalem will be essential. This study together with the urban spatial study could be the first steps in this process.

**Recommendations:** This study has covered the strategic architectural and urban image quality themes in Jerusalem. It needs to be followed up by further more detailed studies: these should begin with a study of the architectural image sectors and conclude with one for the architectural image elements (see Scheme 3). In addition to these, a further follow-up study will have to be made. This will deal with the results of both this present architectural image quality study and those of the urban spatial study to determine how the sets of results can be combined. In other words the guidelines and principles drawn up in this study will have to be incorporated into the Crescent Urban Model which is the result of the urban spatial study.

In the longer term the IPCC should develop a concept structure plan for the city. This plan should include a well-defined urban vision based on strong architectural and urban guidelines that could provide a basis either for the peace negotiations or for the future development of the city.
Appendix 1 New Approach to Cultural Heritage, Example

As part of my M.Sc. thesis I worked on a development project for the new area near the port to be built in the Gaza Strip. It included the design of a new town and an industrial area with all its services. The goal of the project was to produce a structural urban plan of the new town of Gaza, including the architectural design of the Gaza World Trade Centre, to be known as Gaza Twin Towers, and including detailed plans for the latter building.

The main starting point was the cultural heritage of Gaza adapted to today's needs. A new method for using Islamic geometrical patterns was developed. With CAAD tools it was possible to generate a historical pattern and use it as the underlying design on three different scales, for urban planning, architectural design and building technology. This was a new method which integrated the three levels of planning, with their different challenges, into one systematic approach. The method resulted in a design high in aesthetic value and functionality. The images generated were rich in contrast, a positive contrast which was harmonious, continuous and organized.
Appendix 2 List of References


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Chapter Three

An Economic Perspective for Jerusalem

...every problem contains a challenge and an opportunity...

Samir Hazboun
Dew Baboeram
Introduction

Background
As part of the Oslo Agreement, Jerusalem was placed on the agenda for the final status negotiations which were to have started in May 1996. Shortly thereafter, an IPCC research team began to conduct strategic studies that would be useful to the negotiators. And although the final status negotiations have not begun even at this late date, IPCC has begun to produce assessment studies on the potential and the future of Jerusalem. One of the first of the studies resulted in a detailed document, "Jerusalem Profile", which contains extensive historical and statistical information about East Jerusalem.* The document has an economic section that is mainly of a descriptive nature, capturing the status quo. The present study is a follow-up to that. Our emphasis has shifted to the analysis of the economic potential of Jerusalem.

Research Problem
This study tries to address the following problem: Define a future economic perspective and strategy for Jerusalem. The adopted approach is the following:
1) First we provide a description of the problems in the economy of Jerusalem. The descriptive material builds upon the work that has been done in the "Jerusalem Profile".
2) Then we try to establish what challenges and opportunities can be identified through problem analysis.
3) Finally we translate the challenges and opportunities into a future economic perspective and strategy.

Research Methods
The data for this study are based on three sources:
1) In-depth interviews with 15 individual experts on different aspects of the economy. We hereby express our deepest gratitude for their input and assistance.
2) Workshops and brainstorming sessions with key persons from the various economic sectors. Four workshops involving 40 persons have been held on different themes.
3) Literature and documents from various sources (including print and Internet sources).

Structure of this paper
This paper has the following structure.
- Section One provides an analytical framework for the study.
- Section Two presents a SWOT (Strength-Weakness-Opportunity-Threat) analysis of the economy by sector and develops a perspective for the future for each sector.
- Section Three treats the relations between the sectors and their perspective for the future. It also examines the implications of the perspective for the labor market.
- Section Four discusses the short and long term actions based on the perspective.

* The complete "Profile" study is available as Chapter One in The Jerusalem Urban Fabric, IPCC, Jerusalem, 2003.
Section One: Analytical Frame

Problem Description

The economy of East Jerusalem has not been based on the needs and potential of its Palestinian citizens. Israeli political and military considerations have been the determining factor in our economic development. The peace process—although it is stagnating at the time of writing this document—contains the promise that in the not too distant future the economic development of East Jerusalem will be based primarily on the objectives and the potential of the Palestinians. When that opportunity comes, we must have in place an economic perspective on the basis of which economic policies can be derived. The purpose of the study is to develop this perspective and provide ideas for economic policy.

Problem Definition

Three factors will shape any economic perspective. These are:

1. East Jerusalem will be the capital of the Palestinian state and the site of the Palestinian government. This will have economic implications because the central state apparatus will be located in East Jerusalem.

2. East and West Jerusalem will be linked by economy and infrastructure and not separated by a physical wall. The economic development of Jerusalem will be influenced by the economic development of both Palestine and Israel.

3. Jerusalem is the religious capital of three world religions. Its economic function is heavily influenced by this factor.

In developing a future economic perspective for Jerusalem and designing an economic policy based on this perspective, the following questions must be addressed:

- What is the physical area for an economic program?
- What are the links between Jerusalem and the national economies of Palestine and Israel?
- How deal with the question of an undivided city?

The position taken in answering these questions defines a framework for a future economic perspective.

The Area

A distinction must be made between the City of Jerusalem and the District of Jerusalem. The city is under Israeli occupation and under the jurisdiction of the Israeli authorities. The district is partly under the jurisdiction of the Palestinian National Authority (PNA).

The area is important from the point of view of physical planning. Most cities have the tendency to grow in terms of population and surface area. The expansion of the city of Jerusalem thus is a factor that has to be considered in any future perspective. We presume that East Jerusalem will expand in the area of the Jerusalem District creating a Greater East Jerusalem.

Links with Palestine and Israel

In any final settlement the economy of Jerusalem has to be positioned vis-à-vis the Palestinian and the Israeli economies. How should the Jerusalem economy be related to these?

In our approach we argue for the following position:

- An undivided Jerusalem will derive its strength from two strong and equal parts, not from one strong and one weak part. Thus a strong economic basis for East Jerusalem will favor a strong undivided Jerusalem.
• East Jerusalem is linked de facto to the Palestinian economy through labor, capital, trade, consumer behavior, and transportation, for example. Strengthening the link between East Jerusalem and Palestine would improve the economic basis of East Jerusalem. This basis is now weakened by the policy of separating East Jerusalem from the West Bank through such Israeli actions as closures, restricted identification cards, and other discriminatory policies. The economic potential of East Jerusalem is seriously under-utilized when it is cut off from its natural linkages.

These arguments plead for strengthening the link between East Jerusalem and the West Bank and the Palestinian economy. The linkage will enlarge the economic basis of East Jerusalem and give impetus to the development of the city’s economy by tapping such Palestinian resources as entrepreneurship and financial and human capital.

Similarly, East Jerusalem can benefit from the resources of Israel by linkages to capital, technology, and physical infrastructure. These linkages will create a strong economic basis for Jerusalem and will stimulate growth for both economies. In a situation of peace Jerusalem and Israel can become the center through which the Middle East and the West can develop economic relations.

An Undivided City
At present Jerusalem is a divided city in many respects:

• Culturally, there is a multi-ethnic society without either unity in diversity, cultural equality, or mutual respect. In fact, the multi-ethnic society of Jerusalem is a segregated society in which one cultural group dominates the culture of other groups and prevents the free cultural development of the others.

• Socially, the city is divided into a relatively poor eastern part and a rich western part. The social institutions of the parts do not operate on an equal footing with each other. Even the level of services is not at par between the two sides of the city. Although equal tax rates and levies are paid by the east side, the amenities and services are unequal to those in the western sector.

• Politically, Jerusalem is divided in two parts: the Israeli political authority over East Jerusalem is enforced by military means. The Palestinians’ political aspirations for a joined and undivided administration of the East and West are being frustrated by the Israelis. Political unity would mean sharing the city instead of dominating the city.

• Economically, there is no unity between East and West Jerusalem. The East is left economically underdeveloped while all efforts of the Israelis are directed to the West. The economic division of the city is to a large extent also the result of neglect by the Israeli authorities.

An economic plan for East Jerusalem cannot be divorced from the social, cultural and political aspects of the city. The economic potential of Jerusalem can only be fully exploited when the city is undivided socially, culturally and politically. Stimulating social, cultural and political equality will bring the best of the economic potential forward. The diversity of the city can then be used as strength instead of a weakness.

The Dynamics of an Urban Economic System
For centuries cities have been regarded as civilization’s most developed areas. Cities are the places where commerce and craft developed. Cities have become concentration places for industry, finance, political power, services, labor, culture and housing.

They have constituted themselves as centers of economic growth not necessarily related to agriculture. In their initial stage of development, a city as an urban center functioned in relation to the rural areas, in the first instance as a market place. Later on they
processed agricultural products (bakeries, clothing factories, slaughterhouses), then developed an industry not related to agriculture and finally provided a range of services (e.g., governmental, health and financial). In their mature stage, they have become independent of agriculture and are centers of economic growth.

Thus, compared to rural areas, cities represented a higher form of social, economic, political and cultural development. The concentration of economic opportunities and services attracted people from the rural areas to the cities.²

In modern times, we are aware that cities also have certain comparative disadvantages: crime, unemployment, environment and housing problems, for example.

Within a region several urban centers may develop, and the economic role of one center becomes related to the role of other urban centers. One city might be the center where industry is located providing jobs for people who live and sleep in another city. Or one city might be the governmental center, while another can be the cultural center of a region.

So the economic character of an urban center will not only be defined by the specific activities that are carried out there, but also by the activities of other urban centers. These activities can be complementary to each other or competitive.

That also holds good for the relation between the urban center and the rural area. The urban center can be complementary to the rural area if the economic activities strengthen each other. But they can be competitors if the people in the city choose rural areas as a place to live and spend their money there.

A city might have an economic function for a local area. It provides services for its inhabitants (social, cultural, commercial) and generates purchasing power by providing these services. In most cases it also provides these services to the people in the adjacent rural areas.

It might have an economic function for a region with more cities, say an industrial zone providing employment for people living in another city. It generates purchasing power through its industrial production and its spin-off.

It might have an economic function for a nation linking regions with one another. The city where the government apparatus is located fulfills an economic function for the nation because the central apparatus is connected to locate administrative centers in a nation.

Some cities have international economic functions linking national economies (stock exchange, international financial centers, and venues for international institutions).

Thus, one can develop an economic perspective from different angles: local, regional, national, international.

The Criteria for Judging an Economic Perspective

Any economic program and the perspective on which it is based must have criteria for judging output. We use three criteria in judging whether the perspective is a viable one on which to base an economic program:

1. Does the perspective contribute in realizing the social and economic potential of the Jerusalem district?

2. Can the perspective and its programs create enough jobs for the people living in the Jerusalem district?

3. Can the perspective provide for a clean living environment?

General Remarks

The economic potential of Jerusalem is defined by the extent to which the city and the district are able to attract and generate purchasing power. An economic strategy for Jerusalem as an urban area should take the following aspects into account.

1. Define the economic function of the urban area. For exam-
people: a city with a suburban character might have the function of providing a metropolitan area with labor, a place to live and specific economic activities supporting the economy of an urban area. In the case of Jerusalem the function of the Jerusalem economy vis-à-vis other urban and rural areas should be defined. Most probably Jerusalem, i.e., an undivided East and West Jerusalem, would evolve into a metropolitan area which is related to other cities in the West Bank in such a way that the metropolis would act as a motor in generating economic growth supported by other economic centers in the West Bank.

2. **Position the urban economy within a national, regional and global framework.**

The difference between Jerusalem and Ramallah is that the Ramallah economy is growing because of the crisis in Jerusalem due to the Israeli policies. As soon as Jerusalem is able to function under normal circumstances (peace and equality) it should become the economic motor, and the function of Ramallah in the national economy will be redefined, possibly in a supporting role for the economic engine of Jerusalem. Because of its role as religious capital of the world and its role in world history Jerusalem would be a major player in at least one economic sector, namely tourism. Given the fact that the resolution of the conflict in the Middle East is tied up with the resolution of the problem of Jerusalem, the economic effects of peace for the city might transcend that of a tourist center, and might develop into the axes for an economic co-operation between East and West.

3. **Define the strength and weakness of the urban economy in terms of competitive disadvantage vis-à-vis other urban centers.**

Globalization has developed to the extent that metropolitan areas are in competition to attract global players in the world economy and to divert the global flows of capital and purchasing power to their regions. In spite of all the advantages Jerusalem might have in peacetime, that in itself will not guarantee its competitiveness. The historical advantage of Jerusalem will have to be weighted against its disadvantage of not being a major metropolitan city (its population would fit in a sub-quarter of Bombay or Teheran!).

4. *In the case of Jerusalem one must take into account the economic effect of political arrangements in the event of a final settlement.*

When the Palestinian government moves to East Jerusalem and the city truly becomes the capital of Palestine, it will affect the economy in several ways. In defining an economic perspective the effects of this process should be taken into account.
Section Two: The Sectors

In the next section we will deal with the following economic sectors:

- **Tourism**: in any scenario for the future tourism will be a major sector because of the historical significance of Jerusalem.
- **Services**: this comprises a great variety of subsectors, from government services, transport and communication to financial, health and retail services. In any metropolitan center this sector is very important.
- **Industry**: its potential might be bigger than in agriculture, but not as big as tourism and services. Specific attention will be paid to the information technology (IT), which is technically not a sector but a technology.
- **Agriculture**: an estimation will be made of its potential, although the perspective for this sector in the Jerusalem district is not bright.
- **Construction**: this sector depends on the development of other economic sectors.
- **Public utilities and infrastructure**: these sectors are prerequisites to the development of other economic sectors and are not the engine of an economy.

1. Tourism

**The Historical Trend**

Tourism has been a major sector in the economy of Jerusalem for decades. The Palestinian tourism sector has witnessed deterioration during the last twenty years as is seen from the following indicators:

- In 1967 there were two hotel rooms in East Jerusalem per one room in West Jerusalem. In the Nineties this ratio was reversed: two and a half rooms in West Jerusalem per one room in East Jerusalem. The number of Palestinian rooms in the Nineties is at the same level as in 1967.
- The number of travel agencies decreased by almost a quarter in East Jerusalem, while in West Jerusalem they increased thirteen fold between 1967 and the Nineties.
- The number of licensed guides decreased by more than fifty percent in East Jerusalem, while the number of Israeli guides grew from zero to 4,300.
- For every Palestinian large bus there are nine Israeli large busses for tourists. For very Palestinian minibus there are 8 Israeli mini busses.

**The Present Problems**

A comparison between East and West Jerusalem shows that East Jerusalem has lost ground to West Jerusalem in the last thirty years. This is mainly ascribed to the consistent policy of the Israelis to marginalize the Palestinian tourist sector. The Israeli policy was directed to create an Arab tourism sector that was subservient to the Israeli tourist sector. In its subjugated form East Jerusalem could be presented in their marketing policy as an oriental element in a tourist package from Israel and not as a package that had its own value.

The main problem for the Palestinian tourist sector is to establish its own value in the tourist product of Jerusalem. And that is impossible without social, political and cultural equality.
The Potential: the Opportunities

In practice, the tourist product of East Jerusalem is built on the visits to the holy places.

In peace, this package can be developed and differentiated around more themes. Below some ideas are presented in conceptual form on the marketing theme. They are suggested for discussion and are not a definitive proposal for policy. An input and involvement is needed from the private sector to develop these packages with more precise concepts and marketing themes.

The Packages:

Religious and Spiritual Capital of the World

The concept behind this package is based on three elements:

1) The celebration of religious feasts and events of the three religions (Christianity, Islam, and Judaism).

2) The visit to the holy sites of the three religions. The religious sites of the three religions are located in Jerusalem and the West Bank. They form an attraction by themselves.

3) The center for religious and spiritual discourse. Jerusalem should be the place where religious and spiritual groups meet with each other, exchanges views and experiences and develop thinking, ceremonies and rituals by inspiring one another.

The concept of the religious and spiritual capital of the world definitely requires an atmosphere of peace and equality.

Jerusalem - the Largest Living Museum on Earth

The concept of the largest living museum on earth rests on two pillars:

1) The visit to historical and archaeological sites with a non-religious character. These sites are located mostly in the West Bank.

2) The reconstruction of historical events. Jerusalem can be the place to participate in historical events that are reconstructed.

Jerusalem - East meets West

The concept behind this tourist package consists of a variety of elements around the theme of the exchange of the experience of East and West. The basic make-up of this package will be fairs, festivals and conferences.

Jerusalem - History and Religion in a Nutshell

The concept behind this package is based on the use of Madurodam: replicas of famous buildings and areas using motion and miniturization as an attraction. In the case of Jerusalem this concept can be centered around history and religion.

Jerusalem - the Recreation Park

The concept is a recreation park like Walt Disney's where the attractions are centered around themes from the religion (not only Islam, Christianity and Judaism) and history.

Jerusalem - Conference Center of the Middle East

The concept consists of two elements:

1. An offer of conference facilities.

2. An offer of facilities for fairs.

Jerusalem - City of Sports

Although the main tourist attractions will be related to the historical character of the city and the region, it is still possible to develop smaller packages on specific themes. One example is sport.

Jerusalem & the Dead Sea: Health and Recreation Center of the World

The concept behind this package is to link the Dead Sea with Jerusalem. The Dead Sea for tourist development is based on three elements:

1. The potential for medical tourism.

2. The potential for beach tourism.
An Economic Perspective for Jerusalem

All busses are owned by private companies. After the closure in March 1993 busses from outside Jerusalem were not allowed to enter the city. So a new competition arose from Ford transit carriers which are more expensive but better in quality (the waiting time is short and they operate longer hours and they are considered safer than the big busses). Some private schools have private busses.

The mini-busses also have a formal (licensed) and informal segment (not licensed).

Problem. The main problem is that the public personal transport is very weak in its organization. There is a need for regulations (devising quarters and routes, prohibit uninsured transport, regular testing of vehicles). Private enterprise can be stimulated with long term loans for buying new busses and organizing the support in the maintenance (service stations).

Opportunities. In the industrial zone at Atarod there are opportunities for developing a car center for buying and selling new and second hand cars. The center can grow into a kind of mode where one can not only buy and sell cars, but also get spare parts or do the maintenance. Such a center could compete with the unregistered garages (which are normally cheaper) through the synergy that is reached by concentrated complimentary functions.

Freight

The transportation of goods in East Jerusalem and between Jerusalem and the cities in the West Bank and Gaza is done by trucks owned mostly by private persons. There are hardly any transportation companies for freight transport. Basically the north-south transport is organized by non-Jerusalemites (West Bankers). There are no railways.

Opportunities. There is a potential for developing freight transport in the Jerusalem district. An infrastructure for warehouses at Attarod can be developed as a central storage place for freight transport between Gaza and the West Bank to Jordan down to Turkey. It can be linked to the development of the seaport in Gaza.

International Transport

International transport is maintained by bus and airplanes. The main air transport still goes through Tel Aviv. The bus transport links Cairo with Jerusalem in a 15-hour drive three times a week.

Opportunities. The development of both international air and bus transport will gain from broadening the international base of the Palestinian economy. Jerusalem will be in the midst of these developments because of the following factors:

1. The Qalendia airport has the potential to become a competitor both for Tel Aviv and Amman, basically because of tourist potential of Jerusalem.

2. The regionalization of the tourist package of the Middle East linking Jerusalem to Cairo will enable the development of an infrastructure of restaurants, hotels and shopping centers on the road. Bus transport is still cheaper than air transport. There is already a basic infrastructure of hotels and restaurants. There is a shopping center at the Suez Canal.

Communications

Telecommunications

The basic telecommunications infrastructure in East Jerusalem is Israeli. In the PA controlled areas of the Jerusalem districts this infrastructure is in Palestinian hands and is privatized. Due to political factors the curious situation now exists that a call from the West Bank to East Jerusalem is an international call to be paid according to international rates.

Problem. The telecom infrastructure of East Jerusalem and its revenues are in Israeli hands.

Opportunities. This sector is booming and will continue to grow in importance because of the growth of information technology.
Mass Media

While over 90% of the households in East Jerusalem have a TV set, at least one - third of which are connected to satellite receivers, and while there are no fewer than 29 local stations distributed about the West Bank territories, no local station is allowed to broadcast from East Jerusalem.

The case is similar in the AM-FM radio media. Almost every home in East Jerusalem has at least one radio that may be tuned to some of the 18 stations in the West Bank, but again no station is allowed to broadcast from East Jerusalem.

At this time there is one Palestinian daily newspaper - Al Quds - with a circulation of 25,000-30,000. There is a weekly magazine in Hebrew for Palestinian-Israeli communication. There are some monthly and bimonthly magazines.

There are five advertisement companies who work in the city and in the Jerusalem district. They have competitors in Ramallah and other commercial centers. Their main outlets are print media (billboards, magazines). The main TV-advertisement directed to Palestinians comes from Jordanian television.

Problems. The infrastructure for Palestinian mass media is unevenly developed, mainly because of political reasons.

Opportunities. In peace time there is an enormous potential for the development of the mass media. There will be a need for editors, journalists, production companies, advertising agencies, and technical services. The basis for this stems from the following factors:

1. The development of tourism and the service sector (Arab and western, recreational and business) will stimulate the publication of information and recreational material.
2. The development of information technology will link print, radio, television and internet with each other.
3. The weekly prayers from the Al Aqsa mosque can be the basis for developing Arab television for an international audience.

Wholesale and Retail Services

The wholesale marketing of agricultural products is organized by one company - Tunuva, located in West Jerusalem but owned by Palestinians. They provide the retailers with goods from Palestine, Israel and other countries.

Some middlemen and peddlers also organize the movement of goods and agricultural products between farmers and retailers.

Problem. There are no big wholesale distributors for manufactured products. The manufacturers in Jerusalem (cigarette, foods processing, plastic producer) have direct links with the retailers. The companies importing manufactured products also have direct links with the retailers, although there are some warehouses.

Opportunities. The economy has not developed to a stage where there is a wholesale infrastructure of warehouses and distribution centers. But the potential is there due to the role the Palestinian economy can play in the region (connecting Egypt and Jordan through the Gaza and the West Bank) and the internal growth of the economy.

Producer Services

Financial Services

Arab banks are not allowed to operate in Jerusalem. They cannot take real estate as collateral for their loans. Palestinians depend on Israeli banks or on banks in the West Bank for credits.

The small stock market of Palestine was established in Nablus but it used the name of Jerusalem in the index, the Al Quds index.

Problem. The financial system depends heavily both on economic and political conditions.
All busses are owned by private companies. After the closure in March 1993 busses from outside Jerusalem were not allowed to enter the city. So a new competition arose from Ford transit carriers which are more expensive but better in quality (the waiting time is short and they operate longer hours and they are considered safer than the big busses). Some private schools have private busses.

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3. The weekly prayers from the Al Aqsa mosque can be the basis for developing Arab television for an international audience.

4. The holiday seasons of the different religions offer opportunities for developing television programs from the holy sites.

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Problem. The financial system depends heavily both on economic and political conditions.
Opportunities. In peace times the Arab banks will return to East Jerusalem. Most probably the stock market will follow. Political stabilization will lead to a differentiation of financial services (the rise of investment banks and investment companies, and credit unions). The Central Bank of Palestine will be located in Jerusalem and will attract all major Palestinian financial institutions.

Insurance Services

There are no Arab insurance companies functioning in East Jerusalem. Palestinian cars in East Jerusalem for example are obliged to register at Israeli insurance companies.

Problem. The development of the insurance sector is restricted by the political conditions.

Opportunities. Once the political environment enables Arab insurance companies to operate, the Arab insurance companies will get an impetus from liberalization because most Palestinians will register at Arab companies. However, competition from Israeli companies who have higher pay-outs must not be ruled out.

Real Estate, Construction and Engineering Services

Real estate is concentrated in the hands of private persons, the waqf, Christian charitable institutions and some churches. The struggle for land is one of the cornerstones of the Israeli-Palestinian conflict.

Problem. There are perhaps ten companies in East Jerusalem providing engineering services (architects, engineering bureaus) to East Jerusalem and the West Bank.

Palestinian engineering services are not an export product.

There is one Arab contractor in East Jerusalem operating under Israeli law. However, he also works throughout the West Bank.

Opportunities. These services can develop into an export product if the technical experience is cultivated to a level where they can be presented as knowledge that can be sold to a market in the Middle East.

Accounting, Legal and Other Business Services

Problem. There are at most 40 law and 30 accounting companies in East Jerusalem. Their clients are mostly in East Jerusalem. Most of their business comes from Arabs who live in Israel.

Opportunities. The accounting services can develop into an export product if the technical experience is cultivated to a level where they can be presented as knowledge that can be sold to a market in the Middle East.

Government Services

Problem. There are no Palestinian government services in East Jerusalem. The PA provides some government services in the Jerusalem district.

Opportunities. In a final status situation the central government of Palestine will be located in East Jerusalem. The economic effects of this will be the following:

- Ministries and government offices will generate direct employment.
- The spending by government officials will boost the local economy.
- The demand for housing for government officials will increase.
- The private sector firms will want to have their offices in the capital of Palestine.
- The international organizations and countries with diplomatic relations will have their representatives in East Jerusalem.

Thus the total effect of government services will have a big impact on the economy of East Jerusalem.
Social Services

Medical Services

Health services for Palestinians in East Jerusalem are provided by Israeli hospitals and by Palestinian hospitals located in East Jerusalem, by hospitals located in Jordan, and by private general and specialized clinics.

Problems. The health sector has the following problems:

1. Health insurance is mandatory and is automatically deducted from one's income (12-15%). There is no Arab sick fund, so all insurance is dealt with by the Israeli sick fund. They prefer to do business with Israeli doctors and Israeli hospitals.

2. The quality of the services of the Arab hospitals is poor compared with the Israeli. Moreover, they compete with each other for patients.

3. The competition also comes from Jordan, where specialized services are cheaper.

Opportunities. There are big opportunities for this sector. Some possibilities are mentioned here:

1. An Arab sick fund for the one million Arabs in Israel would create an enormous fund that could give a boost to the Arab medical sector.9

2. Arab tourists coming to Jerusalem would like to be treated in an Arab environment. They would form another big market for the medical sector (pilgrims usually travel with health insurance).

3. The Arab hospitals in Jerusalem might gain from co-operation and specialization, thereby offering a variety of high quality services and improving the competitive edge in relation to both Israel and Jordan.

Education

The economic effect of the educational system - apart from being the suppliers for the labor market - comes from the interaction between higher education and the private sector.

Problem. There is only one Arab university in Jerusalem (Al Quds).

At present there is no systematic policy of stimulating the interaction between the university and the private sector.

Opportunities. The opportunities for the interaction between the private sector and the university can be developed along two lines:

1. Stimulate students to start a business at the university complex by providing the following facilities: housing, the use of research facilities, support and advice etc.

2. Develop programs to use faculty to solve problems of the private sector.

This could lead to using knowledge more effective in the private sector and the rise of more enterprises based on higher educated entrepreneurs.

Welfare, Religious and Non-profit Services

The charity organizations are consumptive and will not play an important economic role, apart from the waqf (trusteeships), which is an important player in real estate.

Personal Services

Cultural Entertainment

Problem. Cultural entertainment is an important element in the tourism package. But in East Jerusalem it is underdeveloped. There are no museums. There are two theaters (Al-Watani and Al-Kasaba). There are few cultural events apart from religious activities.
Opportunities. The development of cultural entertainment is economically important for two reasons:

1. It will be part of the tourist products (museums, theatres, and festivals).
2. It will be part of the economic environment of a modern cosmopolitan city irrespective of tourism. After work there needs to be more than a bed and a chair.

Hotels and Restaurants

Problem. There are 35 hotels with more than 2,000 rooms in total and 20 licensed restaurants in East Jerusalem. There are 2 four and no five star hotels. In general the restaurants are limited to the Arab cuisine. The brand names of the international hotel chains are missing in East Jerusalem.

Opportunities

1. A differentiation of hotels including five star hotels will attract a higher segment of the market. These hotels need to be located in East Jerusalem.
2. The restaurants must differentiate in order to appeal to different market segments, both in terms of the quality (more high quality restaurants) and in cuisine (a broader range).
3. Concentration of restaurants in one area (one or more streets) including a broad range of cuisine might in itself be a tourist attraction.

Repair and Other Personal Services

The personal services (cleaning, tailors, household servants) are not an important sector. However, the higher developed an economy is, the bigger this sector is.

Concluding Remarks on Service Sector

In general the service sector depends on the level of economic development. The more developed an economy is, the more advanced the services are. But even at the present level of economic development there is room for improvement in the quality of services.

However, in the Jerusalem district the level of services is also related to the prevailing political situation of occupation, which prevents some services from developing their immediate potential (for example transportation, financial services, media, and cultural services).

Optimization of the Economic Structure

In circumstances of peace some services in Jerusalem will be strengthened based on the current level of economic development.

The sector will get a boost from:
- Transportation: domestic transport will be freed from its present restrictions due to the closures.
- Financial services: The Arab banks will return to Jerusalem.
- Cultural services: Jerusalem will regain its position as a cultural center for Palestine.

Economic Growth

A new level of economic development as the result of economic growth in times of peace (primarily due to the tourism sector) will lead to the strengthening of existing services and the rise of new services.

Some examples of the strengthening of existing services are:
- Medical services will grow as population and income grows.
- The financial system will improve and diversify (reacting to higher incomes by offering a differentiated package of services).
- Private transport will grow (more cars).
Some examples of new services that will arise are:
Within the media-sector the advertisement sector and the multimedia sector will develop.
International transport will develop even to the extent that a new airport will be needed.

**Political Changes**

If the political settlement leads to East Jerusalem becoming the administrative center of Palestine, where the government resides, it will have at least the following economic consequences:
- Employment by government agencies will increase (as will the need for office space).
- The national television of Palestine will probably move to Jerusalem providing opportunities for the media sector to develop (including studios, production companies, advertisement agencies).
- Government related business projects (consulting, legal services, lobbyists, and engineering firms, for example) will move their offices to Jerusalem.

The growth of the service sector will also have physical consequences: more buildings, more office space, changes in the quality of public space, e.g., buildings, squares, and parks.

**3. Industry**

In the area of East Jerusalem district there are 215 establishments in the industrial sector, including 158 in Beit Hanina and Kafr 'Aqab.

*Problems.* The industrial base of Jerusalem is weak. It does not have a history of industrial development. There is some light industry located at Attarod. In the Abu Dis area there is a food processing company and the biggest Palestinian cigarette company. In the Wadi al Joz area there are some garages, carpenter shops and aluminum processing factories. In Al-Azarich there is a company for mixing concrete. So, industry in Jerusalem is underdeveloped.

*Opportunities.* The opportunities for industrial development in Jerusalem are limited. One possibility for developing industry is through the connection with knowledge centers. A metropolitan city like Jerusalem will develop knowledge centers (such as institutes for higher education and consulting companies). Industrial development elsewhere in Palestine should be linked to these knowledge centers.

**4. Information Technology**

Information technology is not a separate economic sector, but a technology. In its infant stage it is a sector because there are specific firms developing this technology. But its implementation in different sectors of the economy will increase its relevance beyond the number of firms that develop and implement this technology.

Information technology is based on two processes:
1. The use of chips which are programmed to enable machines to function without direct human interface.
2. The use of information in such a structured way that the machines can work with it.

The main aspects connected with IT are:
- Hardware (computers, networks, interfaces).
- Software (programs operating the hardware).
- Information generation (system analysis, internet, etc).

There are fewer than 10 IT-companies operating in Jerusalem. Many NGOs have found their way to the Internet. They maintain web-sites and have e-mail addresses.

*Problems.* The main problems with the IT-sector are as follows:
- One study concludes that the Palestinian IT sector is four to five years behind peer sectors in other nations in terms of overall competitive advantage.
An Economic Perspective for Jerusalem

- Lack of awareness of the social and economic importance of this sector, hence there is neither an IT focus nor a local point for IT.
- Scarcity of leading-edge software developers.

Opportunities. The main challenges for IT are:
- To create awareness in the population of the importance of this sector.
- To provide a climate in the educational system which stimulates the development of wizz-kids on different levels (primary, secondary and higher education).
- To create an infrastructure for the development of IT-companies (housing facilities, links with institutes of higher education).

In times of peace this sector might provide big opportunities for the co-operation between Israel and Palestine with Jerusalem being the pivot point.

5. Agriculture

General Remarks
In the area of the Jerusalem district there are 131 establishments in the agricultural sector.

Arable land in the district of Jerusalem is to be found in the following areas:
- Abu Dis: there is some live stock and some crops, mostly olives and vegetables
- As Sawahira has livestock and agricultural plant product, mainly olive and vegetables
- Between Beit Ikra, following Beit Surik, through Biddu to Beit

'Anan to the west and to the north there is Al Jip. These are the rural areas of the Jerusalem district and the main suppliers of small family farm production: chickens, eggs, vegetables and fruits.

In the Jerusalem district there are Bedouin families living between Abu Dis and Ma'aleh Adummim and Kadar. They have mainly livestock and produce milk and the local yoghurt.

Problem. The agricultural base of Jerusalem is weak.

Opportunities. The prospects for agriculture are not good. In relation to agriculture Jerusalem might play the following role:
1. Al Quds University has a department for food processing and engineering which can be linked to agricultural research.
2. If Jerusalem establishes warehouses for Gaza and the West Bank it will stimulate not only trade, but the growth of food processing firms.

6. Construction

General Remarks
There is one construction company in East Jerusalem. The economic role of construction is related to other economic sectors. Economic growth stimulates the building of new offices and houses.

7. Public Utilities and Infrastructure

Public utilities and infrastructure are maintained by the Israelis. Their economic function is limited to supporting the economic system.
Section Three: The Links between the Sectors

The analysis in Section Two outlined the challenges in different sectors of the economy and puts us in position to ask the main question for developing an economic perspective: what economic sectors have the best potential to generate economic growth?

Economic growth means reaching a higher level of production of goods and services and a better quality of these goods and services. Economic growth is the result of the input of land, labor, capital, technology and management in such a way that given a certain combination of these factors an optimum of production of goods and services can be attained.

The basic criteria for deciding the combination of input factors by economic sector are:

1. Which perspective generates maximum employment in the long term?
2. Which perspective strengthens the basis of the economy, i.e. ensures that the different sectors are getting stronger and influence one another in a positive way.

Suppose an economic aid program for Jerusalem were developed that amounted to say one billion dollars in five years. How would this money be spent?

Consider a scenario in which housing would be singled out as the most important sector to invest in. This might be considered for short term political reasons. But would it be wise for long term economic and political reasons?

To answer these questions we would have to estimate the effect of such an investment on other economic sectors and on unemployment. Further research would be needed to define the exact relations and the parameters involved. But on the basis of general observations we can make the following observations:

- An investment in the tourist packages has direct effects on employment in the tourist sector and on purchasing power as the result of the initial investments. But it also attracts purchasing power when it is there in the market, and strengthens other sectors, notably the service sector. This will increase incomes and lead to a demand in housing that could be financed by regular means.

- An investment in housing has direct effects on employment in the housing sector, but it does not attract purchasing power. In fact it needs purchasing power to be sustainable.

- The development of tourism will strengthen the service sector to such an extent that it will be able to generate economic growth on its own merits. The tourist package "Jerusalem - Conference Center of the Middle East" might be stimulated by the tourist package "Religious Capital of the World", and specifically conferences and meeting that are held on the basis of this concept. But once the infrastructure of conferences is there it can be the basis of attraction of conferences on other themes and become a center of attraction of purchasing power.

Consider the scenario in which emphasis is placed on industry. Even if we concentrate on light non-polluting industry (for example food processing) we have to consider the competitive edge of Jerusalem in this sector. Gaza or other parts of the West Bank are better suited for this sector, given their economic history and capabilities. Any investment in industry has to consider the fact Jerusalem has yet to catch up and currently is unable to compete effectively, which means that it will have little effect on other economic sectors.
The investment in tourism will have immediate effects on other economic sectors. Suppose the tourist package "Jerusalem-Recreation Park" park is developed. It will have immediate effects on distributive services (such as transport, communications, cultural entertainment, hotels and restaurants). The same holds good for other tourist packages. Further research would be needed to estimate more accurately the effects of these packages on the economy.

The scenario in which the Palestinian government moves to Jerusalem is in economic terms a bonus for the city. There is no competition. It will be there, and it will have positive economic effects on the city.

Our conclusion is that using the strength of Jerusalem-tourism is the basis for an economic perspective. The bonus government services will already be there, but the development of different tourist packages will lead to strengthening the service sector.

Of course an investment program will not only consider economic aspects, but also social and political factors. On the basis of social and political arguments, funds should be allocated to housing and other programs. On the basis of economic arguments, funds should allocated to economic sectors that optimize economic growth. A balance between these arguments should be found in the process of decision making.

We conclude that an economic program should concentrate on working out the packages in such way that they are intimately linked with the development of the service sector and use modern information technology to get into the 21st century.

Jerusalem and the Rest of Palestine

An economic perspective for Jerusalem should lead to a stronger economy for the rest of Palestine. If we were to base such a perspective on agriculture or industry, Jerusalem would enter in a competition with the rest of the West Bank (agriculture) or Gaza (industry). If the perspective is based on tourism and the service sector, Jerusalem could strengthen the West Bank both in terms of linking historical sites on the West Bank with Jerusalem and in stimulating agriculture on the West Bank. Gaza would gain from Jerusalem's function as a warehouse in the north-south trade.

A strong Jerusalem will expand its territory in the direction of Ramallah. Now Ramallah is profiting from the shift of purchasing power from Jerusalem due to the closure. When the closure is lifted, Ramallah will lose to some extent, but on the other hand it will gain from a stronger Jerusalem. The tourist packages could have spillover to Ramallah, with its classical Arab image.

Jerusalem and Israel

From an economic point of view, the Israeli economy would gain a lot when Jerusalem is free. The advantages lie in the following fields:

1. Tourist packages from Israel can be linked to tourist packages of Palestine. This would strengthen the peace process, but it will also have a positive economic impact on both Israel and Palestine.
2. Jerusalem can function as the gateway to the Arab economies with a service sector that accommodates Arab culture.

Economic Strategy

Thus the economic strategy for Jerusalem can be summed up as follows:

1. Base the economy of an undivided Jerusalem on a set of tourist packages.
2. Develop the service-sector in relation to the tourist. But there is a phase in economic development where the service sector will develop into an engine of economic growth and will attract purchasing power by itself. A long-term policy for the service sector can not limit itself only to the development of services in relation to tourism.
3. Catch up with global developments in technology and develop the information technology.

Translation into a Program

The translation of the strategy in an economic program depends on the following processes:

1. The political conditions under which a final agreement is reached between Israel and Palestine. When, to what extent and under which conditions will the Palestinian government establish itself in East Jerusalem? This will not only affect the level of government services available in Jerusalem, but will also determine the extent to which the full economic potential of Jerusalem can be utilized.

2. The extent to which linkages with Jerusalem City can be developed (Palestine, Israel, and the Middle East). These linkages will determine the kind of program that can be put up.

Judging the Perspective

In Section One we mentioned the perspectives from which to view an urban economy: local, regional, national and international. We will consider our proposed economic strategy (first tourism, then service) from these perspectives.

International Perspective

Compare for example agriculture and industry with tourism. From an international (and even global) perspective tourism in Jerusalem definitely has a competitive edge above the other sectors because of the historical and religious significance of the city. Furthermore, tourism will strengthen the West Bank with its historical sites, something one cannot expect from agriculture or industry.

Jerusalem can attract international purchasing power on its own. But it has another international dimension. It can be part of an international offer to tourists that is part of a regional tourist product (see the overview of tourism products).

Some subsectors of the service sector have an international dimension (transportation, warehouses in the north-south, trade communications, financial services). They would develop as the international profile of Jerusalem is fully exploited.

Thus from an international perspective the choice for tourism and services is clear.

National Perspective

From a national perspective (in relation to Gaza and the West Bank) the economic position of Jerusalem would concentrate on two aspects:

1. The capital of the Palestinian state. The administrative apparatus would move to Jerusalem. But it might be rational from an employment point of view to keep some part of this apparatus in Gaza and the West Bank. Being the capital does not necessarily mean moving the whole apparatus to Jerusalem. An analysis of the government apparatus has to distinguish between the parts that need central guidance and the parts that could be located outside the center. Of course, this presupposes a view on the nature of the Palestinian state which allows decentralization of the state apparatus.

2. The function of Jerusalem as a transit place in the north-south trade between Gaza and the West Bank would materialize in warehouses and shopping centers.

Regional Perspective

From a regional perspective (Jerusalem and the West Bank) tourism would again be the primary sector to develop for the following reasons:

1. Tourism is the sector that would give the region an attractive
appeal because of the link with historical sites on the West Bank.

2. Agriculture and consumer industry in the West Bank can profit from the economic growth due to tourism as a supplier of consumers (personal services - hotels, restaurants etc).

Local Perspective

From a local perspective the Old City will be the economic basis, not as a market place but as a tourist attraction. However, if the service sector is to be developed first in relation to tourism then later on its own, then plans will have to be developed for those service sectors with the best opportunities. They are:

- Government services (the state apparatus of Palestine).
- Communication (mass media, telecommunications, information services).
- Financial and insurance services.
- Hotels and restaurants.
- Cultural entertainment.

Conclusion

From an international, national, regional and local perspective tourism and the service sector are the optimal basis for an economic strategy for Jerusalem.

When we take into account the criteria for judging the economic vision (see Chapter Two) we see that this vision fits into these criteria.

1. The economic perspective contributes in realizing the social and economic potential of Jerusalem.

2. The economic perspective creates jobs for the people. In tourism job opportunities are realized for low-skilled labor. The service sector provides opportunities both for low and high skilled labor.

3. The economic perspective provides for a clean living environment.
Section Four: Actions

Planning for the Future

An economic perspective has to be translated into a practical program. And although there are many uncertainties (strongly related to politics), Palestinians cannot stop preparations for future long-term economic planning. The rationale for planning for future economic development by concluding joint principles for economic co-ordination and co-operation is two-fold:

- First, to present the suggested future arrangements that reflect win-win scenarios concerning Jerusalem for Israel and Palestine.
- Second, to prepare for the "day after" the opening up of the political dialogue with concrete proposals.

The arrangements and the preparations will find a common basis in the long-term perspectives and the long-term strategy that is agreed upon.

General Remarks

The economic perspective laid down in this document has some practical consequences we want to consider.

We will deal with the practical implications on two levels:

1. The relationship with the Israelis.
2. The preparation for long-term planning by the Palestinians.

Goals for Economic Co-operation

If the economic development of Jerusalem is a joint effort between Israel and Palestine the following aspects have to be taken into consideration.

First, the following goals have been set for an economic co-operation on Jerusalem:

- Define the principles for Israeli-Palestinian future economic relations in Jerusalem.
- Formulate specific sectoral proposed projects for future co-operation. These projects can concentrate on developing sectoral perspectives.
- Define an Israeli-Palestinian "Common Ground For Future Economic Relations For Jerusalem" which provides the following:
  - Stipulate a set of principles for the economic behavior of both parties.
  - Serve as the basis for ongoing conflict resolution on economic matters.
  - Co-ordinate long-term planning policies and co-operation in major infrastructure projects.
  - Regulate and enhance economic co-operation between both sides of the city.
  - Construct the support structures, which are conducive for the implementation of future economic understandings.

Economic Master Plan

Second, the development of an economic master plan for the city has to be considered in which the perspective and strategy are translated into concrete economic and infrastructural projects. It therefore seems important to create a long-term development plan, according to the following recommendations:
An Economic Perspective for Jerusalem

- Definition of an overall development plan for the Jerusalem based on the perspectives that are developed from joint discussion;
- Definition of urban development axes for the future, considering the current political situation and settlements policies;
- Establishment of a "social profile" of the population of the area;
- Establishment of land use plans for the area, taking into account the following issues:
  - definition of built up and unbuilt up areas;
  - definition of protected areas, such as historic city centers, cultural landscapes and natural parks;
  - definition of green areas in urban centers and the outskirts;
  - definition of industrial and services zones;
  - definition of areas for the development of housing projects;
  - definition of areas for sports and leisure activities, including camping sites.
- Development of specific master plans for the following infrastructural networks:
  - traffic and transportation networks for the area as a whole and their linkages with other cities, including parking, street design, sign posting, traffic lights, etc.;
  - water and sewage network, including extension and rehabilitation works, as well as storage, recycling facilities and sewage plants, electricity distribution networks, including proposals for increasing the capacity of the network, abolishment of overhead lines in historic city centers, etc.;
  - waste collection and waste disposal for the area;
  - tourism development and tourist circuits, including necessary information and training programs, hotel facilities, documentation.
- Establishment of an environmental control system or network.
- Surveys on and proposals for the improvement of:
  - health services,
  - social and economic conditions,
  - the educational system at different levels,
  - facilities concerning sports, exhibitions and cultural activities,
  - housing and related services, including needs for their rehabilitation,
  - preparations of guidelines and standards for new buildings.
- Definition of a concept for the conservation and restoration of monuments and cultural sites and the reuse of existing cultural buildings for other purposes based on a policy for the integration of urban renewal in the future development plan.
- Proposals for an appropriate administrative and institutional framework for the implementation of the Master Plan (institution building).
- Proposals for public awareness programs and community participation mechanisms.

The preparations for long-term economic planning have two dimensions: institutional and strategical.

Institutional

The preparation on the institutional level consists of the following:

1. A Palestinian municipality in whatever embryonic stage should have an economic department with the following tasks:
- Building a network with entrepreneurs. The network will develop the economic perspective and translate it into concrete programs.
- Putting up an investment fund for implementing the programs based on the perspective.
Organizing necessary institutional support of the economic program on a national and international level.

Preparing for the full fledge functioning of a municipality with rules and regulations by working out the rules and regulation for business in East Jerusalem (municipal taxes, environmental rules and regulations, registration of businesses etc).

2. The development of the tourist and service sector should be dealt with on different levels of the Palestinian state:

- The economic perspective for Jerusalem should be developed on a national level and a regional level.
- The Palestinian state should create the relations to develop Jerusalem from an international perspective.

Strategical

The strategical planning comprises the following aspects:

1. An intersectoral study has to be conducted dealing with the linkages between the sector and providing some parameters on the basis of which quantitative scenarios can be developed for long-term planning. This study must include relations and parameters dealing with the city, the district, the region, the nation and international factors. The scenarios must give indications on the effects of investments on economic growth and employment.

2. The ideas for translating the economic perspective into economic programs must come from all sectors of society: the business community, the intellectuals, the trade unions, the political parties, the social and religious organizations. An awareness campaign on the necessity for developing and implementing such a program will have to be initiated.

3. The parties involved in financing a long term economic perspective—investors and governments—must also be involved in developing the perspective.

Conclusion

An economic perspective for Jerusalem should be based on developing tourism in relation with the service sector using modern information technology.

This perspective from a Palestinian point of view should be developed with the parties concerned both in and outside of Palestine.

The perspective is the basis on which to deal with the Israelis on the future of Jerusalem.
End Notes

1. A cynical expression of this is to be found in the following citation of Teddy Kollek, a former Israeli mayor of Jerusalem: "Never have we given (the Arabs) a feeling of being equal before the law. They were and remain second and third class citizens... For Jewish Jerusalem I did something. For East Jerusalem? Nothing! Sidewalks? Nothing. Cultural institutions? Not one. Yes, we installed a sewerage system for them and improved the water supply. Do you know why? .... There were some cases of cholera, and the Jews were afraid that they would catch it, so we installed sewerage and a water system against cholera." Cited in the brochure JERUSALEM - Occupied and Divided. Jerusalem 1997.

2. In the theory of push and pull factors explaining migration to the cities this is the pull factor. The push factors are the mechanisation of agriculture which pushed labour out of the rural areas.

3. These elements are based on a paper by Hani Abu-Dayeh, vice president of NET Tours and vice chairman of Jerusalem I Tourism (JIT), entitled: "A Palestinian perspective on Dead Sea development." We are grateful for his permission to use his paper for this report.

4. Based on a three-night stay at a hotel rate of $50 per night and a spending of another $50.

5. Based on a yearly income of $8,000 and a labor cost component of 20%.

6. Jerusalem receives yearly two million tourist visitors. About 15% (300,000) stay in East Jerusalem.

7. Some services have elements of tangibility such as visibility and storability (computer software, theatre plays etc).

8. The privatisation resulted in cheaper telephone rates and shorter waiting periods for installing a line.

9. Some specialised services such as open heart surgery are much cheaper in Jordan than in Israel (about on quarter of the Israeli costs).

10. A rough estimate of this fund is as follows: Based on an average monthly income of NIS 1000 for 200,000 Arab families in Israel and 12% of the income for health insurance, a yearly income for the Arab sick fund would be around NIS 288 million.

11. One study estimates that in the whole of Palestine there are 1,800 people working full and part-time in 215 companies which generate a conservative estimate of $65 million in revenues. See Development: Industry Needs Assessment for Information Technology Center for Private Enterprise. Augustus. Ramallah. 1977: p.11.

Chapter Four

Urban Spatial and Functional Structure Plan for Jerusalem

Rassem Khamaisi
The conflict over Jerusalem has negatively affected its natural and balanced development. The conflict may be increasing the Israeli’s influence and control over Jerusalem, but in return they are weakening its structure and its ability to survive and prosper as a cultural, spiritual, and urban center. They are eroding its ability to balance between its available resources and its ability to develop them, and they are creating an imbalance between the real population and housing increases and those desired by Israel.

Inspection of the existing spatial plans for Jerusalem reveals that they have been devised to secure Israeli control over Jerusalem. The objectives and methodology of such plans have stemmed from an attitude that does not take into account the requirements of development of Jerusalem for all its residents. In fact, the plans have been drafted in such a way as to ensure Israeli interests through the realization of a certain geopolitical and demographic strategy.

The action-reaction approach is a well-founded pattern in the Palestinian-Israeli hostilities. Thus, it is no surprise that in other aspects of the conflict the Palestinian side also tries to ensure its interests in Jerusalem through its reactions to the Israeli initiatives. However, the Palestinians’ political, economic and social conditions have made them less successful in realizing their objectives. Hence, both the Palestinian and the Israeli sides try to realize their interests and objectives in Jerusalem through a battle for survival. Both the Palestinians and the Israelis feel that they are engaged in a battle for survival in Jerusalem, but the meaning of this concept differs between the two sides: the Israeli side occupied East Jerusalem “al-Qudes” and continues to consolidate its presence in it in accordance with a colonialist understanding based on the so-called “historical rights of the Jews”. Israel attempts to present the continuation of its occupation and settlement expansion in Jerusalem as a battle for survival. Meanwhile, the Palestinian side is under occupation and tries to confront and overcome this threat to its existence through its own understanding of survival.

Planning the urban and functional structure for Jerusalem in light of this survival mentality is not an easy task. It is a very difficult mission because acceptance of any planning concept that reflects this survival struggle, cannot be accepted by the other side.

Nevertheless, the objective of this paper is to attempt to overcome the existing survivalist mentality by the formulation of a plan that contributes to the development of Jerusalem as a city viewed by everyone as important. Such a plan must contain administrative and political arrangements enabling the realization of a minimum level of interests and requirements for the two conflicting parties. It must be based on mutual concessions; therefore, it does not provide each party with all its needs. However, it enables Jerusalem to overcome the era of conflict and to enjoy its special spatial, climatic, residential, housing, cultural and religious characteristics.
This study will examine the primary planning ideas and concepts concerning the spatial and functional development of Jerusalem. It takes into consideration the existing structure and the current trends and seeks to devise planning strategies for spatial development in Jerusalem that are capable of creating an international city in which all can live in dignity, prosperity and peace. We also seek a plan in which the natural and physical space is balanced, originality is preserved and prosperity and sustainable development are guaranteed. In sum, we seek a comprehensive planning idea for Jerusalem.

In Section One of this study we will present a brief historical overview of urban growth and spatial development in Jerusalem. In Section Two we will trace the historical path of urban planning in the city. Then, in Section Three, we will present salient background considerations that shape our planning strategy. These include elements of the status quo that any plan must acknowledge, guidelines the plan should meet, and key assumptions which underlie our proposed plan. In Section Four we propose our major planning concept, a combination of the Crescent Model and the utilization of a series of new gates. In Section Five, we will discuss strategies to realize the proposed planning concept.
Section One: Historical Overview of Urban Growth in Jerusalem

Throughout most of Jerusalem's 5000-year history, spatial development remained confined to the Old City area. Only after the middle of the nineteenth century has spatial development expanded outside the Old City walls. While this study is not about the history of Jerusalem, we will present a historical overview of spatial development in Jerusalem up to the present by focusing on its master plans and observing the major developments in each stage.

Spatial Urban Growth of Jerusalem

Most of the urban growth of Jerusalem from 139 AD to 1850 AD was concentrated inside the Old City walls. The Old City area has undergone a recurrent process of demolition and reconstruction: it is comprised of layers of buildings that have been demolished as a result of natural causes, such as the earthquakes of 747 AD and 1066 AD, or by the wars, such as those between 1077 and 1260 AD (Mustafa 1997, Cohen 1977).

Under Mamluk and Ottoman rule between 1253 and 1917 AD, Jerusalem witnessed almost seven hundred years of political stability. Buildings from this period remain in reasonably good shape unto the present. Additionally, religious buildings erected before the Mamluk period, but constantly renovated throughout the different epochs of history, have also remained functional. These include: the Church of the Holy Sepulcher (erected 328-335 AD), the Dome of the Rock (erected 685-691 AD), and the Al-Aqsa Mosque (erected 693-705 AD). (Bydoun 1992).

The golden age of construction in Jerusalem is the Mamluk Period (1253-1516 AD), especially during the eras of the Governor of Al-Sham Seif Eddin Tankaz Al-Nasiri (1293-1341), Sultan Muhammad Bin Qalaoun, and Sultan Qitibay (1427-1495) who moved his headquarters into Jerusalem. During this period the four Ma'athen of the Holy Sanctuary were erected, its Western Riwaq (Hall) was built, markets were established around its periphery and the thirty-three neighborhoods of Jerusalem were given their current shapes and named after the different religions and families (Drori 1990). Moreover, Jerusalem during this period became an academic center as nearly 60 schools, guilds and Khanqahs were formed to make it the hub of academic and cultural life in the region (Cohen 1990).

The Ottomans (1517-1850) continued to develop Jerusalem and to shape the form it is today; they built the Old City walls and city gates. They also supplied it with water from Suleiman Lakes near Artas village south of Bethlehem through the Al-Sabeel Canal to the Sultan Lake just outside the Old City walls, and from there to inside the Old City through a network of canals.

The Jerusalem City Wall is considered one of the city's most distinguished landmarks; it is the signature structure of the city. The wall was renovated and most of it was rebuilt by Sultan Suleiman the Great during 1536-1540 AD. It lies exactly on top of the wall that surrounded Jerusalem in 139 AD (Mustafa 1997: 16). It is 3,662 meters long and its height ranges between 11.6-12.2 meters. The Old City is accessed through eleven gates. Seven gates are currently open: Lions Gate, Herodion Gate, Damascus Gate, New Gate, Hebron (Jaffa) Gate, King David Gate and Al-Magharbeh Gate. The four remaining gates formerly opened in the morning and closed at night, but now they are per-
manently closed.

The wall began to be modified in 1889 when the New Gate was created to facilitate access to the Old City from the Notre Dame compound. A second modification was made in 1897 when an opening was made near the Hebron (Jaffa) Gate to enable the carriage of German Emperor Wilhelm II to enter the Old City. The “new” openings are a sign that a European influence had begun affecting Jerusalem’s spatial development. Moreover, as we shall see below, administrative changes and economic developments, as well as the opening of new roads, also had direct effects on Jerusalem’s urban development.

**Urban Growth outside the Old City Wall**

Until the middle of the 19th Century urban development in Jerusalem was concentrated inside the Old City walls. The exceptions were village nuclei in the area surrounding the Old City, such as in Silwan, Shara‘fàt, An Nabi Samwil, Shu‘fàt, Ath Thuri, and Al ‘Isawiya. In addition, some religious buildings were erected, such as Azzawieh Al-Jarrahieh (1201 AD) in the area currently known as Sheikh Jarrah, Zawiet Al-Kabkabe (1288 AD) near Ma‘manallah Cemetery and Azzawieh Al-Adhamieh (1361 AD) outside Herdion Gate. Further, there were palaces such as As-Sultan An-Nazer palace in Wadi El-Joz, the Sheikh Muhammad Ali Al-Khalili palace (1711 AD), currently known as Al-Sheikh’s palace and orchard, in the Bab Azzahreh area, Al-Khatib palace in Wadi El Joz and Al-Shihabi palaces in the Jabal Al Masharef area. These few scattered beginnings became an organized process in the second half of the nineteenth century and then an organized, directed and planned process in the beginning of the twentieth century. The causes of this transformation are as follows:

1. The regional centrality of Jerusalem in the wake of the proclamation of “Sanjaq Al-Quds” which set the city apart from the Al-Sham District and was directly managed by the Ottoman Administration in Istanbul. This proclamation converted Jerusalem from a secondary city to a central city which formed the center of three sanjaqs: Nablus, Akka (Akko) and Jerusalem. The Sanjaq Al Quds later formed the basis for the delineation of the boundaries of Mandatory Palestine. This centrality resulted from Jerusalem being the largest Palestinian city and from its unique religious and administrative status. Moreover, Jerusalem families were made influential by the Ottoman Empire in order to ensure their loyalty and to guarantee that they would not call for cessation from the Ottoman Empire.

2. The decision to establish the Jerusalem Municipality in 1863. This decision made Jerusalem the second city after Istanbul to receive municipality status and authorized its local administration to collect taxes, supervise the building process, build roads and establish an infrastructure.

3. European infiltration in Palestine, through the privileges bestowed upon the different Christian dominations or through the European’s efforts to inherit the Ottoman Empire. The special status enjoyed by Jerusalem resulted in the establishment of churches, consulates and institutions affiliated with the European states. In fact, every European state sought to be represented in Jerusalem.

4. The increase of Jewish immigration to Jerusalem and other parts of Palestine

5. The establishment of a transportation network linking Jerusalem to the surrounding cities and urban centers. The Jerusalem-Jaffa road was asphalted in 1870, and the Jerusalem-Nablus road was completed in 1907. Moreover, Jerusalem was linked to Jaffa (Palestine’s port) through a
railway completed in 1892. Jerusalem was the hub of the transportation network and this contributed to its economic and urban development.

This development accelerated the population growth and made it impossible to confine urban expansion to the area within the Old City walls. In 1872 the population of the Jerusalem District was estimated at 58,000 residents but by 1922 it had increased to 148,000. Moreover, in 1872 the population of Jerusalem proper was estimated at 14,300 residents but by 1922 it had increased to 62,600 (Mustafa 1997). In order to absorb this growth of both the Arab and Jewish populations, it was necessary to establish new neighborhoods outside the walls:

- The Sheikh Jarrah neighborhood began expanding in 1890 around the Al-Mufti palace that had been established in 1840;
- The Husseiniya neighborhood (The American Colony) began expanding around the house of Salim Al-Husseini, the mayor of Jerusalem in 1882, the house of Rabah Al-Husseini that was built in 1885 and Orient House which was built by Aref Al-Husseini in 1897;
- The Wadi El Joz neighborhood whose establishment began in the eighth decade of the nineteenth century;
- The Bab Assahire (Herodian Gate) neighborhood that began expanding around Al-Sheikh's palace after 1860 (it became the site of Al-Rashidieh School which was built in 1906);
- The Bab al 'Amud neighborhood that began expanding as a mixed (Jewish and Arab) neighborhood around Sa'ad and Sa'id area in 1875 but later became a purely Arab neighborhood. This neighborhood attracted European buildings like the St George Anglican compound 1899, St. John's School (1903) and the Schmidt College and its compound (1903);
- The Al-Musara neighborhood in which construction began in 1875 and later evolved into a commercial-residential neighborhood;
- The Ath Thuri neighborhood which evolved around a nucleus inhabited by nearly 120 people in 1596 but in 1870 became a new developed neighborhood inhabited by the families of Al-Asali, Al-Ja'ouni and Al-Istani;
- The Bab Al-Khalil (Jaffa Gate) and Ma'manallah neighborhoods that were established towards the end of the nineteenth century;
- The Al-Baq'ah neighborhood in which construction began at the German Colony in 1873;
- The Al-Qatamon neighborhood in which the first building appeared in 1875.

In addition, mixed (Jewish and Arab) neighborhoods appeared during this period such as:

- Al-Talbieh.
- Ratsion.
- The Coptic Hanave'im Street.
- Joret Al-Innab.
- Al-Shamama'ah neighborhoods on the Jerusalem-Bethlehem road.

In addition to the above-mentioned mixed neighborhoods, the second half of the nineteenth century witnessed the establishment of purely Jewish neighborhoods outside the Old City:

- The Shkenot Sha'anim neighborhood (1860);
- The Mea Sha'arim neighborhood (1874);
- The Beit Israel, Mehanne Yehuda and Sha'are Tze'deq neighborhoods (1882-1897);
- Zekhron Moshe (1906);
- Giv'at Sha'ul (1910).
Furthermore, cultural buildings and landmarks, which formed the basis of the urban development of Jerusalem, were established during the period between the second half of the nineteenth century and the beginning of the First World War. Such buildings include the Russian Compound (1858), the Notre Dame compound (1884), Ratisson compound (1884-1914), the Ophthalmic Hospital at Al-Baq'ah (1882), Shneller (The Syrian Orphans School-1860), and the Augusta Victoria compound (1907-1910).

Returning again to the European infiltration of the old city, it should be noted that they contributed to the establishment of buildings and neighborhoods outside the Old City walls and also contributed to the establishment and renovation of some churches inside the Old City. Large buildings were established outside the Old City walls because there was no space for the establishment of such buildings inside the walls as well as because the different European communities sought to make statements about their role and importance in Jerusalem.

It should also be noted that Arab urban expansion in Jerusalem until the beginning of the twentieth century was adjacent to the Old City walls, whereas most of the Jewish neighborhoods established during that period were in West Jerusalem, especially along the Jerusalem-Jaffa road.

Urban Growth in Jerusalem during the British Mandate: 1918-1947

Urban growth and expansion in Jerusalem continued during the British Mandate, especially after Jerusalem was proclaimed the capital and the administrative center of Mandatory Palestine. Other factors contributing to growth during this period were the upsurge of Jewish immigration to Jerusalem and the establishment of Jewish and additional European institutions. For example:

- The Hebrew University was established on Al Masharef Mountain between 1918-1925;
- Terre Santa College and The Gesoiit Institute in 1928;
- King David Hotel, Palace Hotel and Jerusalem City Hall in 1930;
- The Al-Sabe' Building was established by the Italian Insurance Company in 1930;
- Adison Cinema in 1932;
- The Youth Mens Christian Association (YMCA) building in 1933;
- The Palestinian Rockefeller Museum in 1934 and, also in 1934, the High Commissioner's Palace, which was initially chosen to be the Augusta Victoria compound, moved to the government headquarters at Jabal Al Mukkabber;
- Hadassah Hospital was established on Al Masharef Mountain in 1939.

This urban spatial expansion of Jerusalem was accompanied by the growth of its Arab and Jewish populations, the expansion of the built-up area and an increase in the population density in the neighborhoods that had been previously established.

Between 1922 and 1947 the population of Jerusalem increased by 165%, from about 62,000 to 164,000. The Jewish population increased by about 192%, while the Arab population increased by nearly 132%. For more details please see Table 1.
Table 1. Population Growth in Jerusalem, 1922-1947

<table>
<thead>
<tr>
<th>Year</th>
<th>1922</th>
<th>1947</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arabs</td>
<td>Jews</td>
</tr>
<tr>
<td>National Affiliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Old City</td>
<td>16,608</td>
<td>5,639</td>
</tr>
<tr>
<td>The New City</td>
<td>11,510</td>
<td>28,322</td>
</tr>
<tr>
<td>Total</td>
<td>28,118</td>
<td>33,971</td>
</tr>
<tr>
<td>% in The New City</td>
<td>40.9</td>
<td>83.4</td>
</tr>
</tbody>
</table>


The above table demonstrates that the population of the new city increased to more than 78% of Jerusalem's total population in 1947, and that most of the Jewish population (97.6%) settled in the new city (Bin Arih 1990). The population growth was accompanied by growth of the number of houses from 21,403 houses in 1931, including 5,853 in the Old City, to about 40,000 houses on the eve of the 1948 war. Those houses spread over 51% of the total area under the jurisdiction of the Jerusalem Municipality at that time (Mustafa 1997).

Concerning the residents' spatial distribution, as we noticed, Jews were concentrated in the western part of Jerusalem, especially around the Jerusalem-Jaffa road, while Arabs were concentrated in the Old City and around it, especially around Jerusalem's northeast-southwest axis. Meanwhile, the eastern area, which included Al Masharef Mountain and the Mount of Olives, remained almost uninhabited. It is worth noting that spatial separation on ethnic grounds early formed the basis of ideas on the partition of Jerusalem, such as Sir W. Fitzgerald's partition plan of 1945.

Jerusalem's commercial center was also divided into two major areas: The Old City area and the outer area between from Jaffa Gate and the New Gate and extending along Jaffa road up to Mehanne Yehuda. Other small commercial centers were distributed in the different neighborhoods. Industrial development during this period was limited, however small workshops were distributed between the Old City and the new city.

The conflict between the Arabs and Jews during the British Mandate was accompanied by a process of urban expansion centered around Jerusalem. This conflict included the battle over the control of local institutions, land ownership and urban expansion. British control over the central administration gave priority to the Jewish interests in the process of development and also facilitated their settlement in Jerusalem and in the rest of Palestine. This conflict also contributed to the evolution of ethnically separated neighborhoods. Jewish urban growth was directed westwards for the following reasons:

- The easy topographic structure and the absence of physical impediments to expansion.
- The association of the Jews in Jerusalem with the Jews in other centers in Palestine such as Tel Aviv, Haifa and Tiberias.
- The roads connecting Jerusalem to these developed centers were built to the west of Jerusalem.
- West Jerusalem area was almost vacant and it was easier to own land there.

In sum, the urban expansion of Jerusalem during the Mandate period was consolidated along and to the west of the Nablus-Jerusalem-Bethlehem road, especially along the Jaffa Road. The expansion of Jerusalem promoted the expansion of the surrounding villages, which later became spatially and functionally connected with Jerusalem.
brew University on Al Masharef Mountain and to intercept the Arab urban expansion along the Jerusalem-Nablus road.

3. Establishing a belt of Jewish settlements along the boundaries of the expanded Jerusalem. This belt was established in two stages: The first was the establishment of settlements Giv'at Serafim, Ramat Ashkel and Giv'at Hammitar and later a belt surrounding the extremities, including Ramot, Neve Ya'akov and Gilo. The second was a belt of settlements outside Jerusalem that included Ma'ale Adumim, Pisgat Zeev, Avir Ya'akov, Gershon Ezion.

4. Consolidating and strengthening these settlement belts by connecting them through a network of comfortable roads that ensured their urban continuity, which at the same time inhibited the integrity of the Palestinian urban expansion.

5. Consolidating the Jewish presence in the Old City through: a) the demolition of Al-Magharbeh, Al-Sharaf, Al-Midan and King David neighborhoods; b) and the expulsion of their Palestinian residents; and c) the establishment of new Jewish buildings to be inhabited by Jews instead of the Palestinians.

6. Increasing the Jewish population, which in 2001 reached 454,600 Jews and formed about 8.6% of the total Jewish population of Israel. This further solidified Jerusalem's ranking as the largest city in Israel.

7. Besieging and inhibiting the Palestinian urban expansion to prevent it from forming ethnic urban continuity and to keep the Palestinian population of Jerusalem under 30% of its total population.

Israel's utilization of its military strength to control Jerusalem and to create a different urban status quo in Jerusalem was the characteristic of this epoch. 25,000 dunums of Arab land in the area annexed to Israel after 1967 were confiscated to establish 15 new settlements inhabited by Jews only. In 1993 the number of residential units in those settlements was estimated at 45,000. Nonetheless, the urban structure in Jerusalem is still divided into two parts: Palestinian and Israeli. The Palestinians' refusal to concede to the Israeli control resulted in the establishment of dual commercial and administrative centers to serve the Palestinian population in Jerusalem, which had increased by 214% as shown in the following table:

Table 2. Population Growth in Jerusalem, 1967-2001

<table>
<thead>
<tr>
<th>Year</th>
<th>1967</th>
<th>2001</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabs</td>
<td>68.6</td>
<td>215.4</td>
<td>214</td>
</tr>
<tr>
<td>Jews</td>
<td>197.7</td>
<td>454.6</td>
<td>130</td>
</tr>
<tr>
<td>Total</td>
<td>266.3</td>
<td>670.0</td>
<td>151</td>
</tr>
</tbody>
</table>

Source: Choshen 2002.

Table 2 demonstrates that in 34 years the total population of Jerusalem increased by 151% while the Palestinian population increased by 214%. This state of affairs resulted in the evolution of an urban functional structure characterized by the following:

1. Expansion in accordance with the model of a central city having a central historical heart and residential extremities containing secondary residential centers.

2. Urban continuity beginning at Ramallah and ending at Bethlehem on a north-south axis and extending from the demolished Lifta and Deir Yassin villages in the west to Mishor Adumim in the east. This urban continuity covers about 64,000 dunums with varying densities and land uses.
3. Different building and settlements patterns in terms of their shape, density and height. It is very easy to differentiate between the Palestinian and the Israeli neighborhoods; the Israeli settlements were initiated as uniform government projects while the Palestinian neighborhoods expanded as a result of numerous and diverse private initiatives.

Data on the utilization of land in Jerusalem indicate that more than 61% of the area under the jurisdiction of Jerusalem Municipality is utilized. The following table displays the distribution of land uses, which form the urban spatial structure of Jerusalem.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (dunums)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>42,804</td>
<td>34.8</td>
</tr>
<tr>
<td>Industry</td>
<td>4,059</td>
<td>3.3</td>
</tr>
<tr>
<td>Institutions</td>
<td>5,166</td>
<td>4.2</td>
</tr>
<tr>
<td>Mixed Uses</td>
<td>2,583</td>
<td>2.1</td>
</tr>
<tr>
<td>Hotels and Tourism</td>
<td>738</td>
<td>0.6</td>
</tr>
<tr>
<td>Public Gardens and Parks</td>
<td>16,113</td>
<td>13.1</td>
</tr>
<tr>
<td>Private Uses</td>
<td>3,813</td>
<td>3.1</td>
</tr>
<tr>
<td>Total Utilized</td>
<td>75,276</td>
<td>59.6</td>
</tr>
<tr>
<td>Open and Agricultural Areas</td>
<td>51,124</td>
<td>40.4</td>
</tr>
<tr>
<td>Grand Total</td>
<td>126,400</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The data of the above table argue that the area of the uninhabited land (including gardens and parks) adds up to more than one half of the total area under the jurisdiction of the Jerusalem Municipality. Some of this area can be utilized and the rest can remain green land. This distribution of land uses also demonstrates that more than one third of the total area of Jerusalem is currently residential and that nearly two fifths of its total area is still undeveloped and remains agricultural or uncultivated. If we inquire into the distribution of land uses only in the East Jerusalem area that was annexed to West Jerusalem Municipality in 1967 (an area of 70,400 dunums), we find that 37,348 dunums are located outside the planned area and that 23,548 dunums have been confiscated in order to establish Jewish neighborhoods. The remaining 9,504 dunums, only 13.5% of the total area of East Jerusalem, have been allocated for Arab construction.

This epoch of urban growth in Jerusalem is characterized as a period of rapid directed growth (see Maps 2A and 2B) aimed at creating a political/demographic/urban state of affairs insuring Israeli supremacy and Palestinian dependency.

This urban state of affairs evolved as a result of an action-reaction principle rather than directed rational planning aimed at fulfilling the residents' needs. Both the Palestinians and the Israelis "fought for survival" in Jerusalem but the difference was that the Israelis fought for survival through the continuation of colonial expansion made possible by the possession of the power and the resources. The Palestinians possessed neither and therefore their battle for survival was a short term battle focusing on confronting Israeli control. There is no doubt that the wide gap in the availability of financial resources and economic development between the Palestinians and the Israelis has contributed to differences in the development of Jerusalem. That said, both the Palestinians and the Israelis have grown up in Jerusalem in spite of the conflict and the competition that has accompanied this urban growth and expansion.
Section Two: Development of Urban Planning in Jerusalem

Before and during the 19th Century, Jerusalem developed in accordance with uncodified and unofficial plans (Shapira 1996). We were unable to have access to those plans and therefore they were not examined. Those plans were prepared by Muslim, German and Greek planners and architects who focused on the renovation of neighborhoods and construction of roads in and to the Old City. Codified urban planning in Jerusalem did not start until the British occupation of Jerusalem in 1917 (Khamaisi 1997). Official physical planning began on April 8, 1918 when Ronald Storz, the military governor of Jerusalem, issued a decree calling for the necessity of obtaining building permits for any building operation inside the Old City or within 2,500 meters from outside of Damascus Gate. This decree was not accompanied by any official master plan determining the use of land, therefore, General Allenby instructed Alexandria City Engineer Mclean to prepare a master plan, taking into consideration Jerusalem’s special status. Mclean’s plan is the first official drawn master plan of Jerusalem that we have.

The development of urban planning in Jerusalem can be divided into three stages: The first is the British Mandate Period: 1918-1948; the Second is the Divided City Period: 1948-1967; the third is the compulsory "Reunification" of Jerusalem under Israeli sovereignty: 1967-1998.

Planning in Jerusalem during the British Mandate

During the first stage five master plans were prepared for Jerusalem, of which three are considered to be directive: the Mclean Plan of 1918, the Geddes Plan of 1919 and Geddes-Ashbee Plan of 1922. The Mclean Plan used the Old City as a basis because it formed a separation line between Al Masharef Mountain, the Mount of Olives, Ras AlAmud and Silwan to its east, and the new area that was prepared for development to the west. The plan proposed seven roads, including the railway, beginning at the northern and western boundaries of the Old City. The seven roads were linked by internal and external circular roads. The new city was designed around this network of roads which allowed easy linkage to the surrounding cities and areas in Palestine. McLean’s plan gave special attention to the planning of the Old City which was viewed as a gem in the heart of Jerusalem; building within the Old City walls was frozen and the use of construction materials incompatible with the historical buildings in the Old City was prohibited. The area included in his plan reached 17,910 dunums of which 10,020 dunums (56%) were allocated for building and development, 5,990 dunums (33.5%) were allocated for limited building and development and 1,900 dunums (10.5%) were con-
sidered an area in which planning and development were prohibited or frozen (see Plan Outlines). McLean's directive plan formed the basis of the latter master plans of Jerusalem.

The Geddes Plan of 1919 depended on the principles laid out in the Mclean Plan but considered the Hebrew University that was being built on Al Masharef Mountain to the east of the Old City as its cornerstone. By comparison, the Mclean Plan considered the rail station to the west of the Old City as its cornerstone. In terms of the land uses, Geddes plan included an area of 17,800 dunums of which 11,790 dunums (66.2%) were allocated for building and development, 5,180 dunums (29.1%) were allocated as an open area and 850 dunums (4.7%) was the Old City.

In 1922, the Geddes-Ashbee Plan sought to combine the Mclean and the Geddes plans and to develop the resulting merger. The additions in this plan were as follows:

Table 4. Proposed Distribution of Land Uses in the Geddes-Ashbee Plan of 1922

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (dunums)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential neighborhoods and commercial activities</td>
<td>14,370</td>
<td>64.8</td>
</tr>
<tr>
<td>Industry</td>
<td>1,510</td>
<td>6.8</td>
</tr>
<tr>
<td>Special areas (Old City, Silwan, Hebrew University, Shneller)</td>
<td>1,420</td>
<td>6.5</td>
</tr>
<tr>
<td>Open areas</td>
<td>4,860</td>
<td>21.9</td>
</tr>
<tr>
<td>Total</td>
<td>22,160</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A brief review of these plans will show that they aimed at regulating and even prohibiting construction in the Old City while encouraging it towards the west, northwest and southwest. They also demonstrate that the area to the east of the Old City was kept open. Jerusalem was linked to its urban surroundings by a road network and a railway. This transformation in planning came in response to the urban growth and expansion of Jerusalem.

Following the three directive plans, two other plans (the Holliday Plan of 1930 and the Kendall Plan of 1944) were prepared for Jerusalem and were officially ratified during the British Mandate. These plans aimed at keeping up to date with the global advancement of urban planning which was developing steadily to cope
with the urban problems resulting from modernization. The Holliday Plan depended on a calculated quantitative program and included a detailed system of regulations and instructions supporting its implementation. Moreover, it built on the roads network of the earlier directive plans. It classified roads into three levels and wove together a cohesive network of circular and longitudinal roads, starting from the northwestern corner of the Old City. Some of the major additions that appeared in this plan include the following:

1. Building was permitted on the eastern sides of the Mount of Olives and Al Masharef Mountain and prohibited on their western sides to ensure an open area overlooking the Old City.
2. The Old City became the core of all development plans.
3. Zoning was codified to control and regulate construction and development in Jerusalem.
4. Some areas in the Old City were designated as revival and renovation areas and were marked in the plan as areas for demolition.

5. Jaffa road was chosen as the backbone of the roads network and the services and commercial activities.
6. Industrial zones were to be established around the railroad.

**Table 5. Uses of the Planned Land in the Holliday Plan of 1930**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (dunums)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential area (including the area marked for demolition and renovation)</td>
<td>31,918</td>
<td>79.2</td>
</tr>
<tr>
<td>Commercial area</td>
<td>942</td>
<td>2.5</td>
</tr>
<tr>
<td>Industrial area</td>
<td>736</td>
<td>1.8</td>
</tr>
<tr>
<td>Open areas</td>
<td>5,431</td>
<td>13.1</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>680</td>
<td>1.4</td>
</tr>
<tr>
<td>The Old City and Silwan</td>
<td>733</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40,440</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The Holliday Plan is considered the first codified plan to be officially ratified. The second plan to be codified was the Kendall Plan of 1944. It was prepared for Jerusalem during the Second World War and during an era of increased conflict in Jerusalem between the Arabs and Jews.

The Kendall Plan is characterized by the following:

1. The plan depended on a detailed program (Aspect-Prospect) based on spatial and social figures.
2. The plan included a map and a detailed system.
3. The roads network was divided into four levels and the design proposed in the previous plans was adopted.
4. Residential areas were classified into several sub-areas.
5. Attention was given to designing the urban space through preserving the skyline.
Kendall Plan 1944

For further details on the Kendall Plan please see Map 3 and the table below.

**Table 6. Kendall Plan Land Uses**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (dunums)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential area (six sub-areas)</td>
<td>32,535</td>
<td>77.4</td>
</tr>
<tr>
<td>Commercial area</td>
<td>985</td>
<td>2.3</td>
</tr>
<tr>
<td>Industry and Trade</td>
<td>948</td>
<td>2.2</td>
</tr>
<tr>
<td>Open areas</td>
<td>6,220</td>
<td>14.8</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>600</td>
<td>1.3</td>
</tr>
<tr>
<td>The Old City and Silwan</td>
<td>742</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42,030</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The first stage of urban planning for Jerusalem can be said to have laid the foundations of modern planning in Jerusalem and of protecting the Old City and its surroundings. Mandatory planning of land uses and building instructions directed planning in Jerusalem in (discussed below) stages, and some of it is yet valid today. The objectives of the plans prepared during this stage were to implement modern planning and to preserve the Old City. Nevertheless, we do not find that planning ideas were deduced from the Old City. Instead, they presented various planning concepts that depended on the star and crescent models, as we will demonstrate later.

**Planning in Jerusalem during the Partition Stage**

After the 1948 War, Jerusalem was divided into two parts: an Arab part annexed to the Hashemite Kingdom of Jordan and an Israeli part that became the capital of Israel. During this period various master plans were prepared for each part of the city. The Jordanian part included 13,580 dunums (33.8% of the total planned area) while the Israeli part included 25,650 dunums (63.9% of the total planned area) an additional 930 dunums outside the municipal boundaries of Jerusalem (2.3% of the total planned area) were included since the planned area was slightly larger than the actual area under the jurisdiction of Jerusalem Municipality.

The partition of Jerusalem converted it from the geographic and administrative center of Palestine to a political, economic and administrative extremity. The partitioning also influenced planning and the directions of development in Jerusalem. In the Jordanian sector, Mandatory plans remained operational until the Jordanians prepared a master plan in 1963. This plan was also prepared by the British planner Kendall, and it directed construction along a longitudinal north-south axis that followed the Jerusalem-Nablus road until Beit Hanina. However, there were two serious defects.
in this plan: 1) it excluded land uses for governmental and national purposes, and 2) most of the proposed land uses were oriented towards the local residents instead of the entire country, in contrast to the proposed land uses in West Jerusalem.

By comparison, during this period two master plans were prepared for the western part of Jerusalem. The first was the Row Plan of 1949 that included all of Jerusalem, as if it had not been partitioned; however, it focused on the Israeli western sector. Because the city was disjointed from the east, north and south the transportation plan aimed at the construction of several roads linking Jerusalem from the west to Tel Aviv. Therefore, the circular character of the roads network became complicated. Moreover, the designation of Jerusalem as the capital of Israel resulted in the proposition of a governmental administrative center to balance the "lost" nucleus of the old city. This plan also encouraged building on the top of hills and mountains and left the valleys as green areas. Furthermore, it did not allocate residential areas but instead left them to be determined through detailed master plans prepared by the municipality.

The second plan was the Shabeb Plan of 1959 that is better known as "Master Plan Number 62". This plan merged the planning concepts laid out in the Kendall Plan of 1944 and the Row Plan of 1949. It focused on giving detailed building instructions and restoring the circular character of the roads network in the western sector of Jerusalem; however, it ignored the continuation of eastward development in Jerusalem and stressed eastward development. This plan was officially approved as an alteration of the Mandatory plan, thereby codifying Row's planning concepts and ideas. Moreover, this plan called for the establishment of a governmental center in West Jerusalem and linked it to the commercial center around Jaffa Road. Furthermore, it allocated vast areas for industry.

### Table 7. Proposed Land Uses in the Shabeb Plan of 1959

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (dunums)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Area</td>
<td>13,461</td>
<td>36.1</td>
</tr>
<tr>
<td>Commercial Area</td>
<td>679</td>
<td>1.8</td>
</tr>
<tr>
<td>Industry</td>
<td>1,835</td>
<td>4.9</td>
</tr>
<tr>
<td>Transportation, Airport, Rail Station and Fuel Area</td>
<td>315</td>
<td>0.8</td>
</tr>
<tr>
<td>Private &quot;Rural&quot; Areas</td>
<td>1,013</td>
<td>2.8</td>
</tr>
<tr>
<td>The Government Village</td>
<td>573</td>
<td>1.5</td>
</tr>
<tr>
<td>Public Areas and Institutions</td>
<td>1,669</td>
<td>4.5</td>
</tr>
<tr>
<td>Open Public Parks</td>
<td>14,460</td>
<td>38.8</td>
</tr>
<tr>
<td>Private Public Parks</td>
<td>2,379</td>
<td>6.5</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>350</td>
<td>0.9</td>
</tr>
<tr>
<td>Unplanned Areas</td>
<td>536</td>
<td>1.4</td>
</tr>
<tr>
<td>Total</td>
<td>37,270</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Planning during this stage can be described as official but not practically aimed at directing development in both sectors of Jerusalem. Nonetheless, planning perspectives expressing the changing regional and national status of Jerusalem were devised. The plans approved during this stage for both sectors of Jerusalem are still the official operational plans unless they were adjusted through detailed local plans.
Planning after the Reoccupation and Compulsory
Reunification in 1967

The Israeli occupation of East Jerusalem and the rest of the
West Bank during the 1967 War re-transformed Jerusalem from
a city on the periphery to the geographic center of Israel. Planning
for Jerusalem during this stage began in 1968 when the Is-
raeli Jerusalem Municipality approved the preparation of a new
plan for the Jerusalem Municipality (Shviid 1996). This plan in-
cluded both the western and eastern parts of Jerusalem including
the surrounding villages that had been annexed to Jerusalem
in accordance with geopolitical and demographic considera-
tions (Cohen 1977; Benvenisti 1996). This plan was prepared with
the aim of securing Israel's sovereignty over Jerusalem through the
allocation of land for the establishment of Jewish settlements all
over the city. Moreover, it marked a large area of land as green
and allocated only a small fraction of the total area of Jerusalem
for Palestinian building.

This plan is characterized as a directive plan which estab-
lishes a planning image of Jerusalem and forms a basis for the
preparation of detailed plans for future settlements; however, it
has not been approved. Additionally, it devised a roads network
aimed at enforcing and consolidating the geographic continuity
between the western and eastern parts of Jerusalem. Further, it
allocated areas for Israeli construction in order to enforce the
Jewish geographic continuity at the expense of fragmenting the
Palestinian geographic continuity and urban development.

In summary, the objectives of the 1968 Master Plan for Jeru-
usalem were:

1. To create spatial/physical circumstances abetting suitable
   and effective urban development;
2. To redesign the city to accord its status as the capital of
   Israel and as a holy city that is spiritually extremely impor-
tant to much of the human race. The plan divided Jerusa-
lem into three main areas:
   - The heart that included the Old City, the surrounding valleys
     and the Mount of Olives.
   - The core that included the surroundings of the Old City until
     Armon Hanatsif in the south, Mehanne Yehuda in the west
     and Al Samar Land and the French Hill in the north.
   - The periphery that included residential neighborhoods, in-
     dustrial zones and commercial and service areas.

The road network was divided into three levels: main arterial
roads, arterial roads and local roads. Additionally, the following
instructions and guidelines have been devised to assist in the
implementation of the plan.

1. The shift from the current state of affairs to that desired in
   the plan shall be gradual, slow changes heading toward the
   desired state of affairs and aimed at fulfilling the planned
   objectives.
2. Priority shall be given to the renovation of poor neighborhoods.
3. The majority of building projects shall be large scale projects
   aimed at the establishment of complete neighborhoods, yet
   scattered residential building shall be allowed to continue.
4. Buildings shall not be higher than three floors in the Old City
   and its surroundings, seven floors in the ordinary residential
   areas and 12 floors in the city center. The construction
   of high rise buildings shall be allowed outside the core, pro-
   vided they do not affect the visibility of the old city and are
   erected in accordance with special plans.

The roads plan depended on the longitudinal model. It stipu-
lated the construction of two main arterial roads along which the
city was to be developed; the first was the Nablus-Hebron road
that included a tunnel west of the Old City and the second was
the Tel Aviv-Amman road that dissected Jerusalem south of the
Old City. The plan also stipulated the construction of parallel roads along the two main roads, such as the French Hill-Lifta road north of Jerusalem and the Rail Station road south of Jerusalem.

The proposed land uses in this plan are displayed in Table 8 below.

### Table 8. Proposed Land Uses in the 1968 Master Plan for Jerusalem (According to the Development Plan)

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (dunums)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Area</td>
<td>28,900</td>
<td>26.3</td>
</tr>
<tr>
<td>Civic-Cultural Center</td>
<td>1,300</td>
<td>1.2</td>
</tr>
<tr>
<td>Urban Center</td>
<td>2,200</td>
<td>2.0</td>
</tr>
<tr>
<td>Commercial Area</td>
<td>300</td>
<td>0.3</td>
</tr>
<tr>
<td>The Government Village</td>
<td>400</td>
<td>0.4</td>
</tr>
<tr>
<td>Public Institutions Area</td>
<td>5,800</td>
<td>5.3</td>
</tr>
<tr>
<td>Industrial Area</td>
<td>4,800</td>
<td>4.4</td>
</tr>
<tr>
<td>Transportation Establishments</td>
<td>3,000</td>
<td>2.7</td>
</tr>
<tr>
<td>Open Areas</td>
<td>46,900</td>
<td>42.6</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>2,000</td>
<td>1.8</td>
</tr>
<tr>
<td>Main Arterial Roads</td>
<td>7,000</td>
<td>6.3</td>
</tr>
<tr>
<td>Areas for Future Development</td>
<td>7,400</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>110,000</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>


Analysis of the proposed land uses reveals that nearly 50% of the land has not been allocated for specific uses. Some of this land has later been converted to Jewish settlements like Ramot, Rehavia Shu'fat, and Pisgat Ze'a-v. Other parts have been allocated for administrative, governmental and cultural uses aimed at consolidating Jerusalem as Israel's capital and official administrative center.

Although this plan has not been officially ratified by the Israeli planning institutions, it has been taken into consideration in the designing of the road network, the distribution of services and the allocation of land uses in subsequent detailed plans. Additionally, it has been taken into consideration in determining the use of 25,000 dunums that have been confiscated from their Arab Palestinian owners and expropriated by the Lands of Israel Department for the establishment of Jewish neighborhoods. Those lands were expropriated for the "public interest" which was later found to be the establishment of Jewish settlements.

During this period detailed master plans were prepared for different spatial units. The detailed plans for Jewish settlements were prepared in accordance with an initiative planning mentality aimed at directing the building and construction process, while the detailed plans for Palestinian neighborhoods were prepared in accordance with a regulating mentality aimed at inhibiting the building and construction process. The differences between the Jews and the Palestinians are to be found in their respective planning mentalities; and the contents and outcomes of the planning processes were caused by a development policy aimed at attaining different goals for the Jews and for the Palestinians. Those differences resulted in the evolution of different spatial and urban structures in the Jewish and the Palestinian neighborhoods.

In addition to the preparation of detailed plans, this stage also witnessed the preparation of regional metropolitan plans for Je-
Jerusalem and its surroundings. 1982 witnessed the preparation of a regional plan aimed at adjusting Mandatory regional plan RJ-5 which dated from 1938-1941 and covered all of the Jerusalem District.

RJ-5 sought to make development in Jerusalem the basis of development in the District's villages. It remains operational today in spite of an attempt to adjust it in 1982 through the preparation of the Central Region Plan. The new regional plan sought to design a network of roads which would link Jerusalem to the adjacent areas and which would also thwart Palestinian urban development and expansion around Jerusalem. At the same time, the plan would identify sites for the establishment of Israeli settlements. The area included in this plan reached almost 400,000 dunums.

In 1994 a metropolitan plan was prepared for the Jerusalem area but it has not been published yet. This plan seeks to ensure the Israeli expansion around Jerusalem through the consolidation of Israeli settlement and linking the settlements to Jerusalem via a network of modern highways. The objective of these master and metropolitan plans is directive, but their importance lies in the fact that they represent the planning terms of reference for the executive detailed plans. Moreover, these plans have not been ratified by the official planning apparatus; they have been ratified by steering committees representing the different government bodies. In 2000, the Israeli government began to prepare a new regional plan for the Israel Jerusalem District. To date the planning staff has not finished this task.

The metropolitan plan for Jerusalem indicated that in 1992 the population of metropolitan Jerusalem was 1,135,000 composed of 525,000 Jews and 610,000 Palestinians. The principles set forth in the preparation of this metropolitan plan can be summarized in the following points:

1. Controlling the population of Jerusalem and the economic activities in it.
   Regulating the population does not necessarily mean increasing it; control is primarily concerned with the economic report and the preservation of a balance in the population distribution.

2. Enforcing and consolidating the linkage between Jerusalem and Tel Aviv through a network of modern highways (Road No. 45 to the north, Road No. 39 to the south) and a modern transportation network.

3. Creating notable continuity between the Arab and Jewish residents while at the same time abstaining as much as possible from mixing the population and attempting to reduce friction between the Arabs and Jews.

4. Connecting Ma'ale Adummim, Giv'at Ze'ev and Ghosh Etzion (and the settlements along the roads to them) with Jerusalem and establishing reciprocal relations among the Jewish residents of Jerusalem.

5. Creating jobs in the metropolitan area for all residents in accordance with the principles of comparative prioritization and spatial specialization. Access to such jobs shall be made easy for all residents in order to contribute cohesiveness and to be advantageous to all.

6. Determining planning arrangements and functional administration concepts at a metropolitan level and including the Palestinian autonomous territories within metropolitan Jerusalem in order to contribute to reducing the social and political conflict between the residents. Such priorities and arrangements can include the creation of "joint" areas managed on a metropolitan level in accordance with agreements between the Palestinian and the Israeli sides.
propagation of a planning perspective to detailed plans depending on spatial and quantitative programs and studies.

- The outcome of the planning operation has become more comprehensive and more detailed to include a plan for the proposed distribution of land uses and a detailed spatial program.

In this period, the Jerusalem Municipality initiated preparing a General Outline Plan to Jerusalem, including West and East parts of the city. The planning staff has not finished the process of planning. Thus, in this planning research, we do not deal with the content of this unpublished suggested plan.

Our review of planning in Jerusalem brings us to the question: Has planning laid out an image of Jerusalem to be realized, or has planning during this long period been periodically adjusted to reflect the reality and to aim at improving it? With the exception of the first plan, the Mclean Plan of 1918, we have not found any plan that lays out a clear image of the future of Jerusalem and an acceptable logic for the realization of a solid planning idea. Every plan after the Mclean Plan of 1918, while intended to improve and to develop Mclean's planning idea, adopted different planning perspectives. Let us examine the resulting images.

**Image Quality of the Different Historical Periods**

Inspection of the different periods of urban planning and expansion in Jerusalem reveals that each has had a special, distinctive image. Practically, each period complemented the other and laid the bases for the following period in spite of the differences between them. The spatial, urban and functional development achieved in Jerusalem, which will constitute the basis of our planning idea for the future of Jerusalem, is a cumulative development of a mixture of urban and functional planning and development models from the past epochs.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerusalem Proper</td>
<td>91,000</td>
<td>401.4</td>
<td>572.0</td>
<td>155.5</td>
<td>248.0</td>
<td>556.9</td>
<td>820.0</td>
</tr>
<tr>
<td>Metropolitan Jerusalem (Including Jerusalem Proper)</td>
<td>774,000</td>
<td>525.9</td>
<td>1,394.0</td>
<td>609.7</td>
<td>1,990.0</td>
<td>1,135.9</td>
<td>3,348.0</td>
</tr>
</tbody>
</table>

In summary, we would make these observations:

- Even a brief examination of the planning in Jerusalem demonstrates that urban planning has nevertheless kept up to date with urban development and expansion. Planning in Jerusalem has been progressed from the stage of proposing planning ideas to a translating of them into a spatial plan, as the case was at the beginning of the British Mandate. As we noted earlier, the plans prepared between 1930-1967 were unique in that their ratification by the official planning bodies has made them official codified plans.

- After 1967 the plans were master steering plans translated into implementable plans through detailed local plans.

- The contents of planning have improved and gotten more detailed; they have developed from a stage of a general
Until the middle of the nineteenth century Jerusalem was a religious and a spiritual center. This status was the starting point for laying out its image quality and was also responsible for keeping its development around the holy places within the Old City walls. During this period Jerusalem was affiliated with the capitals of the Islamic states and development in it depended on the caliphs' and princes' awareness of its importance. Every caliph or prince sought to leave a reminder of himself in Jerusalem in order to keep his name alive in the Holy City, especially during the Mamluk period when Jerusalem flourished rapidly.

As the Ottoman Empire began weakening in the nineteenth century, the Europeans began infiltrating the Arab World, especially Jerusalem. Each prominent European state sent missions and established centers in Jerusalem. Those centers were first established inside the Old City walls, but in the second half of the nineteenth century they began moving outside and forming the nucleus of the new city. The development of the new Jerusalem was accelerated when the Ottoman Empire allowed the Jews to immigrate to Palestine and when the European countries lead by Britain encouraged this immigration.

The driving force behind the desire of the European countries and religious and national movements and of Zionism to establish centers in Jerusalem was its special status in their history and beliefs. They imagined that controlling Jerusalem could enable them to control the rest of Palestine; this, as a starting point for spreading their control over the entire Middle East. This political-religious state of affairs was reflected in the rapid urban expansion toward the west, in the direction of the Palestinian coast. This expansion formed the core of colonization process that began emerging in Palestine during the nineteenth century and was consolidated during the first half of the twentieth century. As a result, we find the level, width and direction of the roads, and the activities that evolved around them to be similar to those in Europe. That is, the new appearance of Jerusalem was influenced by the European countries that introduced their building expertise. A new city began evolving in Jerusalem on the plain areas to the north and west of the Old City that preserved its traditional character. Moreover, two societies began emerging in Jerusalem; a local authentic traditional society developing slowly and an immigrant society transferring to Jerusalem its own traditions and urban and spatial patterns of behavior. From the local society emerged an elite seeking to imitate the immigrant society that had colonial objectives and sought to control the local society. There, the battle over the character of Jerusalem began with the European infiltration to Palestine in the 1870s and reached its pinnacle with the partition in 1948.

After the British occupation in 1917, Jerusalem evolved from a religious peripheral city to a political and administrative center. The administrative centrality of Jerusalem was initiated by the Ottomans when the Jerusalem Municipality was established in 1863; Jerusalem remained affiliated with Istanbul but did not develop as desired. However, the British Mandate's vision of Jerusalem as the capital of Palestine and the center of the Palestinian government gave the city a real central status that enforced its functional and urban expansion and development. Thus, Jerusalem evolved from a peripheral city to a central city on the national and regional levels, but became affiliated with London on the international level.

The upsurge of Jewish immigration to Jerusalem and the growth of its Arab population resulted in unprecedented urban expansion. This expansion did not harm the traditional status of the Old City that continued to preserve its character in spite of the emergence of a new twin city along its side. In fact, the Old City gave life to the new part of Jerusalem, although it did not form a source of inspiration in its planning. While the urban and functional structure of Jerusalem took the Old City into consideration
as a cornerstone for planning in all of Jerusalem, the administrative, functional and planning decisions necessitated at the same time directing and encouraging new development outside its walls.

During the British Mandate the foundations of the structure of the new Jerusalem were laid. Among the factors influencing the character of Jerusalem were its religious image and its physical position that directed its urban development and expansion towards the west and promoted its linkage to other cities and centers in Palestine via a transportation network starting from the Old City area. Another factor was the increasing influence of ethnic animosity. As each ethnic group sought to live in separate quarters, the conflict over Jerusalem intensified and converted the metropolis from a peaceful, multicultural, multi-religious city to a center of conflict between the different cultural, ethnic and religious groups. The segregation between the different ethnic quarters was aggravated by the emerging conflict over the political future of Palestine in general and Jerusalem in particular and between the Arab national movement and the Zionist movement. Jerusalem was a cauldron for the political and urban conflict between the Arabs and Jews. Its character was greatly affected by the fact that its evolution since the beginning of the twentieth century was accompanied by conflicts. These conflicts directly affected its urban structural planning almost to the point where one could say they completely directed it.

The conflict escalated to such a degree that it became necessary to take it into consideration as a basis for the partition of Jerusalem. This was the case of the Kendall Plan of 1944. Finally, Jerusalem was partitioned into two cities during the years 1948-1967. During this period duplication emerged in the commercial centers, public institutions and foreign representation offices in Jerusalem, and the image that there were two cities in one urban space began to emerge. This impression continues to be echoed in political speeches and conflict resolution proposals. While dualism was enforced after the partition, it began evolving in the 1930s in the form of the establishment of a commercial center almost exclusively for Jews along Jaffa Road as a foil to the Arab commercial center in the Old City. Additionally, the spatial and ethnic, and later the political, partition laid the foundations for widening the gaps between the two sectors of the new city and even between the different quarters in each sector. For example, we find that the Arab quarters remained underdeveloped in comparison with the Israeli neighborhoods. Moreover, the eastern sector of Jerusalem became marginalized and administratively affiliated with Amman and developed a regional orientation, while, on the other hand, West Jerusalem was proclaimed as the capital of Israel. (Nevertheless, it continued to develop as a peripheral city to which governmental resources and incentives had to be diverted in order to encourage investment there.) This fragmentation between the two sectors of Jerusalem made it appear as a divided besieged city. Furthermore, the Israeli desire to consolidate its presence in Jerusalem led to the establishment of residential and administrative buildings deforming the city's image. Also, the limited regulation of building in the eastern sector of Jerusalem under Jordanian rule contributed further to a deformation of Jerusalem's image and distinctiveness.

Meanwhile, the image of Jerusalem after its occupation in 1967 was that of a city evolving against a backdrop of conflict in which each side sought to consolidate its presence and ensure its identity at the expense of the other's. However, Israel's possession of the power and control over the land and resources enabled it to determine Jerusalem's character in a way advantageous to it. On the other hand, the Palestinians could only use "the strength of the weak" to consolidate their presence in Jerusalem and to preserve the monuments of the Old City and its surroundings as witnesses of its Arab and Muslim character. In addition, the buildings established by the Arabs and the urban
expansion undertaken by them during this period had a unique distinctive character. However, continuation of the conflict over Jerusalem's character led to its deformation. In fact, were it not for the Old City that continues to preserve Jerusalem's identity and character—despite the Israeli demolition of Al-Sharaf, Al-Magharbeh, Al-Midan and King David neighborhoods and in despite the establishment of high rise buildings which deform its unique appearance—it would have become impossible to distinguish Jerusalem from other cities in Israel and Palestine, and even in the rest of the world.

The character and the image quality of Jerusalem cannot only be discussed in reference to its partition into Palestinian and Israeli cities on political or ethnic bases, but also in reference to its partition into the new and the old cities. Each of the European, Arab and later Jewish neighborhoods had identities and characters distinguishing them from the others. The plurality and mixture of the urban structure and the architectural design in the Israeli neighborhoods gives them a distinguished character that is a direct outcome of an imported immigrant-based Israeli society. Various foreign models were implemented in the surroundings of Jerusalem without taking into consideration their suitability or compatibility with Jerusalem's physical characteristics and spiritual uniqueness. This issue will be discussed in more detail when we examine the urban design for Jerusalem.
Section Three: Background Considerations for a Plan

In this section we will examine those aspects of the current state of affairs in Jerusalem that been on the development of a plan, and we also consider the assumptions that underly our plan and the guidelines that will influence.

Overview

We will present a brief overview of the existing situation as a basis for laying out the proposed planning vision for Jerusalem and its district according to the Palestinian definition. Jerusalem basically includes the 70,000 dunums that were annexed to Israel in 1967, while the Jerusalem District today includes the villages surrounding Jerusalem but does not include Ramallah, Bethlehem, Jericho and West Jerusalem. Although the Palestinian definition of Jerusalem District does include West Jerusalem, we will deal with the relationship between the Israeli West Jerusalem and the Palestinian East Jerusalem as well as the relationship between Jerusalem on one hand and Ramallah and Bethlehem as peripheral cities on the other, since these cities form an urban and functional unity with Jerusalem.

A. Population

The Palestinian population of Jerusalem at the end of 2001 reached 215,800 while the Israeli population reached 454,400, out of which 173,000 lived in the eastern part of the city that was annexed to Israel in 1967. The following table summarizes the distribution of the population of Jerusalem and its district.

- Includes the Bedouins and the residents of the villages surrounding Jerusalem that were outside the municipal boundaries of Jerusalem in 2001.

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Population within the Municipality Borders</th>
<th>Population of Jerusalem District Excluding Population within the Municipality Borders</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palestinians</td>
<td>68.6</td>
<td>215.6</td>
<td>52.7</td>
</tr>
<tr>
<td>Israelis</td>
<td>197.7</td>
<td>454.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>266.3</td>
<td>670.0</td>
<td>52.7</td>
</tr>
</tbody>
</table>


Based on data from Jerusalem Institute for Israel Research expects the population of Jerusalem to rise to 817,500 people in 2010. The following table demonstrates the expected distribution of the population in Jerusalem in 2010.

Table 11 demonstrates that by 2010 the religious Jewish popu-
lation will increase while the secular Jewish population will decrease. It also demonstrates that the Palestinian population will increase by more than 1%. These demographic shifts will have a direct effect on the population distribution, urban space and functional structure in Jerusalem, as well as on the city's character.

Concerning the religious composition of the Palestinian residents of Jerusalem in 2000, 8.5% (14,200) were Christians divided into numerous denominations and the balance of 158,000 were Muslims. Concerning the age groups, in 1995 the average age of the Jewish residents of Jerusalem was 26.1 years while that of the Muslims was 18.2 years and the Christians 33.1 years. The following table illustrates the distribution of the population of Jerusalem in 1995 according to the different age groups.

**Table 12. Distribution of the Population of Jerusalem in 1995 According to Age Groups (Percentage)**

<table>
<thead>
<tr>
<th>Population Group/Age Group</th>
<th>Population (Thousands)</th>
<th>0-4</th>
<th>5-14</th>
<th>15-24</th>
<th>25-44</th>
<th>45-64</th>
<th>65+</th>
<th>Median (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palestinians</td>
<td>174.4</td>
<td>16.5</td>
<td>24.4</td>
<td>20.3</td>
<td>24.7</td>
<td>10.2</td>
<td>4.0</td>
<td>19.2</td>
</tr>
<tr>
<td>Israelis</td>
<td>417.0</td>
<td>12.0</td>
<td>20.7</td>
<td>15.7</td>
<td>26.5</td>
<td>15.5</td>
<td>9.7</td>
<td>26.1</td>
</tr>
</tbody>
</table>


The above table illustrates the differences between the Palestinians and the Israelis in terms of their age groups. This age structure affects the type of services that must be provided in the present and the future, as well as the housing needs and the economic conditions of the Palestinian families in comparison with the Israeli families. The Palestinian age structure indicates that the majority of the Palestinian society is rural experiencing urbanization. This is suggested by the data on family size as illustrated in the following table.

**Table 13. Distribution of Family Sizes in Jerusalem in 1995 According to the Different Population Groups (Thousands)**

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Number of Families</th>
<th>1-4</th>
<th>5-7</th>
<th>8+</th>
<th>Average Family Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palestinians</td>
<td>30.9</td>
<td>13.1</td>
<td>11.5</td>
<td>6.3</td>
<td>5.38</td>
</tr>
<tr>
<td>Israelis</td>
<td>120.2</td>
<td>82.2</td>
<td>31.0</td>
<td>7.0</td>
<td>3.58</td>
</tr>
<tr>
<td>Total</td>
<td>151.1</td>
<td>95.3</td>
<td>42.5</td>
<td>13.2</td>
<td>3.94</td>
</tr>
</tbody>
</table>


The table illustrates that in 1995 the average Palestinian family size in Jerusalem was almost 5.4 individuals and the number of Palestinian families in Jerusalem was 31,000. The family structure and the age structure are attributed to the high natural population growth rate among the Palestinians in Jerusalem. In 1995 this rate reached 3.8% in comparison with 2.5% among the Jews. The average natural population growth rate in Jerusalem was 2.9%; higher than the average natural population growth rate in Israel of 2.1%, but lower than the average natural population growth rate in Palestine of 3.2%.

In terms of internal immigration, Jerusalem has generally suffered in the last decade from a negative immigration balance reflecting a movement from the city to its district periphery among both the Palestinians and the Israelis. In 1993 more than 6,085 persons immigrated outside Jerusalem and in 1995, 5,518 persons immigrated. Yet it is worth mentioning that the most recent two years have witnessed the phenomenon of the return of Palestinians to Jerusalem in response to the Israeli policy of confiscating the identity cards of Palestinian Jerusalemites living outside the municipal boundaries of Jerusalem. The returnees fear that they might have their identity cards confiscated and conse-
frequently lose their rights to live in Jerusalem. They also seek to retain some of the privileges and services, such as the national health insurance and the social security benefits, which are provided to Jerusalemites by the Israelis.

In fine, the demographic characteristics of the Palestinian residents of Jerusalem are different from those of the Israelis but similar to those of third world societies undergoing urbanization. In addition, there are also differences between the demographic characteristics of the Palestinian society inside Jerusalem and that in the rest of the Jerusalem District. (see Map 4)

**B. Housing Conditions**

We have earlier observed that in 1995 the number of Palestinian families in Jerusalem was 31,000. However, available figures indicate that only about 25,000 residential units were available for the Palestinians. This means that several thousand units house more than one family and that the Palestinian residents of Jerusalem suffer from a critical housing shortage and that those who actually live in residential units suffer high densities because of the relatively high average family size. In 1995 the average number of persons per room among the Palestinians was 2.2 while it was only 1.8 among the Israelis. Additionally, in 1995 the ratio of Israeli families in which an average of one or fewer persons lived in one room reached 42.6% in contrast to 9.3% among the Palestinians. Furthermore, in the same year the ratio of Palestinian families in which three or more persons lived in one room was 27.8% in comparison with only 2.4% among the Israeli families.

It is important to point out that the way housing is made available among the Palestinians differs from the Israeli experience. The public sector is the main provider of residential units among the Israelis while it is totally absent among the Palestinians. We would also add that while the housing hardship facing the Palestinians differs from one quarter to another, it is worse in the Old City.

When calculating the housing needs of the Palestinians in Jerusalem and its district until 2020 we found that more than 147,000 residential units need to be made available for the Palestinians in Jerusalem and its district. The following table demonstrates the anticipated rising demand among the Palestinians for residential units in Jerusalem until 2020 in reference to the anticipated population growth.

The above data concerning the anticipated demand were based on the following assumptions:

**Table 14. Anticipated Housing Needs and Number of Residential Units Demanded among the Palestinians in Jerusalem and its District in Reference to the Anticipated Population Growth (Thousands)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Jerusalem</th>
<th>District</th>
<th>Total</th>
<th>Average Square Meters/ Person</th>
<th>Average Apartment Size</th>
<th>Square Meters Needed for Housing</th>
<th>Number of Residential Units Needed for Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>194</td>
<td>140</td>
<td>334</td>
<td>18</td>
<td>95</td>
<td>600</td>
<td>63.3</td>
</tr>
<tr>
<td>2005</td>
<td>222</td>
<td>162</td>
<td>384</td>
<td>20</td>
<td>100</td>
<td>700</td>
<td>76.8</td>
</tr>
<tr>
<td>2010</td>
<td>251</td>
<td>185</td>
<td>436</td>
<td>25</td>
<td>100</td>
<td>1000</td>
<td>103.8</td>
</tr>
<tr>
<td>2015</td>
<td>281</td>
<td>209</td>
<td>490</td>
<td>27</td>
<td>110</td>
<td>1200</td>
<td>120.3</td>
</tr>
<tr>
<td>2020</td>
<td>331</td>
<td>233</td>
<td>564</td>
<td>30</td>
<td>115</td>
<td>1600</td>
<td>147.2</td>
</tr>
</tbody>
</table>

1. Bridging the current gap between the available housing units and the required units. An estimated 18,000 residential units are required.

2. Improving the housing conditions of the families suffering from housing crises by increasing the area allocated for each individual from 18 square meters in 1995 to 30 square meters in 2020.

3. Providing enough housing units to cope with the anticipated
increase in the number of families based on the demographic data presented in the preceding section.

We must mention also that the data in Table 14 include the already existing buildings that are expected to be improved, and also includes the settlements whose political future is still undetermined.

**C. Economic Conditions**

A special study dealing with the economic conditions in Jerusalem was made by Dew and Hazbon and is included in the present volume. Their study was carried out in coordination with ours, and we participated in its preparation and in laying out future scenarios concerning the development of a strong urban economy in Jerusalem. We tried to link the structure of the urban economy in Jerusalem to the current and future urban and functional structure. We do not want to make a detailed description of the economic conditions in this study because that information can be found in Dew and Hazbon elsewhere in this volume. Nonetheless, we would like to point out the distribution of the Palestinian labor force in Jerusalem over the basic economic sectors as a main indicator to the weak and dependent Palestinian economy in Jerusalem.

![Table 15. Distribution of the Labor Force in Jerusalem According to Labor Sectors and Ethnicity - 1995](source-url)

<table>
<thead>
<tr>
<th>Labor Sector</th>
<th>Jews</th>
<th>%</th>
<th>Arabs</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>208,208</td>
<td>100.0</td>
<td>47,908</td>
<td>100.0</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1,248</td>
<td>0.6</td>
<td>648</td>
<td>1.4</td>
</tr>
<tr>
<td>Industry (Factories)</td>
<td>23,296</td>
<td>11.2</td>
<td>5,596</td>
<td>11.7</td>
</tr>
<tr>
<td>Utilities (Electricity and Water)</td>
<td>624</td>
<td>0.3</td>
<td>224</td>
<td>0.5</td>
</tr>
<tr>
<td>Construction</td>
<td>14,768</td>
<td>7.1</td>
<td>7,868</td>
<td>16.4</td>
</tr>
<tr>
<td>Automotive Trade and Repair</td>
<td>21,840</td>
<td>10.4</td>
<td>5,640</td>
<td>11.8</td>
</tr>
<tr>
<td>Restaurants and Hotels</td>
<td>10,816</td>
<td>5.1</td>
<td>5,016</td>
<td>10.5</td>
</tr>
<tr>
<td>Transportation and Communications</td>
<td>10,400</td>
<td>4.9</td>
<td>3,000</td>
<td>6.3</td>
</tr>
<tr>
<td>Banks and Insurance</td>
<td>7,280</td>
<td>3.4</td>
<td>780</td>
<td>1.6</td>
</tr>
<tr>
<td>Services</td>
<td>19,136</td>
<td>9.1</td>
<td>2,736</td>
<td>5.7</td>
</tr>
<tr>
<td>Public Institutions</td>
<td>26,208</td>
<td>12.5</td>
<td>2,708</td>
<td>5.7</td>
</tr>
<tr>
<td>Education</td>
<td>31,824</td>
<td>15.2</td>
<td>6,324</td>
<td>13.2</td>
</tr>
<tr>
<td>Health and Social Welfare Services</td>
<td>22,880</td>
<td>10.9</td>
<td>2,880</td>
<td>6.0</td>
</tr>
<tr>
<td>Public, Social and Personal Services</td>
<td>14,768</td>
<td>7.1</td>
<td>3,768</td>
<td>7.9</td>
</tr>
<tr>
<td>Private Home Services</td>
<td>2,496</td>
<td>1.2</td>
<td>196</td>
<td>0.4</td>
</tr>
<tr>
<td>NGOs</td>
<td>624</td>
<td>0.3</td>
<td>524</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Table 15 demonstrates that the participation ratio of the labor force in Jerusalem does not exceed 33%, and that one fifth of the Palestinian workers in Jerusalem are employed in the construction sector. It also demonstrates that 12.2% of the total labor force in Jerusalem work in the industrial sector and that 13.5% work in the education and teaching sector, while the tourism and trade sectors employ about 20% of the labor force.

Figure 1 below depicts the distribution of the labor force in Jerusalem in 1995 according to labor sectors and ethnicity.

The following table illustrates the 1995 distribution of the Palestinian labor force according to the different professions and compares it with the distribution of the Israeli labor force in the same year.

<table>
<thead>
<tr>
<th>Profession</th>
<th>Israelis</th>
<th>Palestinians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Professions</td>
<td>19.4</td>
<td>6.0</td>
</tr>
<tr>
<td>Free and Technical Professions</td>
<td>19.4</td>
<td>8.5</td>
</tr>
<tr>
<td>Executives</td>
<td>6.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Employees</td>
<td>20.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Agents and Service and Sales Employees</td>
<td>14.6</td>
<td>14.1</td>
</tr>
<tr>
<td>Trained Workers in Agricultural Professions</td>
<td>0.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Unskilled Workers in Industry and Construction</td>
<td>12.9</td>
<td>33.9</td>
</tr>
<tr>
<td>Unskilled Workers</td>
<td>5.7</td>
<td>28.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Thousands</td>
<td>141,000</td>
<td>31,900</td>
</tr>
</tbody>
</table>


The economic situation of the Palestinian families in Jerusalem affects their purchasing abilities and this leads to differences in the trade volume between East and West Jerusalem. In fact, the commercial center in East Jerusalem in Salah Eddin Street and Sultan Suleiman in the Old City form a secondary center to the commercial center in West Jerusalem that is characterized as commercially energetic and providing a higher level of services.
In sum, the economic conditions in the Palestinian Jerusalem are better than those in the other Palestinian cities, but they are deteriorated in comparison with the Israeli sector of Jerusalem. Any urban spatial plan for Jerusalem must work on improving the economic conditions and increasing employment and economic opportunities in Jerusalem.

**D. Infrastructures and Services**

The condition of the services and infrastructures in Jerusalem was studied and evaluated on three levels: The Old City, the eastern sector of the new Jerusalem and the District. Studies aimed at evaluating the health of the infrastructures and services in Jerusalem (Khamaisi 1997; Rosnos 1997; Maliki 1997) demonstrate that the condition of these systems in Jerusalem is still deteriorated on a neighborhoods level. Basic infrastructure networks such as sewage, drainage and asphalted roads are still underdeveloped. The wide gap between the condition and level of the infrastructures and urban services available in the Jewish neighborhoods and those of the Palestinian neighborhoods is obvious to everyone. The Palestinian neighborhoods in the peripheries were originally villages that developed and expanded around village nuclei like Al’Isawiya, Shu’fat, At Tur, Sur Bahr and Silwan. Such nuclei still lack the services required in a modern city.

The services and infrastructures in the Old City and its surroundings are available, but they have deteriorated as a result of their limited maintenance and limited upgrading to cope with the growth and expansion of the population. Only recently has the Israeli Municipality begun asphalting some roads and installing a sewage network in Wadi El Joz and Sheikh Jarrah. The deteriorating condition of the infrastructures and municipal and public services in the Palestinian Jerusalem is a direct result of the Israeli governmental and municipal policies that have neglected the Palestinian residents’ needs since the city was occupied in 1967. Another cause of this deterioration was the absence of Palestinian public institutions authorized to provide such services. While local and public Palestinian institutions providing cultural and educational services emerged after 1967 (Khamaisi 1997), no institutions emerged to work on developing the roads and neighborhoods and upgrading the infrastructures and services in the Palestinian Jerusalem. Civil society groups would have found such enterprises financially very costly.

The condition of the services and infrastructures in the villages of Jerusalem District is not better than that in East Jerusalem. In fact, it is worse in spite of forming the hinterland of a central city like Jerusalem. There is no doubt that the spatial condition of the Old City in terms of the quality of its services and infrastructures has deteriorated and the condition of the villages surrounding Jerusalem has also deteriorated. This deterioration in the urban and functional state of affairs creates a city similar to Third World cities in terms of its weak services and poor economy. Yet this city and the villages forming its hinterland are dismembered by separate Jewish Israeli neighborhoods that are quite superior in terms of their infrastructures and services in spite of their existence in the same space.

Meanwhile, the roads networks linking the various parts of the city to the rest of its urban body is primarily a network of local roads used as main and arterial roads along which services are concentrated. There is no graduality in the levels of the roads network with the exception of the historical Nablus-Jerusalem-Hebron road and the road linking Jerusalem to Jericho through Al ‘Eizariya. Meanwhile, other arterial roads have been planned and implemented to serve the Israeli expansion in East Jerusalem and the rest of Jerusalem District. This arterial network of main roads is used by the Palestinians although that was not the objective of the plan. This network neither constitutes cornerstones for developing the “head” of the Palestinian city—the Old City.
and its surroundings, nor its "body"—the hinterland. This network must be adjusted or planners must develop additional roads aiming at serving the Palestinian neighborhoods and ensuring the complementary relationship between the city center and its surroundings. The current roads network does not ensure the balanced and homogeneous development of Jerusalem as the heart of Palestine. To the contrary, the arterial roads network in Jerusalem and its surroundings has been designed in accordance with Israeli national regional and metropolitan planning aimed at consolidating the linkage with Tel Aviv, and the Palestinians were forced to use this network although it was not built to serve them.

In order to adjust this state of affairs we believe that it is necessary to expand arterial roads linking the Palestinian neighborhoods inside Jerusalem and the city of Jerusalem with the other Palestinian cities in parallel or similar to the Israeli roads. Moreover, land uses along these roads must be changed to allow the establishment of economic activities in order for these roads to form axes along which Jerusalem can be developed.

**E. Green and Open Areas**

Comparison between Jerusalem and other cities in terms of the total areas allocated as green and open areas reveals that 40% of the total area of Jerusalem has been so designated. This includes valleys, national parks and areas whose future use has not been determined yet. We illustrated that the Chief Plan for Jerusalem of 1968 allocated 50% of the total area under the jurisdiction of the expanded Jerusalem as green land and that parts of that land were later reallocated as residential areas; the most recent example of such reallocation is Jabal Abu Ghneim in the south of East Jerusalem, where the establishment of a new settlement was approved. Therefore, the allocation of land as green and open areas is currently being used by the Israeli authorities as a mechanism to regulate and inhibit the Palestinian urban expansion and to postpone their development until the conditions become ripe or the need arises for Israeli settlement expansion. Therefore, the Palestinians view these areas not as parts of the urban and spatial structure of Jerusalem and not as areas for improving the urban environment in Jerusalem but as a mechanism in Israel’s hands to prevent Palestinian urban expansion and to confiscate Arab land for the sake of the establishment of Jewish settlements. These green and open areas are mostly located around the Palestinian neighborhoods and the valleys separating Palestinian neighborhoods from each other or penetrating the western side of Jerusalem. (See Map 5)

Meanwhile, the Palestinian neighborhoods lack green areas and public parks. The urban spatial structure of the Palestinian neighborhoods in Jerusalem is based on a random unplanned urban expansion consumes green areas and does not provide breathing lungs for the environment. We find that houses, especially in the peripheries of Jerusalem, are surrounded by private gardens, but public planned and developed gardens and green areas are unavailable or insufficient for a manner suiting a modern city. In fact, a study we conducted on land uses in the Palestinian neighborhoods in East Jerusalem revealed that only 2.6% of the total area of all detailed plans prepared for the Palestinian neighborhoods in Jerusalem has been allocated as open public parks.

We see then that open and green areas have not been dealt with by the Israelis and the Palestinians as an indispensable component of the urban structure that needs to be developed. Instead, they have been dealt with as a means of controlling the urban space and regulating development in it, thus resulting in a mixture of ways of dealing with them. Any future planning for Jerusalem must take into consideration the special sensitivity of
these areas and the refusal to utilize them in light of the political situation.

Table 17. Planned Land Uses in the Palestinian Neighborhoods in Jerusalem (Dunums and Percentages) - 1997

<table>
<thead>
<tr>
<th>Planned Use</th>
<th>Area (Dunums)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>10,305.0</td>
<td>39.8</td>
</tr>
<tr>
<td>Open Public Parks</td>
<td>672.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Public Buildings</td>
<td>579.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Reserved Areas</td>
<td>2,15.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Roads</td>
<td>2,259.9</td>
<td>8.7</td>
</tr>
<tr>
<td>Public and Private Institutions</td>
<td>635.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Archeological Areas</td>
<td>615.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Hotels and Tourism Areas</td>
<td>70.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Architectural Establishments</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Commercial Areas</td>
<td>120.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Panorama Area</td>
<td>210.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Athletic Areas and Playgrounds</td>
<td>34.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>251.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Green Areas</td>
<td>9,410.4</td>
<td>36.4</td>
</tr>
<tr>
<td>Unplanned Areas</td>
<td>208.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Future Planning</td>
<td>33.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Industrial Areas</td>
<td>290.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Total</td>
<td>25,969.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


F. Comparison of Neighborhoods

The following table presents a brief comparison between the Jewish and Palestinian neighborhoods in terms of characteristics determined to be measures of the differences and the gaps between those neighborhoods that share the same urban space but are completely different in terms of their social and ethnic structures.

Table 18. Comparison between the Palestinian and Israeli Neighborhoods in Jerusalem

<table>
<thead>
<tr>
<th>Characteristic or Measure</th>
<th>East Jerusalem</th>
<th>West Jerusalem (Including Jewish Settlements in East Jerusalem)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual's Legal Status</td>
<td>Residence – Resident</td>
<td>Citizenship – Residence</td>
</tr>
<tr>
<td>Population Increase</td>
<td>The population cannot increase through immigration; it can only increase through direct natural growth of the residents after 1967. In fact, there is a desire and efforts to force the Palestinians to leave Jerusalem.</td>
<td>It is possible to increase the population both through positive immigration and the natural population growth. In fact, the government policy encourages population increase through the financial incentives given to Jewish immigrants to Jerusalem.</td>
</tr>
<tr>
<td>Demographic Structure</td>
<td>The size of the age group 0-19 is nearly 50%. The size of the age group 65 is nearly 3.5%.</td>
<td>The size of the age group 0-19 is nearly 38%. The size of the age group 65 is almost 10%.</td>
</tr>
<tr>
<td>Average Family Size</td>
<td>2.6 persons per family</td>
<td>7.3 persons per family</td>
</tr>
<tr>
<td>Size of Participation in the Labor Force</td>
<td>33% of the total population</td>
<td>52% of the total population</td>
</tr>
<tr>
<td>Residential neighborhoods</td>
<td>Mixture of Israeli and Palestinian</td>
<td>Israeli only</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Underdeveloped and deteriorated; completely absent in some areas; limited maintenance in the Palestinian neighborhoods</td>
<td>Developed and constantly maintained even in the Jewish settlement in East Jerusalem</td>
</tr>
<tr>
<td>How Housing is Provided</td>
<td>Through self initiative and financing on privately-owned lands</td>
<td>Through public and governmental initiative and financing (in some areas by associations or individuals in the frame of &quot;Build Your Own House&quot; project), but all on governmental lands</td>
</tr>
<tr>
<td>Housing Patterns</td>
<td>Private; with an open architectural pattern up to two floors; without adequate infrastructure, roads, sewage and drainage</td>
<td>Public; a person can buy an apartment or rent it; with an architectural pattern comprised of several floors; with proper infrastructure</td>
</tr>
</tbody>
</table>

Rassem Khaimai
### Table 18. Continued

<table>
<thead>
<tr>
<th><strong>Housing Planning</strong></th>
<th>This infrastructure is made available after the house is inhabited and at the owner's expense.</th>
<th>made available before the house is inhabited and with only partial participation by the resident.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration of Commercial Activities</strong></td>
<td>Commercial activities are distributed inside the neighborhoods and along the roads without a clear hierarchy.</td>
<td>Commercial activities are concentrated inside main center and secondary neighborhood centers with a clear and integrated hierarchy.</td>
</tr>
<tr>
<td><strong>Population Density</strong></td>
<td>2.2 persons per room</td>
<td>1.1 persons per room</td>
</tr>
<tr>
<td><strong>Planning Methodology</strong></td>
<td>Regulating, controlling and hindering; without any relationship between planning and implementation; without providing financial resources for the implementation.</td>
<td>Directing, developing and initiating; with a strong relationship between planning and implementation; financial resources are made available for the implementation of plans.</td>
</tr>
<tr>
<td><strong>Labor Sectors</strong></td>
<td>Most workers work in low-waged economic sectors, construction and primary industries not requiring high skills.</td>
<td>The majority of workers work in economic sectors requiring relatively high skills, especially in the services, education, health and advanced industries sectors.</td>
</tr>
<tr>
<td><strong>Individual's Monthly Income</strong></td>
<td>The income of the head of the family is low, therefore an individual's average income is low as the family size is large. Individual’s average monthly income is approximately 420 Shekels.</td>
<td>The income of the head of the family is medium and high. Usually there are two sources of income in the family and the family size is small and medium. Individual's average monthly income is high and equals approximately 960 Shekels.</td>
</tr>
<tr>
<td><strong>Functional Continuity with a Hinterland</strong></td>
<td>Weak hinterland and controlled functional continuity with it.</td>
<td>Strong hinterland and encouraged continuity with it to enforce the connection between the center and the hinterland for the sake of integration.</td>
</tr>
<tr>
<td><strong>Availability of an Economic/Commercial Center</strong></td>
<td>A weak economic, commercial and service center exists, but it is</td>
<td>A strong economic, commercial and service center exists and forms a linked system.</td>
</tr>
<tr>
<td><strong>Consumption Culture and Spatial and Functional Behavior</strong></td>
<td>Tends to be traditional; limited resources and functional spatial mobility. Operates in accordance with the Third World pattern.</td>
<td>Tends to the contemporary capitalist consumption pattern; high spatial mobility for both the resident and the consumer. Operates in accordance with the modern world pattern and tries to imitate the American pattern.</td>
</tr>
<tr>
<td><strong>Social and Economic Transformations</strong></td>
<td>Agricultural society undergoing a process of urbanization; trying to bypass the industrial phase to the services phase.</td>
<td>Industrial and civic society trying to apply the capitalist system in its behavior.</td>
</tr>
</tbody>
</table>
Table 18. Continued

<table>
<thead>
<tr>
<th>Continuity with the Cultural, Physical and Functional Space</th>
<th>Gradually growing through the space and developing a suitable balance with it.</th>
<th>Planted in the space and imposed on it that it is possible to say that it is fragmented and strange.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inheritance from and Continuity with the Past</td>
<td>The high concentration of religious, historical, archaeological and cultural centers and architectural patterns that have developed throughout history gives Jerusalem a cultural inheritance and urban continuity.</td>
<td>New city alongside the Old City. Its life began in the middle of last century without cultural, religious, archaeological and historical inheritance and continuity.</td>
</tr>
</tbody>
</table>

G. The Religious and Spiritual Status and the Cultural and Historical Inheritance

Jerusalem is unique in terms of its religious and spiritual status for the three monotheistic religions. This status was the cause of its distinctiveness throughout its long five thousand year history. In fact, the hill on which Jerusalem evolved ago is still its center and the source of its spiritual and religious glamour. During its history civilizations have settled in Jerusalem and left behind them a cultural and historical inheritance that must be taken into consideration. There is no doubt that this religious status and the city's cultural and historical inheritance must be considered as sources of inspiration for the future image and for planning the development of Jerusalem's urban space and functional structure.

H. The Geographic and Spatial Location

The geographic location of Jerusalem must be taken into consideration on two levels. The first is the city's location in relation to the topographic structure that it developed in; Jerusalem evolved on the southern tip of a hill inclined eastwards. It is surrounded from the south, west and east by valleys which are overlooked by the Old City. And it is also overlooked and protected by the Mount of Olives and Al Masharef Mountain. This topography had an effect on directing the development of the city and its urban expansion, therefore, it must be taken into consideration in any planning process. The extension of the hill along a north-south axis, the existence of valleys intertwining with the hill on its western edge, and the sharp inclination from the Mount of Olives and Al Masharef Mountain toward the east form impediments and challenges that must be taken into consideration by planners and incorporated as essential parts of any plan.

In addition to its topography, Jerusalem's location at the heart of Palestine and along the axes of regional and national cities connected to it increases its importance. Jerusalem lies at the middle of the historical road axis that currently links Nablus to Hebron. This axis forms the backbone of urban growth in Palestine and links the Palestinian cities from Jenin in the north to Ad Dahreyeh in the south. In addition, Jerusalem lies at the middle of another axis linking the regional centers of Amman and Tel Aviv through Jericho and Jerusalem. Those two axes cross each other in Jerusalem, thereby increasing its geopolitical importance. The argument that Jerusalem is the center and the heart of the world is justified in light of its location along these axes that link the different parts of Palestine and the three continents to each other.

I. Fluctuating Climate

Jerusalem's geography and topography give it a varying climate as it lies at the border between the modest Mediterranean climatic zone and the warm semi-desert climatic zone. Therefore, the western rims of the Mount of Olives and Al Masharef Mountain enjoy a moderate climate while their eastern rims have a hot desert climate. This variation in climate would be difficult to find in any other city in the world.

J. Civic and Functional Hierarchy

The hierarchy of the civic and functional centers in Jerusalem
is a direct outcome of its partition and annexation in the wake of many wars. This hierarchy is apparent in the fact that some centers are independent while others are not. In fact, the political and economic conditions that Jerusalem went through had an effect on the evolution of this hierarchy.

K. The Operational Plans

It was mentioned earlier that the planning concept devised by Mclean in 1918 was followed by two other plans that were developed until we arrived at the current planning state of affairs. Some of those plans have been ratified and are still operative, therefore, any new plan might be expected to take the earlier plans into consideration and perhaps even adopt them, add to them or adjust them. However, the planning concept that will be proposed in this study will not incorporate the planning ideas and schemes currently operational on the local and regional levels. New planning concepts will be proposed for the sake of avoiding the planning defects of the past schemes.

L. The Changing Political Present and Future

The planning of any city usually takes place in the context of a clear vision concerning its political future; however, the current state of affairs in Jerusalem points to expected change. This change might lead either to the repartition of Jerusalem or to new political arrangements having direct effects on the evolution of its urban space and functional structure. It might also be in the direction of controlling the city's development and expansion and even reducing it. Therefore, making a planning vision against a backdrop of a political conflict over the future identity of Jerusalem is a more complicated task than developing a vision in the context of a clear image concerning the city's future and its political and cultural identity.

M. Variability of the Social and Ethnic Structure

There are three basic social and ethnic groups in Jerusalem: the Palestinians, the secular Jews and the religious Jews. These three groups are subdivided into secondary social and cultural groups, each seeking to develop an urban and functional space different from the other. This variability of the social structure—a structure that is composed of a foreign immigrant society and an authentic local society, a rural society and an urban society, a religious society and a secular society, a Palestinian society and an Israeli society, each having special characteristics and attributes—directly affects the urban spatial and functional structure of Jerusalem.

N. Planning in a Transitional Period

Jerusalem is currently undergoing—as the case has always been—a process of transition not only at the political, social, economic and cultural levels but also in the behavioral patterns of its residents. This process of transition in a variable society requires devising a vision that is special in terms of its planning characteristics and components in order to enable the groups undergoing transition to bridge the gaps between them and to speak in the language of one urban space and one multi-faceted functional and cultural structure.

Q. Sustainability

There is a vast difference between the city's expansion and its ability to feed itself and its development in a friendly space and environment. The city's ability to sustain itself has a direct effect on Jerusalem, especially on its variable structure which is undergoing a process of transition. Indeed, the current conflict between the Israelis and the Palestinians over the future of Jerusalem may lead, if unchecked, to the evolution of a deformed city that cannot feed itself. Any plan must address the issue of sustainability.
Guidelines to the Proposed Plan for Jerusalem

In addition to addressing the many dimensions of the current state of affairs, our plan must meet certain other important guidelines.

We concluded from our brief overview of the development of the urban and functional space in Jerusalem and its district that the planning ideas and concepts for Jerusalem have changed and that the resulting reality was not an outcome of organized directed planning. Much of it gave priority to political and military facts on the ground rather than employing proper planning criteria. We have also found that the basic components of the planning ideas and concepts that were devised during the British Mandate continue to affect Jerusalem's image and structure. Yet Jerusalem's urban expansion and physical continuity with the surrounding cities on the north-south axis (from Ramallah to Bethlehem) and the east-west axis (from Mevaseret Tzion settlement to Ma'ale Adumim settlement) requires devising an urban planning concept and a functional structure that takes into consideration the factors affecting the development of the urban space in Jerusalem. Therefore, the characteristics of the planning proposed in this study will seek to:

1. Devise a flexible and elastic planning concept that focuses on East Jerusalem without ignoring the planning and development of West Jerusalem.
2. Take into consideration various political solutions and arrangements concerning the future of Jerusalem, yet it must preserve the city's uniqueness and distinctiveness.
3. Build on Jerusalem's uniqueness and distinct characteristics and then introduce the modern planning ideas that have been discovered or developed as a result of urban planning, such as the city's ability to feed itself and the modern methods of managing it.

4. Integrated and balance between the development of the city and the development of its urban and rural hinterland in a way enabling the hinterland to support the center instead of depending on it and in a way that creates a coherent marriage between the urban blocs and the surrounding rural space.

5. Present solutions to the current urban problems in Jerusalem and meet the residents' current needs in the areas of housing, economic and social services and the infrastructures to form bases for detailed planning of the city.

6. Avoid wasting the available natural resources and preserve Jerusalem's cultural inheritance.

7. Ensure the possibility of a continuous integrated cultural plurality in the urban space.

8. Ensure a balance between Jerusalem on the economic and social levels. It must also ensure Jerusalem's international status on the religious and cultural levels and utilize this international status to enable it to become an international city on the economic level.

Spatial Planning Assumptions for Jerusalem

Earlier we discussed the spatial and functional growth in Jerusalem and listed the plans that have been prepared for Jerusalem. Here we will review assumptions underlying our spatial planning concept for Jerusalem.

Political and Administrative Borders versus Functional Borders

We assume Jerusalem will be a functional open city with free movement of goods and people, and the capital of two states: Palestine and Israel, and a city with a Palestinian and Israeli hinterlands. The official political and administrative border between the parts of the city will be the pre-1967 border. This starting point
is one of the basic ideas in our planning concept.

Multiplicity and Variability of the Spatial Physical Units in Jerusalem Area

We assume Jerusalem will always be a city with a multiplicity of physical structures and considerable variability in land uses.

Jerusalem evolved from the nucleus of the Old City that forms the tongue of a relatively level hilltop surrounded by higher hills and mountains separated by valleys. This hilltop is the physical parcel from which Jerusalem began to expand to the surrounding hills that form independent physical and spatial units, though they form a physical and urban extension of the Old City parcel. Some of the physical units that represent the extension of the Old City are so distant that it is not possible to see the Old City from them, as in the cases of Beit Hanina, Shu'fat and Al 'Isawiya. Additionally, some of these units are different from the Old City in terms of their climate, especially those units on the eastern side of the Mount of Olives and Al Masharef Mountain, as well as the Anata area in the north and As Sawahira Al Gharbiya and Sur Bahir in the south. East and west Jerusalem currently extend over various physical units separated from each other by mountains, hills or valleys. This multiplicity and variability of the physical structure directly affects our planning concept as we will propose numerous land uses and variable development strategies taking into consideration the multiplicity of the spatial physical structure of Jerusalem as it is defined today, from Kafr ‘Aqab in the north to Jabal Abu Ghneim in the south.

Multiplicity of the Demographic, National, Ethnic, Cultural and Political Units in Jerusalem

As we have shown in our study of the demographic and social conditions in Jerusalem, Jerusalem residents differ in their national, ethnic origins, religious and political affiliations and the levels of their urbanization. This multiplicity, especially the variability of ethnic political affiliations, directly affects the urban structure in Jerusalem. Additionally, the Israelis are divided into secular Israelis and religious Israelis. Each of the above groups has distinct urban characteristics, and we assume that this variability is expected to continue. Therefore, functional partnership must be created in some areas while it must be discouraged in others. This demographic variability requires devising elastic planning solutions taking into consideration each group's needs while prioritizing Jerusalem's interests as a unique city in which participation must be voluntary rather than compulsory and aimed at securing geopolitical objectives.

Additional Assumptions

The following is a brief overview of additional assumptions on which this planning concept depends. It is worth mentioning that the inapplicability of one of the proposed hypotheses does not necessarily mean that the planning concept is unsuitable. On the contrary, the proposed planning concept is a basis that can be easily adjusted.

Political Assumptions:

- Jerusalem is an open city and is undivided by walls or barriers.
- Jerusalem is the capital and the seat of government of two states: Israel and Palestine.
- Jerusalem is run by two municipalities: an Israeli municipality running the Jewish neighborhoods in west Jerusalem, and a Palestinian municipality running the Arab neighborhoods in East Jerusalem. The two municipalities are involved in cooperation and partnership with each other.

Furthermore, the realization of the proposed political hypotheses that call for Jerusalem to be the capital of two states
and to be an open city implies the establishment in the eastern sector of Jerusalem of administrative, functional and economic centers paralleling those that currently exist in West Jerusalem.

**Demographic Assumptions:**
- In 2020 the population of Jerusalem within its current municipal boundaries will increase to about one million people; 42% will be Palestinians.
- Jerusalem District will attract positive Palestinian immigration concentrated in Jerusalem and the surrounding villages, especially in the northern part.
- The residents are not going to be exchanged on a national or an ethnic basis.
- The natural population growth rate will decrease for both the Palestinians and the Israelis.

**Social and Cultural Assumptions:**
- The social and cultural plurality of each social and national and ethnic group in Jerusalem shall be accepted and the continuation of their partial separation on national and ethnic grounds shall continue.
- The Israelis shall be concentrated in the western sector of Jerusalem and the Palestinians will be concentrated in the eastern sector.
- The process of urbanization in the Palestinian society will increase, and the process of religiosity in the Israeli society will dwindle.
- The social and cultural differences between the different population groups will begin to diminish, yet each group will keep its privacy.

**Economic Assumptions:**
- Economic growth will continue for both the Palestinians and the Israelis, but Palestinians development will be given priority in order to decrease the current gap between the East and the West sectors.
- Jerusalem, including Ramallah and Bethlehem, will form an international world and regional city in addition to being the national center of Palestine.

**Spatial Assumptions:**
- The urban space and the functional structure for Jerusalem cannot be planned in isolation from its surroundings and the area that is functionally and administratively affiliated with it.
- Internal regional relations shall be established between the Palestinian and the Israeli cities on one hand and Jerusalem on the other. In addition, regional relations shall be established between the regional urban centers like Amman, Cairo, Tel Aviv, Damascus and Beirut on one hand and Jerusalem on the other.
Section Four: The Proposed Planning Concept

Objectives of the Proposed Planning Concept

Based on the review above, we see that any proposed planning concept must seek to change the existing state of affairs and to achieve the following objectives:

1. Jerusalem is to become the capital and center of the Palestinian state.
2. Jerusalem is to become a cultural and religious heart for all monotheistic religions, and a center for peaceful coexistence between the different cultural groups.
3. Jerusalem is to become a regional and an international "world" city having special attributes and cultural uniqueness enabling it to jointly the family of the international cultural centers.
4. To provide job opportunities and housing and infrastructure for all Jerusalem residents in a manner suiting a modern city that enables people to move into it and to settle in it without prejudice.
5. Jerusalem is to become a city which balances cultural and physical plurality and diversity, and a clean friendly city whose slogan is always "welcome."

Goals of the Planning Concept

The following is a brief summary of the goals of urban planning for the Jerusalem area:

- Jerusalem shall become a unique capital for two states (Palestine and Israel), and shall guarantee cohesion, equality and plurality. Cohesion means the freedom of movement for all peoples, goods and values. Equality means arriving at a situation whereby East Jerusalem residents can enjoy the same opportunities enjoyed by West Jerusalem residents, and plurality means the possibility of coexistence between groups having different and diverse cultural, religious and social characteristics and values.
- Creation of an urban area in which all residents live in harmony, social justice and a sustaining environment, and all become politically and economically productive and culturally vibrant.
- Preserving the Old City and improving the quality of life in it so as to enable it to form the axis of growth and uniqueness in Jerusalem. The Old City must also be linked to the different sites around Jerusalem, and must form a live museum and the core of inspiration for the city's development.
- Improving Jerusalem's physical infrastructure and human resources while protecting its cultural inheritance and religious values.
- Enabling Jerusalem to join the network of world cities through merging and enhancing its inherited tourist, cultural and religious potential capabilities, and modernizing its tourist services and information and developed industries.
- Making Jerusalem a center for conflict resolution and the exchange of knowledge.
- Facilitating the revelation of its natural scenery and climatic diversity.
Components of the Planning Concept

The planning concept will depend on the following components as sources of inspiration:

1. The Old City, including its walls and gates, is the heart of Jerusalem and the core of any planning concept. The walls will be converted from a barrier through which entry to the Old City is impossible except from certain gates to a green area separating the Old City from its urban and functional surroundings. New gates will form the points of entry to Jerusalem and the linking paths to its surrounding space.

2. The parcel comprised of the Old City and the area surrounding it shall continue to have special urban characteristics ensuring a breathing space surrounding the Old City and giving it special centrality.

3. Fragmentation of the urban continuity between the center of Jerusalem on one hand and the peripheral cities and secondary centers that surround it on the other will be reduced.


5. Ensuring the diversity of building densities within the urban space in reference to the comparative advantages of each area.

6. Preservation of the natural resources and taking the physical structure as a central factor directing the densities and heights of construction.

7. Ensuring a balanced relationship between the current axes of spatial development in Jerusalem.

8. Building a roads network ensuring easy transportation and continuity between the different parts of Jerusalem as well as between Jerusalem and its surroundings.

The components of the proposed planning concept reveal that there is a certain philosophy beyond it. This philosophy is that Jerusalem is basically a city enjoying a special religious, spiritual and cultural status and any planning concept must build on this uniqueness. Moreover, the physical structure of the urban space that evolved and continues to develop is centered around the Old City space that includes its walls and gates. In fact, our plan proposes making walls and gates --existing and new-- central elements that preserve separation or buffer areas and gives them a new meaning because they can be entered through gates or entrances having special characteristics. In other words, we seek to preserve Jerusalem's pattern but we also seek to increase its area and population and to cope with its changing functional structure.

Alternative Planning Concepts

The symbols known to express the three monotheistic religions that consider Jerusalem to be holy for them are the hexagonal star for Jews, the cross for Christians and the crescent for Muslims. These symbols have formed a source of inspiration for the proposed urban structure for Jerusalem.

The Old City maybe seen as a shining sun from which rays having different densities emerge around two axes forming a cross. The two axes are the two main roads around which Jerusalem's urban development extends in a linear pattern. This pattern of development does not run on indefinitely as it becomes surrounded by a green crescent around Jerusalem. This crescent repeats itself twice: the second around the Old City parcel and the third separates Jerusalem from the surrounding central cities. Our proposed planning concept seeks to complete this crescent that surrounds the eastern sector of Jerusalem to become a complete circle surrounding both east and west Jerusalem and having the Old City as its center.

The crescent planning concept merges three planning pat-
terns: the linear or longitudinal, the radial and the ring or concentric pattern. It takes the Old City as its center and several new gates as the entrances of the external crescent.

In contrast to the crescent image, there is the idea of the "star concept" that merges the linear or longitudinal urban pattern with the radial pattern that includes the axes forming a crescent. The star idea also takes the Old City as a central point and spreads outside towards the peripheries. Around the rays of this star the transportation network and the urban structure could evolve.

In order to choose one of these two planning concepts we set standards to evaluate them so as to choose the concept that is more capable of achieving the objectives and strategies that we proposed for development in Jerusalem. The following is a table illustrating the weighted standards and the marks given to each planning concept in relation to a scale divided from 1-5, with the number 5 realizing the objectives in an ideal manner and the number 1 not realizing the objectives. We adopted the methodology of multiple standards in evaluating the proposed planning concepts. The results are presented in Table 19 below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Standard</th>
<th>Standard's Weight (1 - 100)</th>
<th>Crescent Concept (1 - 5 Points)</th>
<th>Star Concept (1 - 5 Points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Level of Protection of the Old City's Uniqueness and Distinctiveness</td>
<td>10</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Clarity and Distinction of Jerusalem as an Urban Entity</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Distribution of the Levels and Densities of Cultural Activities</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Level of cohesion between the urban structure and various types of natural scenery</td>
<td>8</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>Levels of clarity and creativity in land utilization</td>
<td>7</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>Levels of integration between East and West Jerusalem</td>
<td>10</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>Levels of creation of elastic and flexible administrative bodies</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>Levels of linkage and connection with archaeological sites</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>Levels of realization of the Old City's attributes</td>
<td>10</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>10.</td>
<td>Diversity of life in different environments</td>
<td>8</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>Effectiveness in reviving the transportation network and system</td>
<td>9</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>Cost of maintaining the urban space and system</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total**: 100 406 292
The above table demonstrates that the crescent or crescents pattern is more capable of ensuring the realization of the objectives that have been devised at the beginning of this section and of devising strategies capable of realizing those objectives. Therefore, we will now focus our attention on the crescent planning pattern that considers the gates as one of their basic components.

The Gates Image

It might be imagined that the proposed gates along the boundaries of the crescent will be established to link Jerusalem to the surrounding cities and will be gates that could be closed or converted to check points. That is the case in the present situation where nine Israeli checkpoints forming barriers and limitations to development have been established at the roads leading to Jerusalem. And that was the case before 1850 when the Old City's gates were closed at night. However, what we are proposing is different: we are proposing the concentration of functional activities within these gates in order to reflect transformation from one area to another. Functional activities could be either constructed or natural. For example, they could be the establishment of a football stadium near Jaba' village at the entrance of Jerusalem; the establishment of a commercial center at the entrance of Jerusalem from the direction of Ramallah; the establishment of a tourist center at the entrance of Jerusalem from the direction of Bethlehem; or an open tourist center at the eastern entrance of Jerusalem. Therefore, the proposed open gates are expected to represent points of transition from one type of construction patterns and functional activities to a different type so as to give those coming to Jerusalem the sense that they have entered the city.

Like the Old City and its gates, each gate has special characteristics and functions that make those coming to the Old City feel that they have entered it. This is what we want with regards to the proposed open gates: we want to transfer the feeling of spirituality and uniqueness that a person has when entering the Old City or seeing the Holy Sanctuary and the Dome of the Rock to our proposed planning concept and to those entering greater Jerusalem so as to create an impression that Jerusalem is really special and unique. The concept of gates and their ability to make places appear unique is repeated in Jerusalem as in the cases of the gates of the Holy Sanctuary and the gates of the Old City, as well as the proposed gates of greater Jerusalem. This repetition can give Jerusalem additional uniqueness stemming from the concept of divinity and cohesion in urban planning and design.

The following is an overview of seven new gates that we propose around Jerusalem:

1. The Gate of Administrative and Functional Activities. Lies at the edge of Jerusalem (Qalandiya) Airport and in Ar Ram area on Jerusalem-Ramallah road. The industrial-commercial park in Qalandiya (Atarot) could be developed as the axis of this gate.

2. The Gate of Recreation and Health Tourism. This gate links Jerusalem to the Dead Sea in Az Z'a'ayyem area. In this gate a balance shall be established between the desert space and the desert tourist services.

3. The Pilgrims' Gate. This gate lies at the entrance of Jerusalem from the direction of Bethlehem. It links, yet separates, two urban centers admired by pilgrims.

4. The Gate of Administrative and Athletic Services. This gate lies at the intersection of Road Number 4 and Road Number 45 in Bir Nabala area, and links Jerusalem to Tel Aviv and Ramallah.

5. The Gate of Industrial Activities. This gate links Jerusalem to Nablus in the Jaba' area were the quarries are. An industrial zone is currently being developed in this area, but it needs further renovation and development.
6. **The Gate of Desert Agriculture.** This gate links Jerusalem to Hebron and the south eastern part of the West Bank. It is located in As Sawahira Ash Sharqiya and Sur Bahir area that overlooks the desert space where desert agriculture began to develop.

7. **The Gate of Mediterranean Agriculture.** This gate links Jerusalem to the north western part of the West Bank that is characterized by green agriculture and products growing in a moderate climate like citrus products, olives and different kinds of fruits. This gate lies in An Nabi Samwil area (see Map 6).

We emphasize that the proposed gates present a functional image related to the characteristics of the different spaces and urban centers surrounding Jerusalem and tries to translate them into functional centers.

**Image of the Crescent Zone**

As the case is with the first impression one might have about the gates, it might be imagined that we are proposing a green belt forming a barrier surrounding Jerusalem and preventing its expansion. However, that is not what we are proposing. We propose the allocation of an area of transition or transformation between the building patterns in Jerusalem and those in the surrounding cities. This area shall have a very low housing and population density confined to the currently built up areas whose future expansion will be prevented. Nonetheless, we propose the establishment of certain activities (such as parks, playgrounds, green recreation areas, cemeteries, car parks and an airport) within this green ring that will form a buffer zone surrounding the urban structure in Jerusalem. Such activities need an open space and can form a barrier to the continuity of the different urban blocs. This barrier shall be characterized by its green color in light of the high density of trees and green fields and the low density of houses in it.

The proposed green crescent will give Jerusalem an urban value and will form an empty space paralleling the intensive urban growth in Jerusalem, especially between the rings of the proposed crescents. Additionally, this green crescent seeks to create a green space and an urban lung in metropolitan Jerusalem. Meanwhile, the green crescent around the Old City will preserve its urban and spiritual status.

Furthermore, the green belt will transform the urban growth and the physical structure of the urban blocs from the linear grid pattern to an integrated concentric pattern that builds on the idea of unity, balance, equality and integration.

From a functional point of view, the idea of the crescent and the new gates shall give Jerusalem an open heart and make it the center of metropolitan Jerusalem; therefore, it points to the beginning of a new era in Jerusalem.

There is a strong reciprocal relationship between a city's heart and its hinterland; the more developed a city's hinterland is the stronger is the force pushing towards the development and expansion of its heart. Increasing the population of Jerusalem and upgrading its economic and administrative status from a peripheral city to a regional and an international center should lead to the expansion of Jerusalem's urban heart towards the peripheries, contribute to the intensification of economic and administrative activities at the center, accelerate the suburbanization of the residents towards urban centers at the peripheries, and lead to the transformation of the services and economic and functional activities. This urban process, which can be summarized as the sliding of urban activities toward the peripheral areas, has already taken place in the other metropolitan cities and will take place in Jerusalem as well.

The crescent will determine the distribution of functions within the urban space and will contribute to dividing Jerusalem on func-
tional bases. The nucleus of the city's heart develops inside the Old City whose urban characteristics must be preserved within the walls. The Old City inside the walls must be revived in terms of its housing, economic and functional activities; its functional role will be limited to tourism and to its religious importance. Nevertheless, we find it necessary to balance between the continuation of housing in this area and the development of services and economic activities in it.

The second half circle includes the area that surrounds the Old City parcel but excludes the crescent that surrounds the Old City proper. This area will be allocated for cultural, social and administrative activities and symbolic governmental buildings connected with and integrating the functional structure in the Old City. In addition, the development of housing will continue in this area, but the establishment of high rising buildings will be prohibited because they make it impossible to see the Old City proper from different locations in the Old City parcel. Meanwhile, in the external half circle that excludes the Old City parcel (the first and second crescents) urban, commercial, housing, administrative and governmental activities will develop. In this area it would be possible to increase the housing densities and to build high rise buildings provided that they do not make it impossible to see the Old City. This means that in every urban design the Old City shall be the point of orientation.

We do not favor the establishment of high rise hotels or public buildings inside the Old City parcel because they destroy the Old City's centrality in the urban design for the heart of Jerusalem.

Outside of the crescent, i.e., the area that includes the rest of Jerusalem District and the surrounding peripheral cities, there must be activities that complement the urban activities and functions that will be established in the heart of Jerusalem - but not repeat or compete with them. This means that we view Jerusalem and its district and the cities surrounding it and forming urban continuity with it as one urban unit. In fact, the aim and the function of the crescent is to distribute the functional and urban roles and to give a special impression of the future image of this unit. In order to do so, the urban space in Jerusalem will be divided into functional spatial blocs, each enjoying special characteristics and comparative advantages. Those blocs form components of the whole, create a balance within it and give it strength and diversity without losing the uniqueness and distinctiveness of its core which is the Old City.

The implementation of the crescent must not be confined to the eastern sector of Jerusalem; it must be completed to include the western sector and to distribute the urban roles of the urban blocs in it. In spite of the functional duality that might arise in Jerusalem in light of becoming the capital of two states, West Jerusalem is currently the center of some economic and administrative activities that can complement those in East Jerusalem. Therefore, West Jerusalem can give East Jerusalem strength and uniqueness and enable it to compete with other national and regional cities.

Mission of the Concept

The mission of the proposed planning concept can be summarized in the following points:

1. The Old City should remain the heart of Jerusalem and the main axis of urban and functional formation in it.

2. Planning should be deduced from the existing physical and natural structure and the existing urban growth in Jerusalem and its district. It should aim at adjusting the existing situation and ensuring Jerusalem's uniqueness and distinctiveness.

3. Modernization of the urban originality of Jerusalem through the proposed functional gates of the modern Jerusalem that parallel the existing gates of the old Jerusalem.
4. The proposed concepts and ideas of planning stem from Jerusalem's religious and spiritual status and seek to enforce that status in Jerusalem's new parts.

5. Jerusalem will achieve national and international centrality as an economic and urban heart in addition to its religious and spiritual status.

6. Jerusalem and its district will be divided into urban and functional blocs depending on integration, unity and balance.

7. Creation of an elastic urban structure giving individuals and commercial and administrative institutions the option to settle in it.

8. Overcoming the current urban and geopolitical impediments and limitations and directing them for the sake of the city's future interest.

**Description of the Main Elements of the Planning Concept**

The following is a brief summary of the elements of the proposed planning concept:

1. The Old City within the walls: The proposed planning concept seeks to devise strategies to revive it.

2. The Crescent idea: Comprised of two crescents differing in their sizes and urban components. One will surround the Old City and the second will surround Jerusalem and form a buffer zone separating it from the various urban extensions in Jerusalem District and the surrounding cities.

3. The New Gates: Located at the boundaries of the crescent and at the main road junctions connecting Jerusalem to the surrounding cities.

4. The expansion of cities or the establishment of new cities through the expansion of villages will take place outside the crescent area.

5. The Old City parcel: Includes the Old City influence area and the crescent surrounding the Old City. Also, it includes the western sides of the Mount of Olives and Al Masharef Mountain until Al Samar Land, as well as Silwan, Ras Al Amud and Ath Thuri.

6. The current axis of urban growth: Extends along Nablus-Jerusalem-Bethlehem road and the urban axis that will parallel it or branch from it.

7. The rural area outside the crystal crescent: Comprised of the desert area and villages that extend from As Sawahira Ash Sharqiya village in the south along the eastern sides of the Mount of Olives and Al Masharef Mountain to Mikhmas village in the north. Also, includes the agricultural villages to the northwest of Jerusalem.

8. The currently established Israeli settlements that form new satellite cities surrounding Jerusalem and are linked to west Jerusalem.

9. West Jerusalem as a diverse urban unit that is currently different from East Jerusalem, in spite of competing with it and directly affecting the urban and functional structure in all of Jerusalem at the present.

10. Diversity of housing densities in the urban spatial blocs for the sake of creating balance and cohesion between a space that feeds itself and has a dense urban bloc on one hand and the grid urban growth on the other.

The proposed averages of building heights aim at creating organized, cohesive and integrated skylines. However, it is possible to establish distinct buildings forming orientation points within the urban space or forming landmarks or functional nodes within the urban blocs, provided that they do not compete with or cover the buildings that represent the heart of Jerusalem, specifically the Holy Sanctuary and the Dome of the Rock within the Old City parcel.
Table 20. Distribution of Densities and Heights of Buildings According to the Different Proposed Planning Blocs

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of Area of Planning Bloc</th>
<th>Average Population Density</th>
<th>Average Height of Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Old City</td>
<td>20 persons per dunam</td>
<td>Below the Old City walls</td>
</tr>
<tr>
<td>2.</td>
<td>The Crystal Crescent</td>
<td>500 persons per dunam</td>
<td>Two floors</td>
</tr>
<tr>
<td>3.</td>
<td>The Old City Parcel</td>
<td>15 persons per dunum</td>
<td>Three floors</td>
</tr>
<tr>
<td>4.</td>
<td>The Central Linear/Longitudinal Axis</td>
<td>25 persons per dunum</td>
<td>Six floors</td>
</tr>
<tr>
<td>5.</td>
<td>The Eastern Area</td>
<td>15 persons per dunum</td>
<td>four floors</td>
</tr>
<tr>
<td>6.</td>
<td>The Scattered Villages</td>
<td>10 persons per dunum</td>
<td>two floors</td>
</tr>
<tr>
<td>7.</td>
<td>Ramallah</td>
<td>30 persons per dunum</td>
<td>six floors</td>
</tr>
<tr>
<td>8.</td>
<td>Bethlehem</td>
<td>10 persons per dunum</td>
<td>four floors</td>
</tr>
<tr>
<td>9.</td>
<td>The New Gates</td>
<td>10-25 persons per dunum</td>
<td>six floors</td>
</tr>
<tr>
<td>10.</td>
<td>The New or Expanded Cities</td>
<td>25 persons per dunum</td>
<td>six floors</td>
</tr>
</tbody>
</table>

Concerning the relation between the functional structure and the urban space, we believe in the factor of distributing the functional activities according to the comparative advantages of each planning bloc. Nevertheless, we proposed the establishment of centers of services and economic and administrative activities within the urban space. The following is a more detailed elaboration on the contents of the planning idea.

**Content of the Planning Concept**

The planning concept is comprised of three factors: Image, Value and Function.

**Image**

The form and content of the crescent concept represents a new mission in the development of Jerusalem in the 21st Century. This concept considers Jerusalem's new gates to be entrances at the boundaries of the crescent area. It also considers those entrances to be gates to the heart of the metropolis and to Jerusalem District. The intensification of development in the heart of metropolitan Jerusalem can complement and integrate the unity of the Old City bloc and can practically consolidate the image of Jerusalem as a unique and distinct city. The new gates in Jerusalem's crescent wall parallel the seven gates in the Old City walls.

The concept of the crescent is not new to the region. The historic 'Fertile Crescent' concept, for example, refers to Iraq, Syria, Lebanon, Jordan and Palestine. However, we have revived this form as a concept in urban planning, and we seek to translate it in Jerusalem and its surroundings. Moreover, the crescent represents the beginning of the month in the Hebrew and the Muslim (Hijri) calendars, and is viewed as a symbol for the beginning of a better future. The proposed image of the crystal crescent takes into consideration the geographic, historic, symbolic, religious and spatial inheritance concerning the image of the crescent and seeks to implement that legacy in the surroundings of Jerusalem, especially around the Old City.

**Value**

In the proposed crescent concept the crescents area, especially the external crescent, represents a value balancing the grid and radial urban growth in Jerusalem and creating a unique ecological area at the level of the metropolitan urban space. This area must be refined to produce a balanced urban environment that can sustain itself and prevent the formation of a stressful urban environment.
The crescent concept allows development and growth in accordance with various planning concepts through the establishment of an integrated hierarchical transportation and road network because the crescent concept encourages circular, grid or radial urban growth in accordance with the different proposed planning units.

**Function**

The Old City area, the crescents and the functional gates form the central elements in our proposed planning concept that must lead to reviving the centrality of Jerusalem in the metropolitan area and in Jerusalem District. Yet we seek to develop Jerusalem's international functional status and to develop it as a national and regional center. This objective requires the establishment of international functions and activities within the space of the crescent in the middle region. Those functions are summarized in the following activities:

1. **Local Government Center.** Jerusalem will be the capital of the Palestinian state and is currently the capital of the Hebrew state. Jerusalem is an Israeli governmental city; therefore a Palestinian governmental city forming an urban mass inside the urban space must be established. This government city must include several governmental buildings either concentrated in one area or distributed in East Jerusalem. In addition, such buildings can be outside the Old City parcel area. The Parliament, the Presidential Palace and the Supreme Court of Justice that are proposed to be located in an area overlooking the Old City.

2. **Jerusalem (Qalndiya) Airport.** This airport will offer transportation services to all of metropolitan Jerusalem. A part of the airport will be located inside the crescent, while the other part (which includes the accompanying service and industrial buildings) will be located in the adjacent industrial and service area.

3. **Metropolitan Athletic Center.** Includes a football stadium and additional playgrounds.

4. **Metropolitan Industrial Parks.** This will be distributed along the boundaries of the crescent in Qalndiya (Atarot), Jaba' and Hizma.

5. **Commercial Belt.** Metropolitan commercial activities are distributed along this belt. It starts at the heart of the Old City and runs along the north and south axes. In addition, central commercial centers shall be established throughout the metropolitan space.

6. **A Health Center and a National University Hospital.** This will provide health services to the residents of Jerusalem in particular and Palestine in general. It will include health research centers and facilities for holding international conferences.

7. **International Research Centers.** These institutions should offer specialists and programs in the area of the resolution of conflicts on ethnic, religious, and sociopolitical bases. Such centers, like Tantur Ecumenical Center, will hold international conferences.

8. **National Museums and Theaters.** The provision of cultural services to Palestine and the region is essential.

9. **Functional Centers.** These centers, along the gates, will provide services and help define the gates.

10. **The Green Crescents.** This area will include green zones, natural reserves, recreational areas and green lungs on a metropolitan level in order to preserve the distribution of land uses and the skyline in the space surrounding the city of Jerusalem.

11. **Residential Areas.** These will differ in their quality, density and height.
Section Five: Strategic Planning Issues for Jerusalem Area

The following is a brief summary of strategic issues directing the implementation of the crescent concept and the new gates:

- Palestinians must promote the proposed planning pattern through official and diverse mechanisms. They must take initiative and increase awareness for the sake of realizing the content of the planning concept in 2003.

- Palestinians must discuss the proposed planning concept with the Israeli authorities and Israeli politicians. They must seek to consolidate their efforts and increase their strength in order to be able to guide the planning process and to take initiative in planning matters.

- Increasing national and international awareness of planning considerations in Jerusalem.

- Promoting the new pattern through professionals and academics, as well as politicians and ordinary people, by launching a local and international information campaign, organizing design competitions, holding detailed planning festivals, and preparing graduation projects for university students.

- Coordination with Israeli institutions and authorities in order to develop selected projects in ideal and representative locations.

- Gaining the support of international donors.

- Initiating an information campaign that aims at stopping Israeli actions and activities which contradict and prevent the implementation of the proposed planning concept. Such Israeli activities include the expansion of settlements and increasing their absorption capacities. In that regard, Palestinians must work on stopping the possibility of the expansion of Ma'ale Adumim settlement in order to protect the eastern gate in the proposed planning concept.

Warnings

During the preparation of the proposed planning concept, we conducted interviews and meetings with a large number of individuals having various roles, duties and responsibilities. We found that any idea concerning Jerusalem can have two completely contradictory interpretations due to the political biases arising from the long conflict. There are some who see the space of the crescent as a means of separating Jerusalem from its Palestinian hinterland, and therefore a tool suiting the Israeli policy. We would like to emphasize that our planning concept does not promote this separation. On the contrary, it seeks to ensure the Palestinian demographic, economic and institutional growth inside the crescent space and therefore to increase the Palestinians’ linkage with Jerusalem. Nevertheless, we find it very important to develop Jerusalem in accordance with a clear planning concept based on specific priorities that must be accomplished.

Moreover, the existence of Israeli settlements outside the Jerusalem area and outside the crescent does not conflict with the planning concept since the future of those settlements has not been determined yet. Although those settlements have been established in accordance with geopolitical consideration and in violation of international law and the international charters, they currently exist and any planning concept must take them into account and must offer short and long term scenarios concerning their future. We suppose that the political solution will lead to a
political separation between Palestine and Israel and therefore will lead to decreasing the size of Israeli settlements in the Palestinian space. Nevertheless, we do not suggest the expulsion of the Jewish residents from their settlements; they can continue to live in their settlements under the Palestinian state.

It is important to emphasize that our planning concept presents scenarios but does not make policy. It depends on purely professional considerations and does not present a certain political position. We are presenting this concept to decision makers as one approach to urban planning in Jerusalem, and we believe that it is the suitable alternative that can make the development and the administration of the urban space in Jerusalem, and its surroundings more flexible. We recognize that any planning solution has political dimensions but these can be discussed elsewhere. The current planning concept is proposed in a purely professional manner.
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