Jerusalem City: An Inquiry into it's Morphological Evolution

Golam Mohiuddin

Assistant Professor
Department of Urban and Regional Planning
Jahangirnagar University, Savar, Dhaka-1342, Bangladesh
E-mail : chisty74@yahoo.com,

Abstract: Jerusalem, one of world's holiest cities, is sacred to Jews, Christians, and Muslims. The location of synagogues, churches and mosques as well as shrines and tombs of the holy, the learned, and the martyred has made it one of the most important pilgrimage centers for monotheist. The Temple Mount, the Wailing Wall, the Dome of the Rock, the Church of the Holy Sepulcher-to name only a few -awards Jerusalem with a very special holiness to half of the humanity. Over the centuries, numerous historic events have left footprints in Jerusalem contributing towards its morphological evolution. The core focus in this study of morphological evolution has been the socio-spatial issues that have made due contributions over the centuries on city's morphology. The study has found that the sense of belongingness derived out of religious attachment has ultimately promoted the mass awareness regarding the cultural, historic value of Jerusalem's spatial footprint. Moreover, successive government's firm determination to preserve the distinctive urban space factors by devising and implementing supportive planning guidelines, public conciousness regarding the preservation and protection of natural landscape in order to maintain the spatial harmony have also contributed in maintaining Jerusalem's unique character for decades.

Keywords: Jerusalem, urban morphology, cityscape, conservation

Introduction

Urban entities are basically culture and geography's largest artifact- product of a very complex play of varied forces (Dickinson, 1984). Numerous theoretical understanding have come forward regarding the formation of urban entities hence illustrating the process of morphological evolution of human settlements. Many ways of conceptualization of urban morphological evolution have been proposed by anthropologists, historians, geographers, planners, architects and other professionals- due to its' multi-faceted, interdependent, social, physical and spatial dynamics. It has been the intention of researchers in urban studies to seek out the 'generalized rationalization' of the urban form and structure which is the outcome of the socio-spatial dialectic at a particular point in time. Indeed, the initial objective of all studies on urban areas is to identify spaces within the cities which exhibit distinctive social or spatial characteristics. Thus the main focus is on the segments or parts or sub-areas which may be termed morphological regions, neighborhoods, localities, districts, precincts, urban social areas or urban regions, according to the type of approach and semantic taste of the researcher. Besides, city form and morphology tends to change less rapidly than many human institutions because these are non-generational, lacking the definite life span like human organism (Vance, 1990). Basing upon these theoretical propositions, this study has been initiated to investigate the issues and components that have dictated the formation, growth and maturing of the spatial fabric of the mystic and historical city of Jerusalem. The core focus here has been the component(s) of urban spatial structure and socio-political affairs that dictated the morphological from from time immemorial. The continuing process and forces of the interrelationship of morphology is being illustrated here from various points of view.

Jerusalem: The City at a Glance

Location and Landscape:
Jerusalem is located in the middle-eastern part of Israel. It is a 3000-year-old city covering an area of

_____

about 629 sq.km (Sharon, 1973). It is one of those places on earth where human civilization had first settled and flourished. To day, it is a city where mysticism and optimism have merged completely.
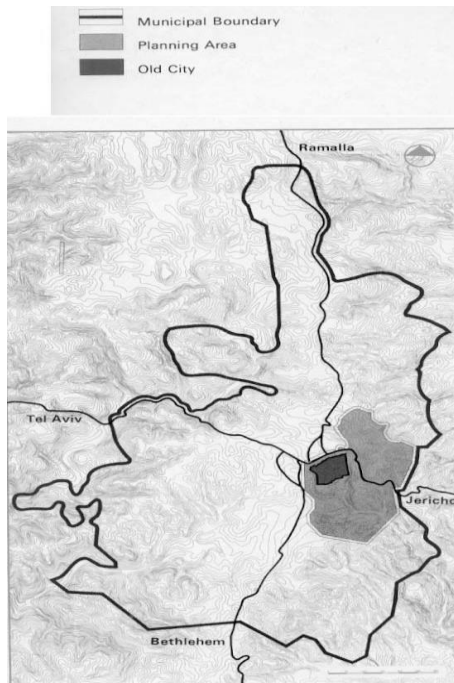
Figure 2: Map showing modern day city core,

Figure 1: Map showing old city and municipal boundary,

Figure 3: Open Spaces – creats balance between natural and urbanized spaces in Jerusalem,

Topographically, Jerusalem is at 800-meter high plane from the Mediterranean Sea (Sharon, 1973). Mount olives in the east and mount Zion on the north is bordering the city. These mountainous ridges along with an artificially maintained open space are covered with lash greens that appear as a dividing zone between old and new city. Moreover, this carefully designed green space is designated for conservation, for recreation and as an escape from the haste of urban life. The valleys that remain unspoiled are preserved as the natural setting to support the urban environment (Sharon,1973).

Jerusalem is a good example of maintaining green spaces in an urban eco-system (Hasson, 2001). Parks, gardens and courtyards as well as ecological niches are conserved, both as a public or private property.As per contemporary standards, the urban planning allocates a reasonable ratio of green space per capita. It also guarantees playgrounds and green spaces with in proximity of each neighborhood. The existing 'Open Space Plan', with its balance between natural and urbanized spaces, is adopted and put into practice (Hasson, 2001). The importance of green spaces and environmental issues in influencing the quality of physical and mental health, is emerging as a central criterion in all development decisions.

Cityscape:

Jerusalem is a living city that has grown in an organic manner and is well based economically and socially. For centuries, it has been an extremely vibrant cultural and spiritual urban entity. During the early days of modern Israel, Jerusalem was supposed to be the state capital. However, later, Tel Aviv selected (Hasson, 2001). Such postulation of being the state capital initially and later emerging as a regional city has affected the cityscape by slowing down it's physical growth (Hasson, 2001).

Townscape of Jerusalem is marked with vaulted alleyways, narrow lanes open to sky, fore court and interior plaza, stone paved streets with plenty of greens (Hasson, 2001). It is also dominated by domes of vanity, towers and minarets that can be seen

anywhere from the city. As a whole the city, the cityscape is rich in format and color (Hasson, 2001).

From the early decades of 20th century, Jerusalem emerged as a city divided into two parts, namely old Jerusalem, which was established centuries ago as a fortified urban enclave, and the new city that has emerged circling the old city. Each of these two parts are standing today with their own distinctive spatial character.

In the **old city** of Jerusalem, the distinctive characters are as follows:

- Comprised of ancient architecture and built form emerged on different era representing different religious philosophy- resembling organic form of growth.
- buildings are of low heights with open cout yards
- covered with narrow, crowded, bustling pedestrian alley.
- houses, synagogues, mosques, churches, religious schools are ornamented with decorative grafting.

Figure 5: Sky-line of Christian quarter at old Jerusalem

Figure 6: "Open Court yard"-one of the common spatial character of old city buildings,
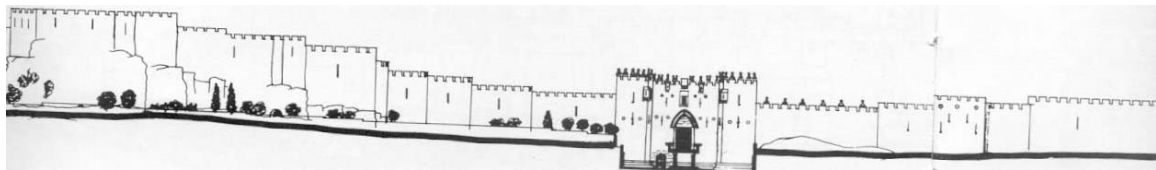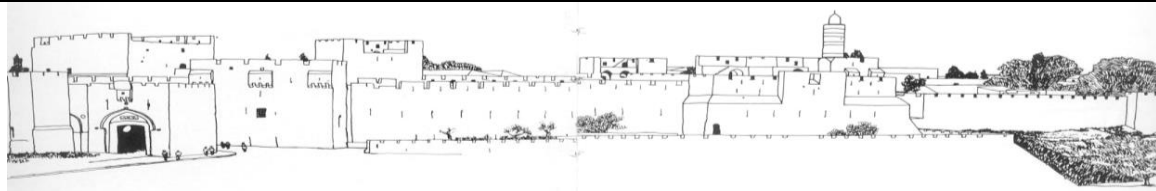
In the **newer part of the city**, the distinctive characters are as follows:
  ➢ *grew around the old city.*
  ➢ *developed in Grid-Iron pattern.*
  ➢ *building heights are maintained at low level to confirm with the sky line of the old city.*
  ➢ *criss-crossed with ample vehicular transport network.*

_____

Figure 8: Sky line of New city

Figure 9: Light rail- one of the popular mode of transport for intracity communiting

Context of Morphological Evolution

The city of Jerusalem came into being approximately in the sixteenth century B.C. (Sharon,1973). Abraham in the eighteenth century B.C. was associated with Jerusalem when it was a city of the Canaanites, and it became an Israelite city in the tenth century B.C.-the City of David. It was David who built up Jerusalem's fortifications, erected impressive public buildings, and made it the political capital of the kingdom of Israel. David's successor, Solomon, established the most imposing building; the First Temple.
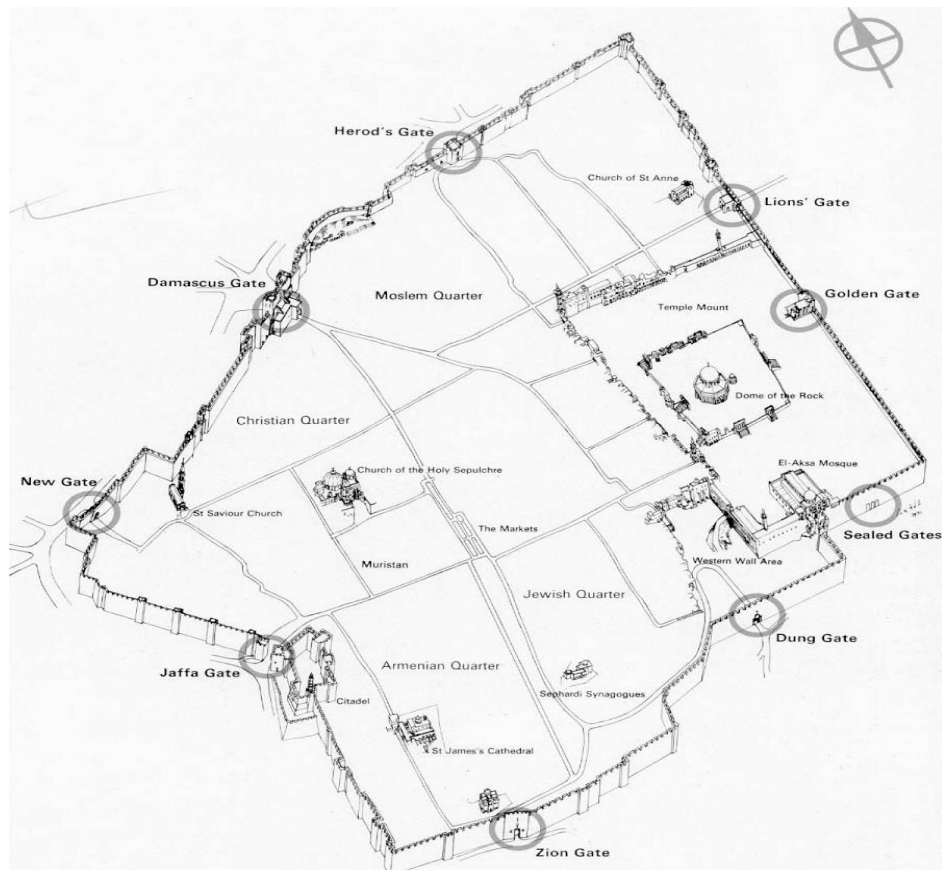

Figure 10: Old city with Harem-ash-Sharif (Dome of the Rock) at the Centre *Source: Hasson, '01*

Although Babylonian emperor Nebuchadnezzar II destroyed it in 586 B.C., a second temple was built on the same site in 515 B.C. under the tutelage of the Persians (Sharon, 1973). This temple stood until A.D. 70, when it was destroyed by the Romans; and Jerusalem became a Roman city - later a Byzantine one (Sharon, 1973). Muslims conquered the city in A.D. 638, and the ancient Temple Mount soon became known as Haram-esh-Sharif, the Noble Sanctuary, as it became the site of the Dome of the Rock and the Al Aqsa Mosque (Sharon, 1973). The "Rock", which is particularly sacred to Muslims, had became the core part of Jerusalem and still it maintains such status in the changed world fabric (Sharon, 1973).
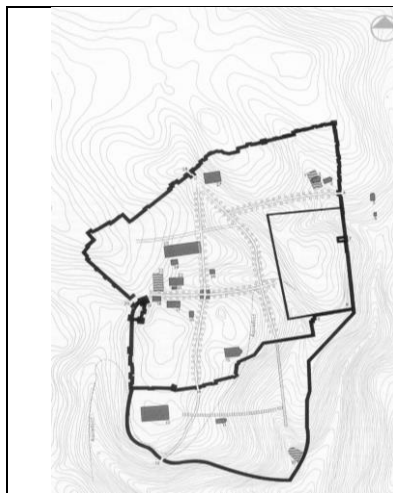
Figure 12: Jerusalem during Byzantine period (324-638 AD)

Figure 13 : During Crusedar period (1099-1187 AD)

Figure-14 : During 2nd temple period (537 BC-70AD)

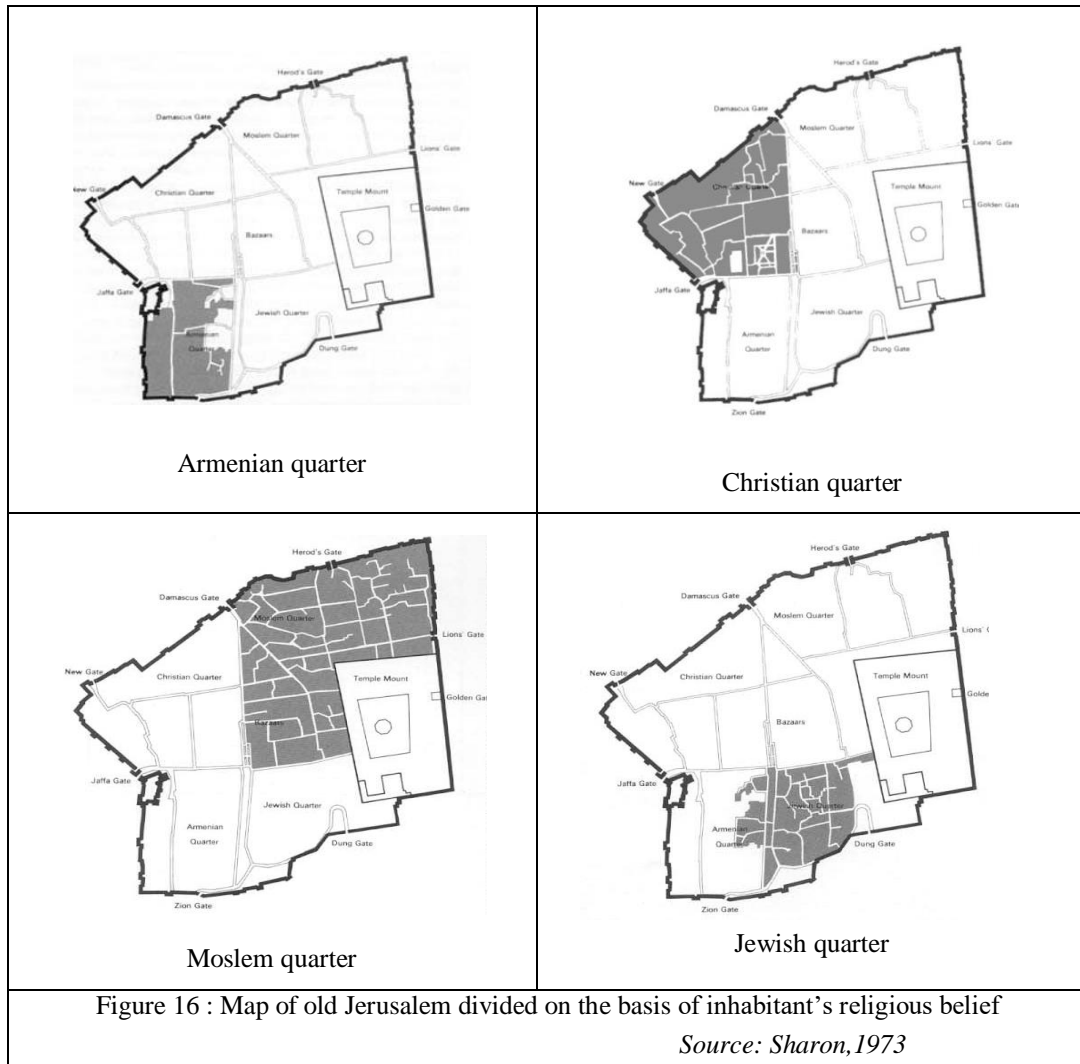Figure 15 : During Ottoman period (1517-1917AD)

Source: Hasson, '01

Urban fabric of Jerusalem has long been influenced, affected and dictated by politics of religion (Brunn, 1993). As such it grew as a partitioned/divided entity. In fact such a political phenomena and subsequent spatial development policy has started shaping the urban fabric and form of Jerusalem to a notable scale from the late 19th century when members of Jewish faith started immigrating to the then Palestine and settled mainly around Jerusalem (Brunn, 1993). These immigrants started to buy out Arab lands in and around Jerusalem (Brunn, 1993). Such an initiative naturally triggered refurbishment of

individual household, blocks, quarters and community that formerly belonged to other religious faiths, in accordance with the belief, culture and heritage of Judaism. Numerous Synagogues, Yeshovts (Jewish religious schools) were built within

the city in between 1885 to 1947(Brunn, 1993). Thus with these the urban fabric of Jerusalem started to incline towards Jewish heritage steadily. Meanwhile the city continued to be divided between Moslem, Christian and Jewish quarters increasingly.

Armenian quarter

Christian quarter

Moslem quarter

Jewish quarter

Figure 16 : Map of old Jerusalem divided on the basis of inhabitant's religious belief
Source: Sharon,1973

After the war of independence in 1948, Jerusalem found itself partitioned into two parts and ruled by two different countries- Israel for the Jewish part and Jordan for the Moslem part. After 1967 war, the size and shape of Jerusalem changed as the Arab parts of the city had been conquired by Israel. In order to sustain the occupancy of the whole of Jerusalem, state partoned Jewish immigration grew tremendously. Previously old Arab settlements were annexed as Jewish land and were developed in a

different fashion, i.e, housing neighborhoods, administrative districts, CBD's, playground, green spaces,theatre halls etc (Brunn, 1993) for the Jewish community. Places with Jewish heritage attracted the attention for renovation, restoration works, ahile places with Christian and Moslem cultural values being neglected. Thus from a more cosmopolitan, secular image, Jerusalem has again transformed into a Israelite city again after King Solomon 586 BC (Brunn, 1993).
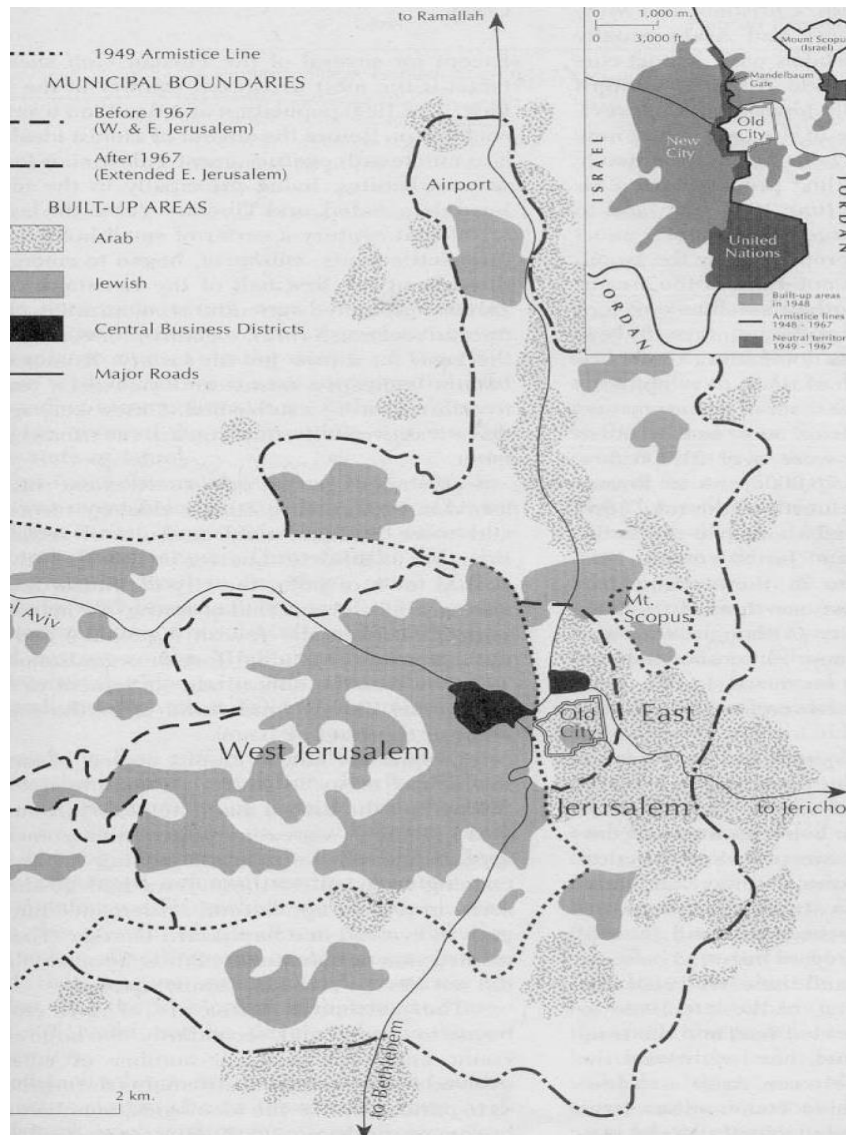
Figure 17: Map showing present day Jerusalem with enclosed enclaves chalked
on the basis of dominant religious community

Source: Brunn, 1993

State of the Present Day Urban Fabric

Urban Design Philosophy

"The architecture of Jerusalem situates up a dialogue between old and new (Choshen, 2001, 87)." It takes into account of social needs, natural topography and cultural heritage. The quality of important projects is increased through architectural competitions, public debates and exhibitions (Choshen, 2001). The scenic and historic heritage of Jerusalem is designated as an heritage of 'Outstanding Universal Value', and actively conserved. International charters relating to historic cities and landscape preservation are adapted to Jerusalem's specific character, their adoption guaranteeing the continuation of the legacy (Brandeis, 2002).

A full conservation survey of the urban fabric of the Old City is accomplished, thus arresting the ongoing degradation of Crusader, Mameluke and Ottoman architecture(Brandeis, 2002). Pre-state monumental sites and vernacular stone buildings outside the walls are preserved and renovated for contemporary needs, or reserved for future generations (Kaplan, 2001).

Figure 18: Postmodernism dominates in the current urban form

Figure 19: Observation kiosk near old city

Source: Brandeis, 2002

The City Skyline

The proportion between height and mass in new developments is harmonized with the dimensions of landscape and man. Housing development integrates the intimate Jerusalem neighborhood scale (Hasson,2001). The height of new buildings is regulated by a new overall plan, thus conserving open spaces and avoiding anarchic land speculation. High-rise construction is banned because of their long-term negative effects on the environment, the economy and the image of the city (Hasson,2001). Low-rise and medium-rise high-density buildings meet all development needs, i.e, 8 story buildings in commercial areas, 6 stories in residential areas, 4 stories in and around the visual basin of the Old City, and other historical areas. Sensitive planning prevents further blocking of urban vistas and panoramas exclusive to Jerusalem.

Figure 20: Hight regulation ensures balance between old and new
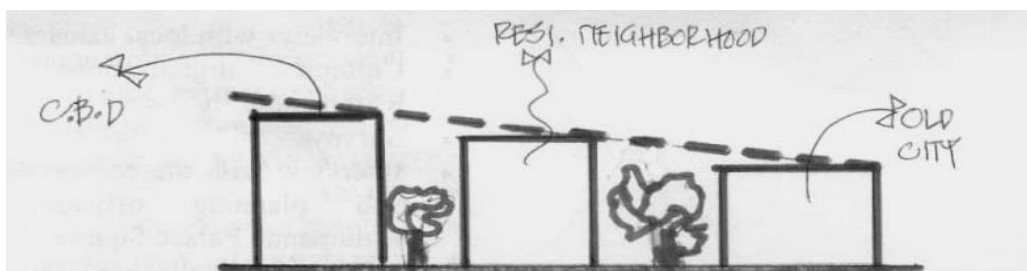

Figure 21: Mediun height public housing

Figure 22: Trend of Jerusalem's skyline –from old city towards outskirts

Source: Developed by Author, 2003

Special care is given to the planning and embellishment of urban public spaces. Streets and squares (including sidewalks, lighting and urban furniture) are designed in harmony with the historic fabric and constructed with sustainable materials (Hasson,2001). Mature trees are respected, while new trees are planted. The importance of green spaces and environmental issues in influencing the quality of

physical and mental health, becomes a central criterion in all development decisions(Hasson,2001).

Jerusalem has ensured quality space for pedestrians through traffic calming measures, and serious prohibition of parking on sidewalks. Careful attention is paid to the disabled, while cyclists enjoy safe routes throughout the city (Choshen, 2002).

Figure 23:Public place like Holocaust memorial are national scale landmark of Jerusalem
Source: Chosshen, 2002

Figure 24: Natural landscape is a common feature of Jerusalem city
Source: Choshen, 2002

Forces Contributing to Urban Morphology

Architecture of the city

In it's 3,000 year old history, the last fifty years since the founding of the State of Israel or the "Israeli period", is a brief moment - but responsible for an unprecedented drive for spatial development (www.jda.il/english). From an architecture of impoverished slums and cheap housing projects to one of prosperity in the suburban neighborhoods and prestigious medium-rise condominiums; from standardization and conformity to uniqueness and originality; from a conservative, restrained and humble approach to a style that often borders on vanity (Kroyanker, 2001). Nevertheless, the influence of the rapidly changing ideologies in built form has attributed the city with the following design features.

From unity to diversity:

Under the British mandate, all residential construction was in the hands of private contractors and entrepreneurs. After the state of Israel was
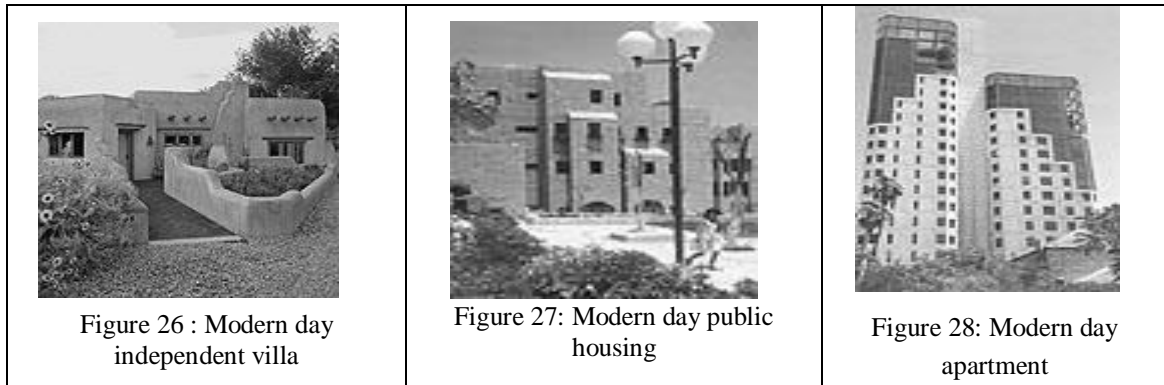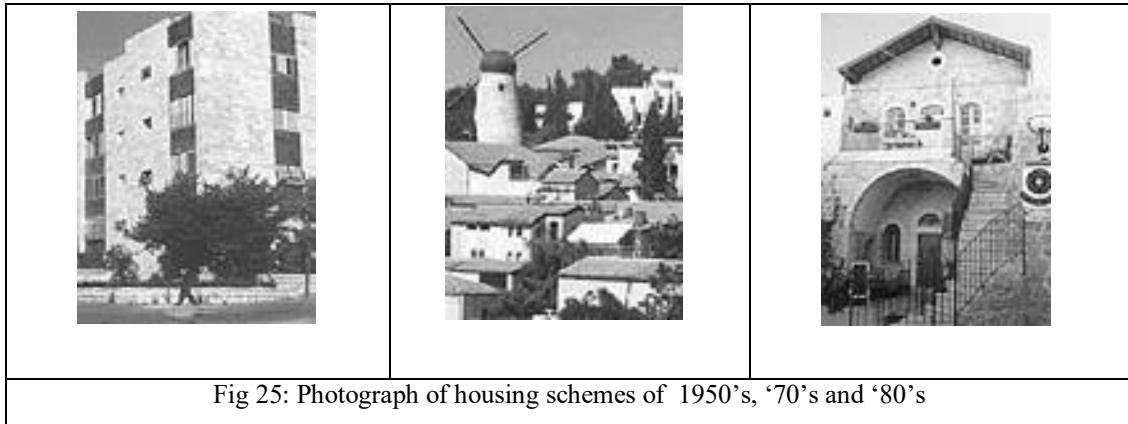
founded, the Ministry of Housing and Construction did more than half the work in this area (Turner, 2001). Buildings constructed during the British rule, being site-specific and gradual, eventually created an urban fabric. But since 1948, public construction has created masses. Residential neighborhoods went up in one go, planned and built within a short period as a single entity. Such construction had an impact beyond its size, mainly due to its dominance of land allocation, housing policies, planning, subsidization and inhabitation (Turner, 2001). Over the years, these aspects have changed significantly, in terms of the nature of planning, neighborhood location, building placement, architectural shape, reference to open spaces, parking solutions and investment in public building. During the years when Jerusalem was a divided city, the political and security situation led to the development of the western and southwestern quarters, which were almost entirely filled with housing projects in the 50's and the 60's (Turner, 2001). The reunification in 1967 led to a government policy designed to prevent the city from ever being divided again by the quick establishment of "facts on the ground" (Turner, 2001). The construction of satellite neighborhoods surrounding the inner city drastically changed the city's shape. Most cities grow

through the gradual expansion of their built areas; here, several neighborhoods were built simultaneously at a distance from the center (Turner, 2001).

Architecture of public housing projects and private buildings:

The transition from the two-family houses of 35

sq.m. per family, to the large, well-kept villas of the "Build Your Own Home" project in the 70's and 80's expresses the shift from lack to plenty, the rising standard of living and the change in consumer habits (www.jda.il/english). Changes in architectural style followed, going from the International "box" to the semi-oriental structures of the '70s, with their many arches and retractions (www.jda.il/english).

Fig 25: Photograph of housing schemes of 1950's, '70's and '80's

Figure 26 : Modern day independent villa

Figure 27: Modern day public housing

Figure 28: Modern day apartment

This was an attempt to escape anonymity and to create an original and local architecture that would match the unique nature of Jerusalem and organically continue its structural heritage.

Changes in standards and shapes:

One of the most outstanding feature of the fifty years of Israeli public architecture is the transition from the anonymity and monotony to the uniqueness and individualism (Turner, 2001). This may be seen everywhere, from government sponsored public buildings to privately built condominiums. The main change was from the stone box on concrete pillars of standard two - to three-bedroom apartments, to a variety of penthouses, multi-level flats and studio

(Turner, 2001). Houses were designed to spread as rows of adjacent cottages or built one on top of another with masses of roof tiles, extra floors, retracting balconies and a multitude of stonecutting techniques and styles (Turner, 2001). This shift from least standard to unique can also be observed in industrial construction. From the multi-purpose modular buildings, as built in the '50's, to the "industrial villas" since the 1980's which architecturally radiate economic and technological power, progress and originality.

From minimalism to structural pluralism:

Another aspect of the transition from anonymity to identity was the shift from minimalist aesthetics to

structural extravagance (Turner, 2001). When the city was divided, the majority of its buildings reflected lean and rational efficiency, expressed through modest design. The architecture of the 1970's and 80's reflects the economic boom through sensual and blunt shapes, as well as extravagance.

| Figure 29: A mall in Jerusalem | Figure 30: Jerusalem theatre | Figure 31: Jerusalem High court |

Changes in consumption patterns since the 1970's:

The gradual rise in the standard of living led to an increased demand for new structures. Newly introduced concepts such as the cottage, basement, pergola, pedestrian mall and attractive sidewalks, reflects a fresh trend in residential architecture (Turner, 2001).

The rehabilitation and preservation of the old neighborhoods south and west of the city center reflects the improved economic status of the educated middle-class, as well as the growing awareness for preservation.

Figure 32: "Har-Homa" new private housing neighborhood in south-west Jerusalem

The religious sector:

Jerusalem's religious and ultra-Orthodox populations have increased significantly since the British rule(Turner, 2001). This, coupled with the expansion and strengthening of new currents in Judaism, has led to a rising demand for places of worship and a need to change planning concepts. The old single buildings that housed yeshivot (religious schools) during the mandate have been replaced by complexes for the ultra-Orthodox, which include synagogues, yeshivot and dormitories reflecting religious liberalism of the reformists through architecture (Turner, 2001). In the 1980's, synagogues built around Jerusalem displayed a variety of influences, ranging from the biblical "Meeting Tent" to European synagogues destroyed during the Holocaust (Turner, 2001).

Public buildings:

The rise in the culture of consumerism is reflected in the Jerusalem theater, the adjacent concert hall and in the reconstruction of buildings of historic and architectural value, most of which are located on the "cultural promenade" of the national park arch (Turner, 2001). The neighborhood groceries are being replaced by the spacious supermarkets. And the conventional commercial activity at the heart of the downtown is being replaced or complemented by the large shopping malls and the industrial building converted into shopping areas (Turner, 2001). The newly-built recreational complexes, community and

sports centers in the neighborhoods and the growing demand for country clubs reflect the changes in leisure habits. The "free time" culture arising from the move to a five-day work week also created a demand for public open spaces (Turner, 2001). Promenades and observation sites have become urban points of attraction. Open-air sculptures such as the "Monster" in Kiryat Hayovel represents yet another aspect of consumer habits and a growing environmental awareness.

Continuity:

Jerusalem, a changing city, has maintained its architectural continuity. The Israeli planners have preserved the basic design principles devised by the British during the initial period of their rule (Turner, 2001). The Jordanians, in their time, also observed the principle of building on ridge tops, not in the valleys (Kroyanker, 2001). Until this day, all governments have carefully preserved the Old City and its environs, making sure that new houses are built almost exclusively of stone (Kroyanker, 2001). To a certain extent, state-sponsored buildings in the 1950's continued the "pre-state" architectural trends.

Regulative Planning

Although from time immemorial, Jerusalem grew in such a fashion that could be treated, more or less, systematic in respective time, but the city really started to flourish in a regulative pattern from the early 20th century with the introduction of first town planning scheme in 1918 (Brandeis,2002). In this scheme, the city was divided into four zones each with specific planning guidelines. Such as,

- For old city within the walls- medieval features were to be respected and construction would be permitted under special condition.
- Areas immediately outside of the walls- undesirable buildings to be demolished and no new buildings were to be permitted.
- Areas north and north-east of the old city- Buildings are to be designed in harmony with the scheme and not to conflict with the skyline of mount olives.
- Areas north and north west- to be preserved for future development

(Brandeis,2002

Within these zones buildings were permitted under the following conditions:

- No building was to be placed so as to appear on the skyline of the Mount Olives and to the south of the city.
- No building was to be of a height than 11 meters above ground level.
- Roofs were to be constructed of and covered with stone or other approved materials.
- No building intended for the industrial purposes were to be permitted

(Brandeis,2002)

In the later years, eight new master plans were proposed- in 1919, 1922, 1930, 1944, 1950,1959, 1960, 1968 respectively (Brandeis,2002). And the regulative framework so cited in the 1918 scheme has been the basis of the proceeding planning schemes (Brandeis,2002). In fact, 1918's scheme has helped the planners in devising landuse planning guidelines for the future . For example, in 1930's scheme, it was proposed that the new residential and business zones to be established in the north and north western part of the city- which is very much in line with the guidelines so framed in 1918's scheme (Brandeis,2002). Such a state of complience to regulative planning has led to the flourishment of today's Jerusalem. Regulative planning schemes basically systemized the urban form and fabric of Jerusalem. It has laid down the foundation of today's skyline, conservation, restoration activities and conservation strategies, paved the path for systematic preservation of the old city and expansion of the new city. Incorporation of old façade in new buildings in areas with heritage value is a must in conservation works at Jerusalem (Sharon, 1973).

Preservation, Conservation and Renovation

From the early nineteenth century, conservation, preservation and restoration of city features with long standing and strong heritage value has become a major concern of the urban development and planning schemes in Jerusalem (Sharon, 1973). It was partly due to the good understanding of the heritage and aesthetic value of the city by the then British Rulers. Since then, conservation, preservation, maintenance of old city skyline is on top agenda for the city governance. But after 1967, the focus is on to the old Jewish quarters, synagogues, traditional buildings of 19th and 20th century (Sharon, 1973). This is achieved through the restoration of original look by the effective use of crafted materials, Jerusalem stone (Sharon, 1973). Alongside, a selection of twentieth century architectural landmarks and garden neighborhoods, characterizing Israel's modern architectural achievements, is designated for preservation.

Figure 33: One of the Renovated Jewish Quarter of Jerusalem

Figure 34: Work of Reconstruction and Architects Impresson of the Project

Conclusion

Jerusalem has been quite successful in maintaining it's heritage, mystic value while moving towards modernism. Decade long careful planning and implementation of urban design, development and management schemes have paid off in true terms. Post-modernistic ideological transition in urban design and planning has truly blended in the ancient fabric of Jerusalem making the city an ever interesting and unique space on earth. But still, the dividing form of city space is quite contrasting to modern day city living. In this era it is quite astounding to believe that a city could be partitioned on the basis of resident's religious faith. The trend of division based upon religious beliefs is going on for decades. Recent Palestine-Israel crisis has attributed the city fabric with more stricter segregation. People belonging to moslem faith need permission, need to pass through variuos checking for setting off to predominantly Jewish part although these two communities have resided side by side without being threat to each other for centuries. Such a division has given the rise of a tensed situation between communities and the urban fabric started observing discrimination on spatial terms.

Reference

Brandeis, Phillip (2002), *"Urban Renewal alongside Historic Conservation"*, in Menachem Zalutzky and Shoni Goldberger (Eds.) "Preserving Jerusalem", New York, John Willey & Sons.

Brunn, S.D (1993), "*Cities of the World : World Regional and Urban Development*", 2nd Edition, New York, Harper Collins College Publishers.

Carter, H (1995), "*The Study of Urban Geography*", Arnold, London.

Choshen, Maya (2001), *"Future City Limits, Urban Growth Patterns, and Spatial Interaction*" in Menachem Zalutzky and Shoni Goldberger (Eds.) "Preserving Jerusalem", New York, John Willey & Sons.

Conzen, M. P. G. (1981), *"The Plan Analysis of an English City Centre",* in J.W.R. Whitehand (ed), *The Urban Landscape: Historical Development and Management,* London: Academic Press.

Conzen, M.R.G (1981), "*Historical Townscape in Britain : A Problem in Applied Geography*" in J.W.R. Whitehand (ed.), The Urban Landscape : Historical Development and Management, London, Academic Press.

Dickenson, R.E (1984), "*The Scope and Status of Urban Geography*", Land Economics, Vol. XXIV, pp 221-38.

Doxiadis, C.A. (1976), "How can we learn about Man and his Environment?", pp77-117, in Rapaport, A. (eds.) The Manual Interaction of People and their Built Environment : A Cross Cultural Perspective; Paris, Mountain publisher.

Hasson, Sholomo, (2001) "*Urban Renewal alongside Historic Conservation*" in Menachem Zalutzky and Shoni Goldberger (Eds.) "Preserving Jerusalem", New York, John Willey & Sons.

Kroyanker, D (2001), "*Fifty Years of Israeli Architecture as Reflected in Jerusalem's Buildings*", London, The John Hopkins University Press.

Moti, Kaplan (2001), "*Relationship between Jerusalem and its Surrounding Open Spaces*" in Menachem Zalutzky and Shoni Goldberger (Eds) "Preserving Jerusalem", New York, John Willey & Sons.

Rapaport, A (1977), *"Human Aspects of Urban Form Towards a Man-Environment Approach to Urban Design"*, Pergamon Press, New York

Safdie, Moshe (1970), "*Beyond Habitat*" , The M.I.T. Press, Cambridge, Massachusetts.

Sharon, Arieh (1973), "*Planning Jerusalem : The Master Plan for the Old city of Jerusalem and it's Environmnet*", MaGraw-Hill Book Company.

Smailes, (1995), "*Sustainable Development: An Introductory Guide*", Earthscan Publishing Limited, London.

Turner, Mike (2001), "*Preservation of the Unique Character and Harmony of the Old City Basin, Preservation of Historic Neighborhoods, Limitation of Building Height, Moving Highrisers to the Outskirts of the City* " in Menachem Zalutzky and Shoni Goldberger (Eds) "Preserving Jerusalem", New York, John Willey & Sons.

Vance, J.E. Jr (1990), "*The Continuing City : Urban Morphology in Western Civilization*", London, The John Hopkins University Press.

www.jda.gov.il/english