EMERGING PUBLIC SPACES IN THE CITY OF AMMAN, JORDAN:

An Analysis of Everyday Life Practices

Thesis submitted to
the Faculty of Spatial Planning
at Dortmund University
for the award of the degree of Dr. Ing.

Mais Aljafari
2014

Supervised by
Prof. Christa Reicher
Department of Urban Design and Land Use Planning |TU Dortmund

Prof. Dietwald Gruehn
Department of Landscape Ecology and Landscape Planning |TU Dortmund

Examiner:
Dr. Maram Tawil
School of Architecture and Built Environment |German Jordanian University

technische universität
dortmund

rp°
Faculty of Spatial Planning

ABSTRACT

In the recent urban development of Amman in the Hashemite Kingdom of Jordan, the provision of public space has been shaped by various political and socio-economic dynamics. This has made it one of the main challenges and focuses of the contemporary planning of Amman. With the adaptation of global policies in Amman, the new emerging representational spaces tend to promote contradictions of non-harmonious ideologies, between locality and globalism in many terms. Therefore, this research studied emerging public spaces in Amman that are produced, reproduced and co-produced through interactions between different modes at the global level and ongoing relations of social practices at the local level.

This research attempts to conceptualize public space in Amman relying on Lefebvre critiques of spatial practices (perceived space) and of representations of space (conceived space) in order to examine the current transformation of Amman's lived space (representational space). In addition to Lefebvre's theory of "Production of Space", this research endorses Hillier and Hanson's theory of "Space Syntax" to understand how the cultural and social structure of public space in Amman articulates with the spatial one.

In comprehensively contextualizing this research, nine public spaces in Amman were selected. A particular emphasis was placed on the ones located in the city center area which have a historical importance, and the negotiations and practices of everyday life there are highly rendered. Additionally, three of the selected spaces are widely used publically but co-produced with partial or full private involvement. These spaces include shopping malls and other public spaces that are realized through public private partnerships (PPPs). One case study also reflects a less typical public space "informal or quasi public space" where a wide range of public gatherings and activities take place.

The intensive analysis of this research shows that Amman's society and space are interrelated in many ways and on many levels. The research has also revealed a diversity of modes underpinning the production, re-production and co-production of public space in Amman. Therefore, the conceived and perceived spaces are highly subjected to global driving forces such as globalization and neoliberalization. While at the meso and micro levels of everyday life in Amman, a complexity of codes and powers dominate the negotiation of the production, reproduction and co-production of public spaces in Amman. Additionally, at the spatial and urban design level, the findings of this research suggest that, at the micro level, Amman has a rich variety of public space typologies. However, the global level planning of these spaces lack a systematic physical network that guarantees a spatial sustainability that is fulfilling both traffic and pedestrian demands. Finally, the research findings suggest recommendations and planning approaches for improving the policy making of public spaces in Amman.

KURZFASSUNG

Die jüngsten Entwicklungslinien des öffentlichen Raumes in Amman sind vor allem von politischen und sozio-ökonomischen Motiven geprägt. Diese stellen heute die wesentlichen Herausforderungen der stadtplanerischen Aktivitäten in Amman dar. Mit dem Einfluss neoliberaler und global ausgerichteter Strategien entstehen basierend auf nicht harmonisierten Ideologien vielfältige Widersprüche mit alten Traditionen, die sich auf neu entstehende öffentliche Räume auswirken. Daher fokussiert diese Arbeit die öffentlichen Räume in Amman im Spannungsfeld zwischen Einflussfaktoren auf globaler Ebene und in der lokalen gesellschaftlichen Praxis.

Der Anspruch dieser Arbeit ist es ein Konzept aufzustellen, welches sich auf Lefebvres Abhandlung räumlicher Praktiken und Repräsentationen des Raumes stützt, um den gegenwärtigen Wandel der öffentlichen Räume in Amman zu untersuchen. Darüber hinaus werden in dieser Arbeit Hillier und Hanson's Therorie des „Space Syntax" angewandt, um die Wechselwirkung zwischen den physischen und sozialen Strukturen des öffentlichen Raumes in Amman mit den stadtplanerischen Motiven aufzuzeigen.

Dies wurde durch eine syntaktische Analyse ausgewählter Fallstudien erreicht, um die Abhängigkeiten und die Integration des öffentlichen Raumes im Untersuchungskontext dieser Arbeit darzustellen. Die Einbeziehung der beiden theoretischen Ansätze hat im großem Umfang dazu beigetragen, die Einflussfaktoren des Einstehens von neuen öffentlichen Räumen im Amman vor einem raumplanerischen, politischen und einem sozioökonomischen Blickwinkel kritisch zu begutachten.

Um eine umfassende Analyse zu gewährleisten, wurden neun öffentliche Räume in Amman ausgewählt. Jeder der ausgewählten öffentlichen Räume hat individuelle Aspekte, die im Rahmen dieser Forschungsarbeit untersucht werden.

Ein Schwerpunkt in dieser Arbeit stellt die innerstädtische Umgebung dar, die intensive zeitliche Tiefe und alltägliche Praktiken des Lebens aufweist.

Zusätzlich wurden in drei Fallstudien Räume betrachtet, die zwar überwiegend öffentlich genutzt werden, aber teilweise oder komplett von privaten Investoren erstellt wurden. Dazu zählen Einkaufszentren und andere öffentliche Räume, die im Rahmen von öffentlich-privaten Partnerschaften finanziert wurden. Ein Fall behandelt außerdem einen weniger typischen öffentlichen Raum in Amman, der als informell oder halb-öffentlich bezeichnet werden kann, in dem jedoch eine Reihe an öffentlichen Aktivitäten stattfinden.

Die Untersuchungen in dieser Forschungsarbeit zeigen auf, dass Gesellschaft und öffentlicher Raum in Amman auf vielen Ebenen enge Wechselwirkungen haben. Diese werden ausführlich analysiert. Zudem zeigt die Forschung eine Reihe unterschiedlicher Methoden der Produktion, Reproduktion und

Koproduktion des öffentlichen Raumes in Amman. Dabei sind die dargestellten Räume in hohem Maße der globalen Kräfte des Kapitalismus, der Globalisierung, des Neoliberalismus und schließlich der Privatisierung ausgesetzt. Auf der Mikro –und Meta-Ebene des alltäglichen Lebens in Amman dominiert ein komplexes Geflecht von Vorschriften und Kräften, welche die Produktion, Reproduktion und Koproduktion öffentlicher Räume in Amman beeinflussen.

Zudem zeigen die Ergebnisse dieser Forschungsarbeit auf der Mikro-Ebene ein auf stadtplanerischer und städtischer Gestaltungsebene vielfältiges Konstrukt verschiedener Typologien im Raum auf. Eine wesentliche Erkenntnis ist es u.a., dass auf einer übergeordneten Planungsebene ein systematisches Netzwerk fehlt, das Nachhaltigkeit im Nebeneinander von Verkehr und Fußgängern sichert. Schlussendlich zeigt diese Forschungsarbeit Vorschläge und Planungsansätze für eine Verbesserung der raumplanerischen Strategien in Amman auf.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

ABBREVIATIONS

Ai	Amman Institute for Urban Development
BCC	British Broadcasting Corporation
BOT	Build-Operate-Transfer
CAD	Computer Aided Design
CNN	Cable News Network
CSBE	Center for the Study of the Built Environment, Jordan
DHS	Demographic and Health Surveys, Jordan
DOS	Departments of Statistics, Jordan
GACDP	Greater Amman Comprehensive Development Plan
GAM	Greater Amman Municipality
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GIS	Geographical Information System
GNP	Gross National Product
GT	Grounded Theory
HDMU	High Density-Mixed Use
IFPO	Institut français du Proche-Orient
JU	Jordan University
LOS	Level of Service
LPG	Liberalization, Privatization and Globalization
MGP	Metropolitan Growth Plan
NGO	Nongovernmental Organization
OSS	Open Space System
PIC	Partnership Investment Cooperation
POPS	Privately Owned Public Spaces

PPP	Partner Public-Prive'
QDA	Qualitative Data Analysis
RJGC	Royal Jordanian Geographic Center
SDA	Spatial Data Analysis
SOEs	State-Owned Enterprises
SST	Space Syntax Theory
TFR	Total Fertility Rate
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
USAID	United States Agency for International Development
WHO	World Health Organization

LIST OF MAPS[1]

---

[1]Unless otherwise indicated, the source of the figures is the researcher.

LIST OF FIGURES[2]

---

[2] Unless otherwise indicated, the source of the figures is the researcher.

LIST OF TABLES[3]

---

[3] Unless otherwise indicated, the source of the tables is the researcher.

1 INTRODUCTION

1.1 Background and Motivation

This PhD research is an extension to the program *Spatial Planning through Intercultural Dialogue: Sustainable, Integrated Urban Regeneration and Revitalization of Historic Town Centers*, an initiative cooperation funded by the German Academic Exchange Service, DAAD. This program was carried out through the Planning Network Middle East, TU Dortmund in Germany, BirZeit University in Palestine, the German-Jordanian University and the University of Dohuk in Iraq. The project began in the year 2007 and ended in 2010. In this program four cities in the Middle East region were analyzed and compared to a fifth German city, which the project was based on. This cooperation of interdisciplinary work lasted three years. It was finalized with a closing event entitled "Sustainable Integrated Revitalization of Historic Cities" between the 31st October and 2nd November 2009. The end product of this cooperation project was assembled into a book. It embodies several articles related to subjects tackled in the cooperation project (Reicher, et al., 2010). The researcher's contribution to this project was to write up a summery article comparing the four historical Middle Eastern cites with the German city. The aims of this closing article were to trace the process of the modern development of the eastern and western selected cities and to address the current planning challenges, especially the ones that led to the loss of identity of these major cities in both the Middle East and Europe.

After this project was completed, the vision for this PhD research was to focus on one of the major challenges that were highlighted in the layers of the analysis. The layers of the selected cities in the summary article included: urban density of each of the selected cities, urban historical richness, urban expansion, spatial morphology, streets networks and connectivity, urban green, open and public spaces, urban fabric patterns and the architectural typologies. Working on a detailed level on these layers of analysis has helped in choosing the topic for this PhD dissertation. One of the major challenges that have been found in Middle Eastern cities in general and in Jordan in particular is the lack of green and public open spaces (Aljafari, 2010). It was found in most cases that public spaces are not integrally planned in the Middle Eastern cities but often left-over areas and their locations are not pre-planned or carefully chosen to serve the social, economical and everyday life needs of the inhabitants. In addition to the physical planning related level, there is a shift in the role of public spaces in modern Arabic cities in general and in Jordan in particular and consequently in the perception of these spaces. Thus, this PhD topic was chosen to tackle this issue within an in-depth case study.

After choosing the major topic for this dissertation "Public open spaces in everyday life", the contextualization of public spaces was necessary to understand the driving forces and conditions leading

to produce this unit of analysis. The city of Amman was then chosen as an in-depth case study. The selection of Amman was done because of different factors. Firstly, Amman is a metropolis that is continuously growing and witnessing spatial transformation due the challenges of exponential population growth, urbanization and liberalization. Secondly, the accessibility to data recourses was of great importance for this research. It was challenging to find the data related to four cities from different countries in the Middle East and the fifth one in Germany. Therefore, Amman has the advantage of having much of the related data accessible for this PhD research.

In addition to the above mentioned motivations, being Jordanian, coming from Amman and being familiar with many cultural issues has helped in defining the scope of this research and in choosing Amman as the case study with its public spaces as the research unit of the analysis.

Thus, in this research the researcher focuses on analyzing the public space of Amman's everyday life, particularly on the emerging typologies of these public spaces in Amman trying to answer some questions related to that area such as what the public space is in Amman, what types of public spaces there are in Amman and what the modes and the driving forces are behind the production of theses spaces as well as how the different social groups appropriate theses spaces and what kind of social spaces are preferred among the majority of the different social groups. This research should answer the questions raised and other emerging ones.

1.2 Research Organization

This research consists of eleven chapters with several sections distributed in each chapter. The following overview (Figure 1.1) describes briefly the contents of each chapter.

1 Introduction

2 Setting the Context: Socio-Political and Economic Influences on the Production of Public Space in Amman

3 Theoretical Constructs

4 Research Focus and Framework

5 Methodology and Data Analysis Methods

6 Defining the Case Study Area and Units of Analysis

7 Empirical Fieldwork

8 Conceptualization of Produced and Reproduced Public Spaces in Amman

9 Triangulated Findings with the Spatial Layout of Public Spaces in Amman

10 Co-produced Public Spaces in Amman

11 Theoretical Based Findings: Impulses for Developing Sustainable Public Space in Amman

Figure 1.1 Research structure

Chapter (1) INTRODUCTION gives an overview on the research topic. It identifies some contextual phenomena relating to the issue of public space in the region of the Middle East in general and in the city of Amman in particular. Additionally, it describes the organizational structure and hierarchy of this research.

Chapter (2) SETTING THE CONTEXT: SOCIO-POLITICAL AND ECONOMIC INFLUENCES ON THE PRODUCTION OF PUBLIC SPACE IN AMMAN describes the political, social and economic situations that led to the emergence of Amman as a city. It additionally traces the literature on Amman with particular emphasis on the impact of the city's economic, spatial and social development and therefore the production of the public spaces of everyday practices in the city. This chapter focuses as well on the studies that addressed the economic development in Amman in terms of the transformation of the economic strategies towards a market-based approach, neoliberalism, globalization, privatization, and individualization, followed by their impact on the urbanization of Amman. The chapter provides as well an overview of the recent development of Amman as a metropolitan city since its emergence in the late 1800s, and thereby, placing the issue of the production of social space in its specific historical and temporal contexts. The chapter describes finally the physical setting of the city and the social, economic and political incidences that paved the way for the creation and the emergence of the new typologies of public spaces in Amman. This chapter reviews other related issues such as the urban growth of Amman and the peculiar dynamics of different social groups and how they affect the perception of public space.

Chapter (3) THEORETICAL CONSTRUCTS sets the theoretical framework and the methodology adopted in this research. It discusses the most relevant theoretical concepts related directly to all these theories of which the notion of space and its relation to society is raised. It further examines some spatial-socio concepts such as social space, social justice and right to the city and space syntax theory. In addition to defining and analyzing some space-related concepts, chapter three also presents them in a critical correlative manner that facilitates the comprehension of the relation of space to society.

Based on the literature review of chapter (2), on the historical development of the socio-economic and political circumstances in Amman and their impact on the production of public spaces, and on the presented theoretical paradigms that deal with space as a socio-spatial concept in chapter (3), **Chapter (4) RESEARCH FOCUS AND FRAMEFORK** presents the research questions and objectives.

Based on these theoretical departures, the research focus, framework, methodology and data analysis methods are outlined in **Chapter (5) METHODOLOGY AND DATA ANALYSIS METHODS.** In this chapter the research methodology and process developed to investigate the research objectives and questions is presented.

In **Chapter (6) DEFINING THE CASE STUDY AREA AND UNITS OF ANALYSIS,** the units of the analysis of this research are defined and described in detail. Additionally, the selection process of the units of the analysis and the criteria for the selection process are addressed in this chapter. The selection process has been realized in two phases: a background exploratory fieldwork phase where a basic understanding of current typologies of the existing public spaces in Amman was achieved, and in the second phase the selection of the research units of analysis in which a comprehensive study was scaled down to specific public spaces with a particular emphasis on the ones located in the downtown area in Amman where public spaces are highly significant in everyday life. In this phase, a preliminary post occupancy study and mapping of user groups and their behavior were done with the aim to investigate the complexity of the contentiously changing nature of the public sphere that has resulted from the structural changes in Amman's urban society.

In operating the research questions and linking them directly to the case study and units of analysis, **Chapter (7) EMPIRICAL FIELD WORK** presents the methodologies used in this research which are a mix between qualitative and quantitative. Thus, it transforms the research questions into qualitative and quantitative concepts and further converts them into measured indicators.

In **Chapter (8) CONCEPTUALIZATION OF PRODUCED AND REPRODUCED PUBLIC SPACES IN AMMAN**, the actual field research is taking place for building the theoretical knowledge for conceptualizing the public spaces in Amman. This part consists of seven sections that led to a proper conceptualization of public space in Amman. This was resolved by analyzing the practices of the different actors involved in the production of space including the practices of the users of the selected public spaces (perceived space), the planners visions of development that illustrate the conceived space and consequently the realized social spaces of every-day life. In addition, a set of issues that influence the perception of the public space and consequently the attitude towards theses spaces and their use are addressed in this chapter. The culture in Amman is tackled gender wise in order to explain the causes that led to a certain appropriation of the public space by certain groups. From the broader view of gender segregation enforced by the results of the analysis, more emphasis in this chapter is given to women's low participation in the public sphere due to socio-cultural factors.

Following the study of the issues influencing the use and behavioral patterns of public spaces in Amman, **Chapter (9) TRIANGULATED FINDINGS WITH THE SPATIAL LAYOUT OF PUBLIC SPACES IN AMMAN** using Space Syntax Theory (SST) to measure some spatial attributes related to the selected public spaces. This was done through measuring the level of connectivity and integration of these spaces with their surrounding environment. Triangulating the analysis of this chapter with the

findings with chapter (10) leads finally to answering the fourth research question of how the physical and the social structure of the selected public spaces articulate.

The following **Chapter (10) CO-PRODUCED PUBLIC SPACES IN AMMAN** conceptualizes further the newly co-produced public spaces in Amman through the partnership of a number of actors. This is achieved through analyzing two of the selected case studies which are co-produced through private involvement. The analysis in this chapter addresses the different stakeholders participating in the co-production process and the mechanism in which the partnership between the public and private partnership is realized. Eventually, this chapter critically analyzes the characteristics of the projects produced under such a process and the challenges of this kind of co-production of space at the theoretical and real life practice level.

Chapter (11) THEORETICAL BASED FINDINGS: IMPULSES FOR DEVELOPING SUSTAINABLE PUBLIC SPACE IN AMMAN is the last chapter of this research that highlights the key research findings. Based on the findings of the previous chapters, this chapter further proposes urban design and planning policy recommendations for scholars, professionals and decision makers in Amman. It additionally considers suggested areas of further research that might be of interest.

1.3 Limitation of the Study

It is important to mention that this research has faced some limitations with respect to collecting the data and conducting the field work. The major limitation is related to the political situation at the time this research was conducted which was at the peak period of the Arab Spring that started in October 2010 due to the eruption of pro-democracy citizens against their regimes across the Middle East and North Africa (More details are in chapter 7.6). The Arab Spring brought tension to the whole public sphere of the city of Amman at the time this research was conducted and therefore it influenced the willingness of users of the selected public spaces to participate in this research or to answer openly some questions during the interviews.

Another major limitation is related to the availability of relevant data and the format in which the data was handed to the researcher. Unfortunately, the lack of data was related to key issues such as population studies and statistics from the Department of Statistics in Amman, data on key variables that account for the socio-economic issue of Amman. Therefore, the research used other sets of data that has the potential of serving as an alternative for these variables.

In addition to the data unavailability issue, lack of important spatial maps in digital format was another major challenge in this research. Unfortunately, it was in most cases difficult to get digital maps

compatible to Auto CAD, Depth Map or GIS. Most of the maps and the data were handed to the researcher in JPG format or as Excel sheets. This limitation has reduced the scope of the analysis in some parts of this research.

The issue of privatization of public space is a very new concept in the Greater Amman Municipality (GAM) and the Housing Bank Park is the first GAM experience involving the private sector in the production of public space in Amman. For that reason the researcher faced the problem of the unavailability of documents and information about the mechanism and the process in which the public private partnership (PPP) is operated and about the shared responsibilities of each actor. Thus, most information about this issue was gained through personal interviews and through the available literature.

2 SETTING THE CONTEXT: SOCIO-POLITICAL AND ECONOMIC INFLUENCES ON THE PRODUCTION OF PUBLIC SPACE IN AMMAN

2.1 Introduction

Public space has been an integral component of the city for centuries. It is not merely a physical layout or spatial entity. It's a dynamic sphere influenced with external forces. In this chapter public spaces in Amman will be defined within the context of current political, socio-economic and spatial structure to understand the circumstances in which Amman evolved and therefore the modes that produced the social spaces there. This chapter also sheds light on the circumstances in which it evolved, from being a small arable land, to a village, a town, a capital city and eventually to a metropolitan city. To do so the origin and the early development of Amman has been traced to locate the socio-political and economic structure in a temporal and spatial framework. This chapter also attempts to explore the factors that shaped the socio-cultural and spatial segregations that contributed much to what seems today in Amman public realm as a major spatial challenge. The reviewed literature focuses, and is based to a large extent, on scholarly and popular literature such as journal articles, novels, archives and documentaries. These literature resources contribute to understanding the circumstances surrounding the formulation of transformation of the public space since the earlier decades of Amman's evolution and explained this phenomenon from a social perspective. Furthermore, this chapter discusses in detail the current neoliberalization and privatization trends that participated in creating social stratification and spatial segregation in Amman. Finally, it traces the planning culture in Amman from the early planning attempts under the British surveillance at the beginning of the 20th century until the recent Amman Metropolitan Growth Plan 2025 (MGP) that tried to deal with the spatial and exponential demographic growth of the city. Following the comprehensive understanding of the issue that participated in producing the current social spaces in Amman, the issue of public spaces will be introduced as a multi-fold product of what has been reviewed.

2.2 Perceived Amman

The conditions in which Amman evolved have made it difficult to classify it as a typical planned Arabic city. In the literature on the Middle Eastern cities, Amman has not been recognized or classified by formal state practice nor by Orientals as one of the typical Islamic Arab cities in the region (Daher, 2008, 2010). This can indicate the crises of spatial and social identity that Amman suffers from and which also explains why urban spaces and some heritage locations were not until very recently incorporated by the government as a subject of interest for urban development projects in Amman. The lack of urban civic identity can be clearly seen at the social level in Amman where many residents have a weak sense of belonging and

complain that Amman doesn't fulfill their expectations (Shami, 2007). "The elites complain of the lack of night life, merchants complain of a lack of market, women complain of inequality, university graduates complain of unemployment and lack of work opportunities[4] and ethnic groups complain of ethnic neighborhoods". In addition to people's complaints about the physical infrastructure and the provision of social facilities, residents of Amman don't perceive it as a city of their origin (Shami, 2007; Daher 2008). Despite the fact that thousands of people were born in Amman, there always comes the question at the social level of where you are from and always the answer is I am from Karak, Irbid, Madaba, Salt or any other Jordanian city but never from Amman (Anani, 1992 in Daher, 2008; Shami, 2007).

2.3   Political Dimension

In this section, the development of Amman is investigated with a particular emphasis on the political contribution and influence on the city's development. It will also try to understand the different historical layers which participated in configuring the currently existing public spaces through tracing the history of Amman since its early appearance in the late 18th century until its contemporary state.

2.3.1   Amman: From Arable to Urban

Despite the fact that the modern history of Amman began in the late 18th century, excavations have shown that Amman is one of the oldest and continuously inhabited cities in the world. Through history it has been inhabited by many civilizations from Ammonites, Romans and Ottomans to modern Arabs. In the late 18th century, Amman was conceived as a part of a larger spatial entity called Balqa[5] (Matthews, 2000). Two patterns of communities coexisted in the city, of which the first pattern consisted of Bedouins. They were pastoral in tradition and consisted of mobile tribes who increased their power and wealth by raiding other tribes and extracting settled communities from them. They had primitive agriculture practices where plant cultivation was exclusive to the members of the tribe. Additionally, the basic form of subsistence was animals grazing and their products. The other pattern was an agrarian one, characterized by primitive cultivation where farmers grew just their needs. Agricultural surplus was a subject of good climatic conditions at that season and security conditions (Hamarneh, 1996).

---

[4] During the Arab Spring, most protests of university students and politically unaffiliated unemployed graduates set up a protest camp in a main square in the capital city of Amman after Friday's prayers, protesting inflation, unemployment and corruption and calling attention to the disparity between the rich and poor in Jordan and demanding sweeping electoral reform (See chapter 7.6).

[5] The geographical boundaries of Albalqa extend from the Zarqa River in the north to Zarqa-Ma'in in the south. On the eastern side lays the Hajj road. The western side boundaries are drawn by the Jordan valley.
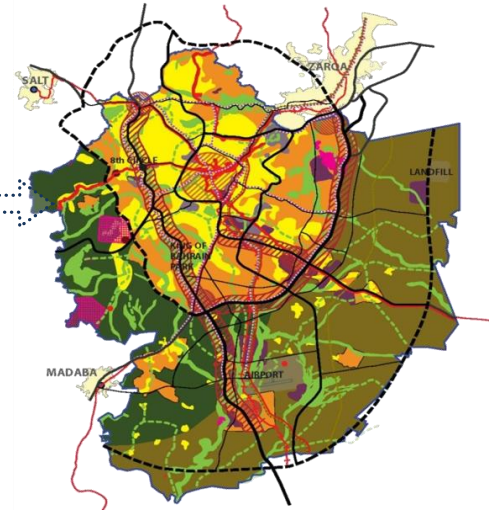
Map 2.1 (A) Jordan in a regional context, (B) Location of Amman in Jordan, (C) Present municipal boundaries of Amman

(A)

(B)

(C)

Until 1816, no cultivation was recorded in Amman, specifically in the downtown area (Wadi) and at the citadel (Hamarneh, 1996). Around the beginning of the 19th century, the major feature in the process of social change in the Balqa region was the transition of nomadism to land cultivation and settlement. However, until 1840 Amman had no features of physical settlements except for the Bedouin tribes who recognized no authority and sought power through fighting each other and ruining the city. In the second half of the 19th century, there was a lot of literature written about Amman and the whole region of Balqa through scholars' expeditions[6]. Amman had, at that time, green wide fields of corn and wheat with cultivation on the southern side of Amman, namely at Ma'en, Madaba, Hisban, Yajouz and Wadi Sir. The land was unequally distributed among different tribe members prior to a period of government intervention and capitalist penetration. In the fourth quarter of the 19th century, Amman witnessed relative improvement in security conditions due to the powerful authority of the central government over the tribal entities and therefore a decrease in land cultivation which consequently led to an increase in trade and exchange activity. Because of the availability of water, Amman was a stop point on the pilgrimage or "Hajj" route to Mecca and therefore trade and exchange activity took place between the pilgrims and Bedouin inhabitants of Balqa in general (Hamarneh, 1996).

---

[6] Scholars documentations and setting descriptions of Amman in the novels were the major resource to obtain information about Amman

The modern history of Amman started during the decade of the 1870s when the first wave of Circassian immigrants[7], representing the Shapsugh tribes (Potter et al., 2009) came and settled in Amman, namely in what's called now *Al Shapsugh* and *Al Muhajereen* areas in Amman. They established the earliest agricultural communities in modern Amman which was at that time not called Amman and was not a city with clear boundaries. It consisted mainly of the remnants of the old Roman city of Amoun, known as Philadelphia, including the Amphitheatre, the Roman Nymphiad and the citadel overlooking the downtown area. The first wave of 150 settlers arrived in 1879 and worked in cultivation and a few of them in handcrafts (Rifai, 1996, P. 133; Oliphant, 1880 in Alsawaryeh, 1996). Generally, they lived in primitive settlements compared to the indigenous tribes who had wealth, possessions and land property. They settled for a long time within the Roman Amphitheatre area and in the citadel of Amman, as well as in the area adjacent to the stream (Sail Amman), whose waters sprung from a north-eastern spot called "Ras el-Ain" and ran towards "Sail Al-Zarqa". The settlement consisted of a few scattered houses and narrow streets extending along Sail Amman. The population of Amman was estimated around 150 inhabitants in 1879 and 2000 inhabitants in 1893 (Munif, 1994, 1996).

With the arrival of the Hijaz railway in the 1900s, the transition of Amman from a small village into a town and from an agricultural area into a commercial center was made (Amawi, 1996; Mufti, 1972). Many groups of Circassian immigrants and merchants arrived to Amman in the early 1900s through the Hijaz railway. A clear shift happened when Arabs from surrounding countries in *Bilad Al-Sham*[8], who in the past cultivated lands in and around Amman, moved by the railway to the new villages of the Circassians in Amman and opened shops and thus gave a sense of diversity to the population of Amman and changed its character. With the rising trade activity, two main public gathering streets formed with one being for only commodity exchange (Hacker, 1960 in Hamarneh, 1996). By 1893, the Circassians had built single home units surrounded by a yard and enclosed by a wall. They used wheeled carts to increase the efficiency in transporting goods. Hacker stressed that the physical landscape of Amman, during this period, was largely influenced and primarily determined by the multi-ethnic population from the different regions which greatly contributed to the process of urban fragmentation in Amman (Hacker, 1960 in Hamarneh, 1996; Shami, 2007). People were spatially distributed according to their origins and ethnical backgrounds, and therefore each ethnic group gathered in a particular area of the town creating their own introverted communities.

---

[7] Circassians are Muslim immigrants who fled the Caucasus to escape the religious persecution of Russia. They arrived in Amman in several waves and they were welcomed by the Ottoman Empire and encouraged to settle in the area known today as Amman downtown (Hacker, 1960).

[8] Bilad Al-Sham, or Greater Syria is a historical term used to refer to the region that contains: Syria, Jordan, Palestine and Lebanon, which in a later period of time used to refer only to Syria.

In describing the demographic landscape of Amman in the early 1900s, Munif pointed out that the majority of Amman was characterized with Circassian communities who participated initially in the development of the city through cultivating the land. The other ethnic groups inhabited in a specific part of the city forming their own ethnic quarters. Circassians, for instance, were concentrated predominantly in *Al-Muhajeren* and around the Roman Theater and people from Syria settled in the Eastern parts of the city, not far away from the marketplace *(Souk)* and the road to Syria. However, despite the rapid development of Amman and its population, Al Salt, on the other hand, remained the largest and most important city and trading center in the Balqa region at that time.

The ethnic-based spatial pattern was further emphasized by tracts of agricultural land that was left empty between the ethnic quarters which added a distinctive feature to the urban fabric of the city (Munif, 1994). As time passed on, these empty agricultural lands turned into buffer zones between different ethnic quarters. Consequently, the city expanded as isolated areas in the form of stain-shaped patterns. The lack of financial and technical resources in addition to the absence of a preconceived vision on how to plan a homogeneous city gave the city its chaotic, disordered and complex pattern (Razzaz, 1996). At that time the market place was, by all means, the only public space through which all ethnically diverse groups met and interacted. According to Razzaz (1996), the marketplace played a key role in building bridges across different groups, bringing people closer, eliminating social distances, and unifying norms and accents. If a visitor passed by Amman in the 1940s, the first impression he/she perceived of the city was as if living in a permanent carnival of fashions, accents and traditions (Munif, 1994). However, the multi-ethnic character did not last for a long time as the city expanded vertically towards the mountain tops. This morphology disappeared and was replaced by another more mountainous pattern.

2.3.2   Amman as the Capital City

In 1918 the Ottoman Empire withdrew from the southern Syria region including the lands to the east of the Jordan River, which at that time, made a state of its own. Contrary, during 1918-1920 under British surveillance, Transjordan (east of the river) was officially part of the Syrian kingdom whose capital in Damascus was ruled by Faisal Ibn Al-Hussein. However, the Ottomans kept in contact with the Hashemite rule where some towns of Transjordan served as administrative centers under the authority of Damascus (Rogan, 1996). In 1920 Transjordan was cut from Damascus and was included to the British mandate, while Syria was controlled by the French mandate. When the British began to look into the way of administrating Transjordan, they first thought of the regional context and had a tendency toward Amman due to its centrality. This was despite the fact that Al Salt was the largest city in the Balqa region with around 10,000 inhabitants and had extensive administrative infrastructure, such as official residences, government and municipal offices, courts, police stations, shops and warehouses, which the Ottomans had

provided over the previous half of the century. According to Rogen (1996) the preference of Amman over Al Salt was based on its spatial regional centrality rather than its size or administrative infrastructure. Additionally, it's important to mention the positive impact of its being located along the Hijaz railway.

By the end of 1920, the British chose Amman to be the capital of Transjordan. By 1928, Amman was officially pronounced as the capital city of Transjordan. However, according to the law the capital was subject to change by a special law to another place (Luke & Keith-Roach, 1934 in Rogan, 1996). In 1938 the contemporary physical development planning for Amman began under the British mandate. At that time, the British Mayor proposed a land use plan for the city to regulate the built up environment (Kadhim & Rajjal, 1988; Malkawi, 1996; Malkawi & Abu Dayyeh, 2004; Potter, et al., 2008).

Since the declaration of Amman as a capital city in 1928, the city began to expand up to the slopes of the surrounding hills and spread over the mountain tops (figure 2.1 and 2.2). However, the growth during the first two decades was slow. This is largely due to the slow pace of national economic development during that period. It was also partly due to the topographic characteristics of the valley with its narrow floor area and steep sides. By 1945 Amman was still viewed as a medium sized town with a population of 56,000 (Findlay, 1986).
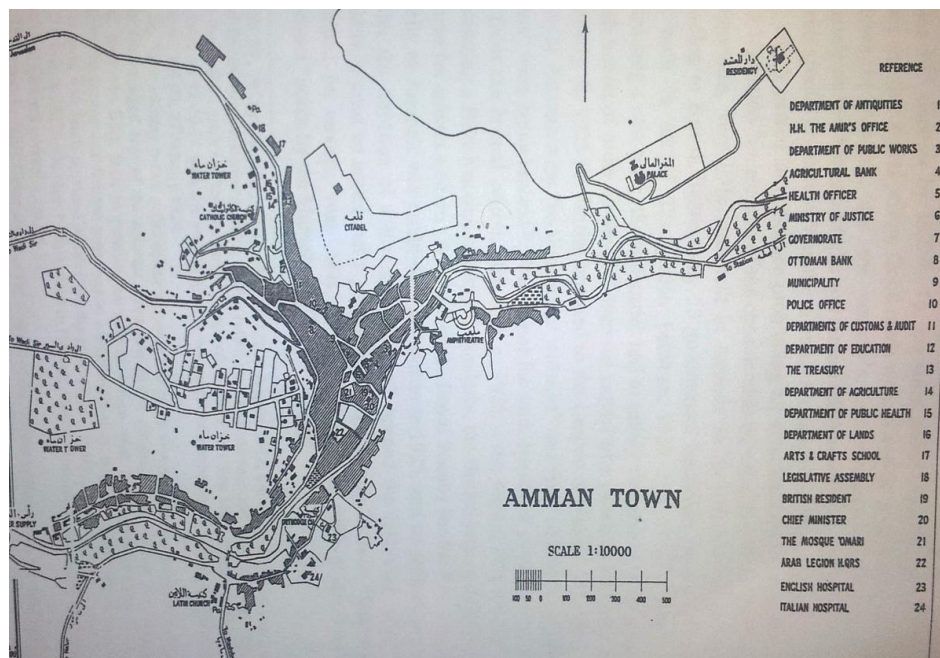
Figure 2.1 Street plan of Amman in 1931

Source: Department of Lands and Survey, Transjordan, Amman, cited in Al Sawaryeh, 1996

The Arab-Israeli War of 1948 had resulted in an influx of 100,000 Palestinian refugees into Jordan (Ababsa, 2010; Pilder, 2011), which entered Amman into a rapid growth phase. Two main official camps were established: Al Hussein camp west of downtown Amman and Al-Wihdat camp east of downtown Amman. In the decades following the war, Amman witnessed a rapid growth of informal settlements around the refugee camps. Another wave of refugees occurred after the Arab-Israeli War of 1967 and resulted in an additional influx of 300,000 Palestinian refugees to Jordan with 150,000 of them settling in Amman (Razzaz, 1996). The majority of refugees were absorbed into the temporary camps located primarily in the eastern parts of Amman. Later on, two official large refugee camps, Hittin and Zarqa, were also established in Russiefa and Zarqa, north-east Amman. These camps were characterized by overcrowding and a lack of basic services.

Figure 2.2 A general view of Jabal Amman in the 1930s. Residences started to creep up the slopes of Jabal Amman Source: Bakij, 2002

The 1970s marked the beginning of a second period of unprecedented urban growth for Amman fueled by the inflow of capital investments and remittances from the Arab Gulf States. The surface area of the built environment in Amman increased more than twofold from 21 square kilometers in 1972 to 43 square kilometers in 1972 and to 54 square kilometers in 1982 (Razzaz, 1993). The major direction of the expansion of Amman was mainly toward the north-west.

In 1979, the population of Jordan reached 2.13 million; it nearly doubled to 4.14 million by 1994. By the end of 2004, the population was estimated at about 5.35 million. In 2007 it further rose to reach 5.72 million and 6 million in 2010. In 2012 Jordan had 6.4 million with 2.2 million in Amman which represented 39% of the overall population in Jordan (DOS & ICF Macro, 2010). By 2025 the population

of the Amman is expected to rise from 2.8 million to almost 7 million due to constant voluntary and forced rapid immigration[9].
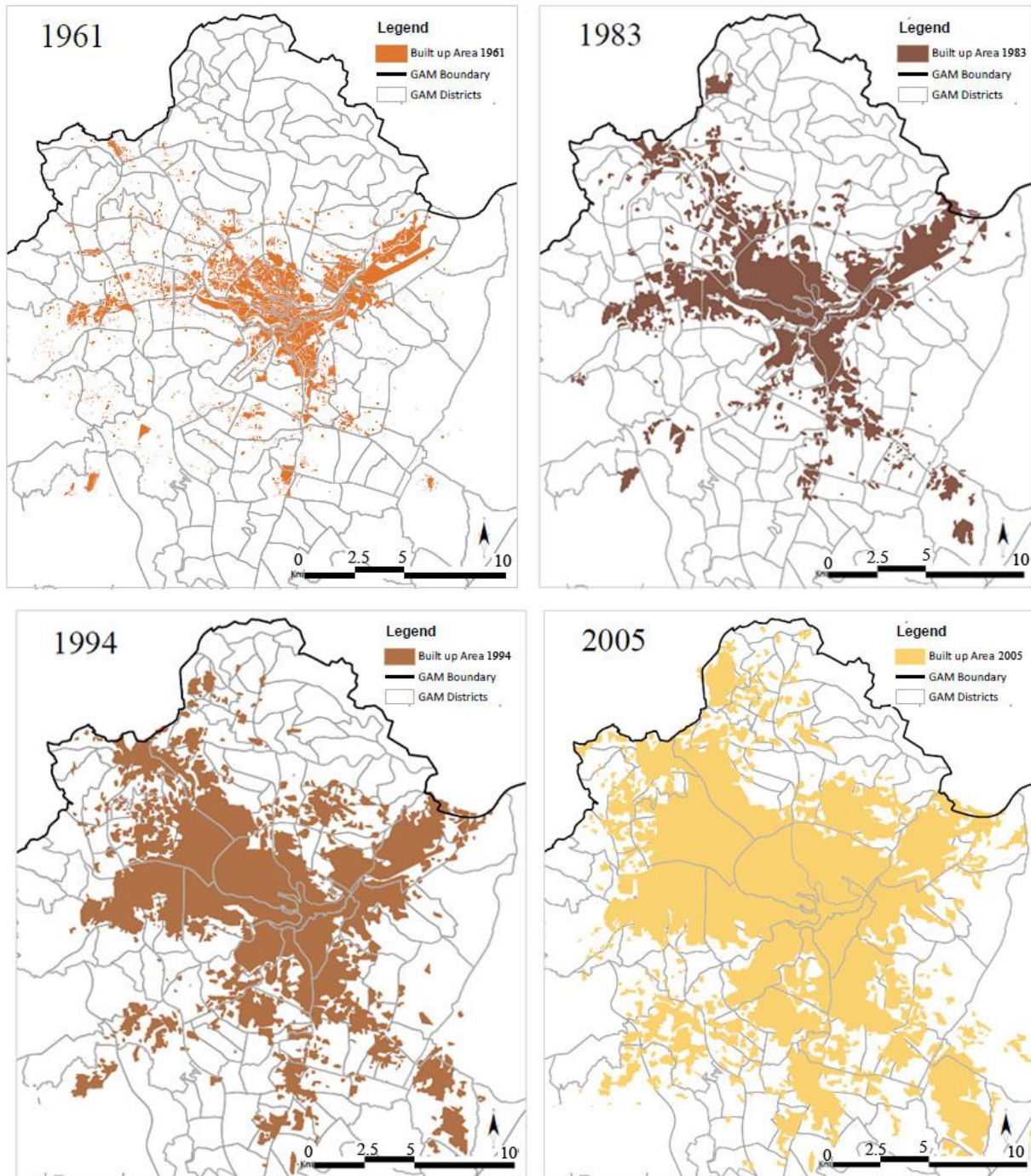
Map 2.2 The Growth of Amman (1961- 2005)

Source: Abu Thiab, 2012

---

[9] The first wave of Palestinian refugees arrived from Palestine in 1948 and a second wave after the Six-Day War in 1967. A third wave of Palestinian, Jordanian and Southeast Asian refugees arrived in Amman from Kuwait after the Gulf War of 1991. The first wave of Iraqi refugees came after the first Gulf War, with a second wave also arriving after the 2003 invasion of Iraq.

As in the previously reviewed literature, the situation in Amman in the 19th century was composed of different ethical and multi-nationality groups. The hierarchy of the social classes at that time depended mostly on their monetary status. During the British mandate (1921-1946) when Transjordan was a colonial state, the political "top-down" governing system enabled the merchants to grow in Amman and accumulate capital to become more powerful as a social class in contrast to the Ottoman times, where trading had a marginal importance (Amawi, 1996).

The estimated population of Amman in 1920 was three to five thousands (Hacker, 1960; DOS, 2010). Half of them were Circassians, while the rest were a mixture of greater Syrian merchants, migrants and political refugees. This simple population structure combined with the interests of the merchants had led to the first features of infrastructure of the capital city during the Ottoman time in terms of spatial features and road network. The commercial center and residential quarters consisted primarily of a simple one-story building system and in a few cases, two-story structures. At that time commercial zones and madafa[10] represented the main public, semi-public space where the people could meet and discuss different issues.

Until 1927[11], besides the functional governmental buildings, there was no emphasis from either the British trusteeship or Hashemite rule on architecture in terms of constructing governmental infrastructure as houses of parliaments, courts of justice, or institutions of education. Only the Husseini Mosque, Raghadan Palace and the British Residency were, with great attention, constructed to impose their presence and reflect their state of power. This lack of spatial attention in the capital city could be ascribed to the lack of funds and to both authorities' intention at that time to emphasize on their dual ruling authorities in Amman through ceremonial practices rather than through construction and elaborating administrative buildings in Amman (Rogan, 1996).

The social structure of modern Amman is highly affected by Amman's constant migration. Forced and voluntary migration has played a key role in making the modern history of Amman. The population of Amman has been formed and reformed by the constant in and out migrations and displacements especially from the Palestinians. Population studies of Amman indicate that much of the residency in

---

[10] A madafa is a communal place in the form of a single building for hosting gatherings and social events of single-family members. It additionally has the function of hosting guests and travelers. A madafa used to be a common form of building in Bilad Alsham. In recent time a madafa has lost its symbolic importance and many families have no madafa.

[11] Later on that year on the 1st of July a massive earthquake occurred in Amman and destroyed most of its buildings including important architectural figures such as the British residency, the minaret of Husseini mosque and others. However, the damages did not affect the fact that Amman would remain the capital city because Amman was chosen basically due to its centrality rather than other factors.

Amman is composed of Jordanians of Palestinian origin that arrived in 1948 and 1967. For some political reasons, the statistics do not differentiate native Jordanians from Jordanians of Palestinian origin to avoid establishing classes among citizens. It differentiates Jordanian passport holders from foreigners (Ababseh, 2011).

Furthermore, with the accelerating expansion and growth of Amman, social disparities continue to grow stronger between different groups living in West and East Amman (Ababseh, 2011; Abu Thyab, 2012, Daher, 2008, 1999). These social disparities are reinforced with morphological ones. Informal housing settlements of Palestinians are self-constructed camp buildings in East Amman in Al Wahdat and Jabal Hussein. In West Amman there are modern neighborhoods with family-owned western style villas and office blocks. These morphological disparities indicate the lifestyles of those groups (more details in section 2.6).

2.4   Economic Dimension: Privatization and Neoliberalism in Amman

As the political dimension was investigated in the previous sections, in this section another insight to the economical dimension is provided to understand all modes participated in producing the spatial and social public spheres of everyday practices in Amman. This section tries additionally to render the impact of the global capital that is granted and invested in Jordan on mega projects. Additionally, it investigates how privatization reinforced by Arab Gulf surplus oil revenues to Jordan has transformed the lived urban space, property value and the perception of the public social life.

Although privatization as a concept is not new in some economic fields of many capitalist countries in most parts of the world, it has been profoundly witnessed in new forms a few decades ago in the period after World War II. In Europe, particularly in west Europe, the spatial planning sphere was characterized by state intervention that led into large-scale public schemes in urban development where local authorities and their architectural and planning firms were at the decision making position of constructing high-rise residential units, motor ways, parks and new towns (Madanipour, 2010). After the seventies in the 20th century, an economic crisis occurred due to the industrial decline in which the post war Keynesian[12] economic approach between the market and the state came under pressure. Consequently, the public sector was not able anymore to provide financial support to urban renewal projects and new town development schemes. To overcome this problem, a solution was introduced in the late 1980s in the United Kingdom and the United States to stimulate economic growth through the market-base approach and competition.

---

[12] A school of economic thoughts based on the ideas of 20th-century English economist John Keynes. It emphasize on the significant role of government and public sector to stabilize output over the economic cycle and served as the economic model during the later part of the Great Depression, World War II, and the post-war economic expansion (1945–1973).

With these structural changes for the state and society by radical decentralization, limitation in the authority of the state, privatization, individualization, globalization and liberalization, a shift has occurred which has major implications on urban and regional planning and development. This economic paradigm spread in many countries around the world and lasted around 30 years until the occurrence of the Global Financial Crisis (GFC) in 2008. With this reduction on the public sector authority, most urban projects were transferred to the private sector.

In the Middle East privatization was introduced through globalization a few decades after it was adopted in Europe and the United States. With regards to the economy in Jordan, until the early 90s the government of Jordan controlled most community services with all ministries and administrative centers in Amman as the government's spatial and administrative system in Jordan was highly centralized. However, since 2000 the master plan for Amman was to transform the city from being mono-centric to a multi-centric metropolis in order to decentralize the population and economic activities (Makhamreha and Almanasyeha, 2011). This has been fueled by several factors such as the local economic crises of 1988 and its consequences, the poor performance of the governmental centrally-planned and executed economies and the success of the liberal economics and development strategies based on privatization and free market which had a better performance than the state-owned enterprises (SOEs) in the economy. The early 2000s witnessed a shift in the economy towards privatization and liberalization not only in Amman but also in many Arabic cities, in Lebanon, Egypt, and many Arab Gulf States, in the form of a huge architectural construction boom. Since then Jordan is moving towards a free market economy. This can be clearly seen in the increasing share in the economic sector in the gross domestic product (GDP). For instance, the share of agriculture in the GDP dropped from 7.3% in 1992 to 3.8% in 1997, then to 3.3% in 2002 and to 3% in 2008. On the other hand, the contribution of wholesale and retail trade, restaurants and hotels to the GDP has not changed significantly; these sectors made up 9.3% of the GDP in 1992, 9.9% in 2006, and 10% in 2008. There was a concomitant rise in the share of the manufacturing sector, rising from 12.4% in 1992 to 16.3% in 2002 and reaching about 17% in 2008. The contribution of the transportation, storage and communication sectors to the GDP has changed little over the past 15 years, rising about 2.1 percentage points between 1992 and 2002, and reaching about 15% in 2008. The GDP per capita at current prices has demonstrated an increase over the coming years, rising from US$ 1,326 in 1992, US$ 1,610 in 1997, US$ 1,882 in 2002 to an average of US$ 2,646 in 2008. The rate of economic growth at constant prices has increased steadily over time; growth was 3.3 % for 1997, 5.8 % for 2002, and 8.8 % for 2008 (DOS and ICF Macro, 2010).

The above mentioned trends of the free market economy activities were officially encouraged by the government through a progressive reform program that was initiated and supported by the government in the early 1990s to permit the privatization of certain public services as part of the economic revival

program. This was constantly encouraged by the flow of the Gulf countries capital to Jordan since the 1990s. This new vision was enforced at the official level by the Privatization law No. 25 which was issued in 2000 to establish the legal and institutional framework for full privatization or public private partnership (PPP) in Jordan (DOS and ICF Macro, 2010). Accordingly, privatization enabled the adoption of an economic methodology which enhances the role of the private sector in the economy to include public sector enterprises. The apparent objectives of privatization include creating a competitive atmosphere among economic enterprises to raise efficiency and productivity. This was realized through the encouragement of local, Arab and international investments in Jordan by providing a rich investment environment. This will consequently encourage the private sector towards long-term investments to strengthen Jordan's capital market and the national economy.

The ongoing flow of foreign capital associated with the intensive investment in the real estate sector has resulted in lifting up the life standards and therefore the cost of living index has increased by 20% between 1992 and 1997, by 8% between 1997 and 2002 and by about 19% between 2006 and 2008 (DOS & ICF Macro, 2010). This economic boom has made Amman, the capital city of a country which is by no means wealthy, rank among the most expensive Arab capitals with relatively high unemployment and inflated food prices (Janjua, 2008 in Ai, 2014).

With the increased capital reserves in Amman from the privatization and globalization particularly from investors from the Gulf States, the investment in real estate has remarkably increased (Daher, 2008). For these investors who are interested in turning their capital into high-density, mixed use commercial real estate projects, Amman was one of the most attractive cities in the region. It was conceived as "virgin market ready to take on both local and foreign investment" (Steireya, 2008). Both the relatively low land prices and the stable political situation in Amman have made it one of the region's most desirable cities for investment. It's a growing city which had a fragile economy particularly in commercial and retail sectors (at least by international standards) which has increased its potential for investments, particularly in office space and luxury residential quarters located in the heart of the city. Furthermore, at the formal level Amman was highly desirous of attracting inward investments. This was supported by Amman municipality's development regulations which were relatively developer-friendly. As global capital contentiously and increasingly circulates in Amman, it has become apparent that this new sudden commercial development carries other sides with its folds. In addition to the development it's bringing, it has brought gentrification and change in the small scale, low-rise and indigenous character of the city and consequently the possibility that Amman will gradually lack a "real" identity.

There has been a growing debate on the impact of mega trends of globalization and privatization on the socio-spatial structure of Amman. Some researchers argue that the current urban transformation can best

be interpreted and understood within the context of neoliberal urbanism and the circulation of surplus global capital that simultaneously produces urban spaces of exclusion and privatized urban landscape (Daher, 2009). Daher asserted that the early 2000s witnessed neoliberal urban restructuring and new types of spatial patterning in Amman in the form of exclusive high-rise business towers, luxury residential apartments, gated communities, and shopping malls (figure 2.3 and 2.4). Such projects are, labeled by Daher, as "flagship urban restructuring projects, neoliberal urban restructuring investments, neoliberal islands and new emerging urban islands of excessive consumption" (Daher, 2009). These investments are not solely the product of the private investors; they were also realized through the active support of the investor-friendly state which legitimized and subsidized them.

Figure 2.3 View of Le Royal Hotel, Amman

Source: Amman Institute (Ai), 2014

Figure 2.4 View of Jordan Gate Towers

Source: Amman Institute (Ai), 2014

Figure 2.5 Zahran Street, before the development

Source: Amman Institute (Ai), 2014

Figure 2.6 Zahran Street, after densification

Source: Amman Institute (Ai), 2014

Privatization has been witnessed in all the Middle East states in the form of 'global models'. In Beirut, Lebanon it was realized in the SOLIDERE city center reconstruction project[13]. The project was initiated by Rafiq Hariri (Prime Minister of Lebanon from 1992 to 1998 and the owner of SOLEDERE and SAUDI OGER) to reconstruct Beirut's destroyed center towards a modern global business district that gives back to Beirut its pre-war identity (Summer, 2005). The case of Beirut was not the only neoliberal experience in the Middle East. Neoliberal and free market ideologies have been realized in similar mega projects in other states of the Middle East: Cairo, Dubai, Abu Dhabi and other Gulf states.

In Amman, in addition to the individual neoliberal small-scale projects, a mega project in the heart of the city was inspired from the SOLEDERE project in Beirut. It has been realized as an iconic urban flagship project that reorients the local identity of the city center to be an international one. The latest most neoliberal project in Amman is the Abdali Regeneration Project which is the biggest mixed-use urban redevelopment project in Amman's history. The goal was to create a new business and commercial hub that, for the first time, gives Amman a distinguished up-to-date business and financial district in a large area in the heart of the city. It was created in 2004 as a partnership between MAWARED[14], which was in charge of developing three former military sites in Jordan, and SAUDI OGER (Jordan)[15], which was in charge of the management and planning of the project and final furnishing of all site projects. The project is located in the Abdali District on a strategic central site that stands next to the previous General Jordan Armed Forces Headquarters. The site covers an area of 35 hectares, extending from Al Shmeisani in the north to the Palace of Justice, the King Abdulla I Mosque and the Parliament in the south.

Abdali has been conceived and promoted to the public as Amman's biggest business district (Schwelder, 2012). The overall plan is for 1.7 million square meters of office towers, luxury hotels, recreational facilities, high-rise residential spaces, and retail, cultural and entertainment facilities. Government buildings, a transportation hub, and a national museum will be located on 55 hectares adjacent to the site. When completed, the projection will be for 40,000 residents, 15,000 jobs, and 25,000 parking spaces. The project is supposed to consist of seven skyscrapers up to 220 meters in height (Beauregard, R. and Marpillero-Colomina, 2011).

---

[13] SOLEDERE (Société Libanaise de Development et de Reconstruction) is a Lebanese private real estate company for the Development and Reconstruction of Beirut's Central District.

[14] MAWARED (The National Resources Investment and Development Corporation) is a Jordanian state-owned company that aims to boosts Jordan's drive towards urban regeneration and inner city development. MAWARED is Jordan's largest real estate developer that acts as a model of public-private partnership towards generating considerable investment opportunities for the private sector, creating job opportunities, and stimulating economic growth. http://www.mawared.jo/.

[15]SAUDI OGER is a private construction company fully owned by the family of Rafiq Hariri.

According to Daher (2009), the Abdali project resembles a symbolic replacement of the existing historic downtown Amman and the current civic urban symbols as the historic Hussein Mosque and Amman Markets (Daher, 2009). Furthermore, this project, from its concept phase until implementation, lacks transparency and public information. This raises the question to what extent the project will be a downtown for all Ammanis. It's providing and fostering a wide area of public spaces which are commercial private spaces in their essence and over controlled and regulated strategically (Schwelder, 2012). Thus, the project aims to provide a good business climate for foreign investors and local elite and to construct a new locality for international business interest (Daher, 2009; Schwelder, 2012). It is not designed to target all socio-economic groups. Certain classes of the society are automatically excluded, not by restricting their accessibility to the site or by imposing entry fees, but by producing high prized spaces that cannot be afforded by the lower strata of the population and by imposing high security systems (Rajjal, 2007; Schwelder, 2012). Such projects are mainly designed to make the city more attractive to investors and global businesses (Summer, 2006).

The Abdali project has been criticized by a number of scholars for being one of the neoliberal urban projects which has impacted on the physical and socio-economic structures of the city. Summer (2006) for instance, argued that Abdali will result in the formulation of a new social group consisting of local political and transnational business elites. It is also claimed that it is a massive neoliberal urban practice that will reinforce existing forms of spatial fragmentation and social segregation. This segregation feeds into and reproduces the social distances between different socio-economic groups in Amman (Daher, 2008; Rajjal, 2007, Summer, 2006). Rajjal adds that the way in which some of the high-rise towers in the Abdali project are branded, through different advertisements, gives an indication that these projects might increase forms of spatial segregation among different social groups.

Some of the neoliberal projects have, in fact, contributed to the displacement of many activities to the outskirts of the city. In the case of Abdali, the project resulted in the displacement of the transportation terminal with all its facilities that include kiosks and vendors to the *Tabarbour* area in order to provide more space for new investments which, unfortunately, have not been implemented or shown its social or even economic benefits yet due to the worldwide financial crises. With regards to the social consequences of such mega projects, Daher argued that it is more likely that these projects will contribute to the East-West divide as the majority of them are concentrated in the affluent western part of Amman and designed to cater for elites. He further adds, it will enlarge the social gap between the East and West of Amman on the larger scale and between the privileged people by these projects and the rest of the city (Daher, 2009).

Figure 2.7 Abdali area in the downtown area before the development

Figure 2.8 Abdali project in the downtown area after the development

Source: Abdali project, 2014

2.5 Spatial Dimension

The spatiality of Amman is to a great extent explained by the socio-economic circumstances experienced in Amman. Its spatial configuration is clear evidence of the impact of socio-economic dimensions. The swift economic development made urbanization the dominant character of the city. Urban growth has rapidly increased through the internal rural-to-Amman migration, as well as immigration from surrounding countries. Recent international crises have also affected the flow of migration into Jordan especially since the political conditions in the surrounding Arabic countries are unstable. In the last few years Jordan has provided asylum for a large number of Syrians, Iraqis, Libyans, Egyptians and other refugees; this has resulted in a substantial strain on national systems and infrastructure that has created an acute pressure on the infrastructure for water, electricity, waste management, education and health over the past two years (DOS & ICF Macro, 2010; UNHCR, 2014). As a result, Amman has expanded from a small village, with a few thousand by the late eighteenth century into a busy metropolis with around 2.5 million inhabitants in 2004 (GAM, 2008).

According to the 'State of the World City Report 2010/11' of the United Nations Settlement Program (UN-HABITAT), Amman has the highest number of refugees in the world (figure 2.9). At least 500,000 of Amman's 2.2 million inhabitants have come to the city seeking refuge from conflicts and disasters in their own countries namely from Palestine, Iraq and recently from Syria, Libya and the other surrounding countries witnessing the Arabic Spring (chapter 7.6). This makes it a unique city as no other city in the world is known to have taken in such large numbers of refugees.
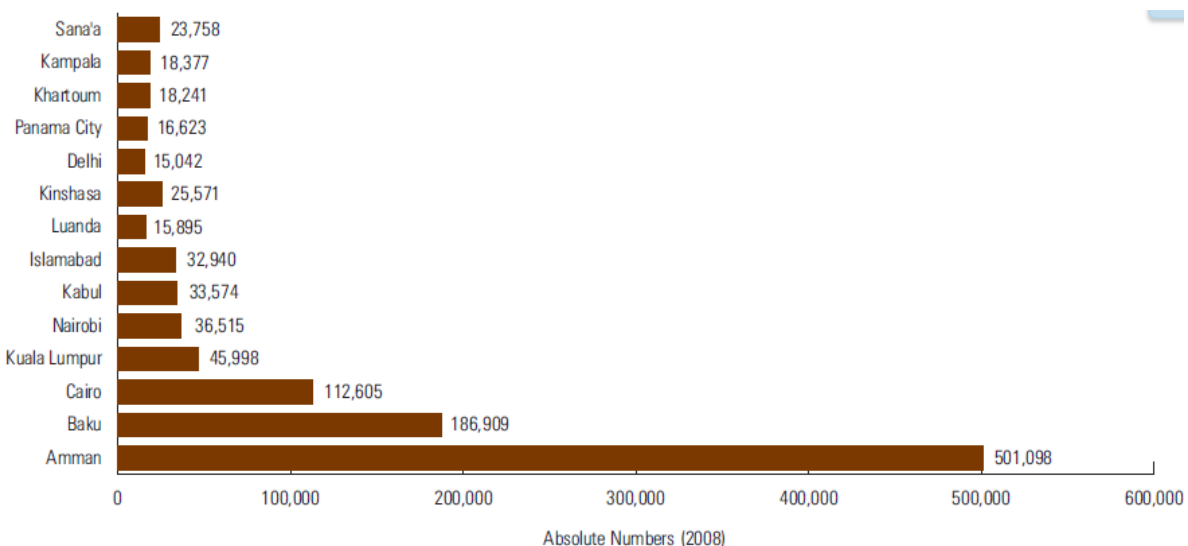
Figure 2.9 Refugees living in urban areas across the world (in absolute numbers - 2008).

Source: UNHCR, 2008 Global Trends, Refugees, Asylum-seekers, Returnees, Internally Displaced and Stateless Persons, 16 June 2009, in UN-HABITAT 'State of World City Report 2010/11

The rapid population and spatial growth in Amman have been caused by the high natural growth and flow of migrants along with the flow of global capital for investments that have fueled a significant geo-demographic shift in Jordan. Consequently, more than 80% of the Jordanian population is living in urban areas (DOS, 2010). The population living in urban areas in Amman increased by 14% between 1980 and 1994 (from 70 to 79%), and rose to 83% in 2004, which is about a 4 percentage point increase compared with 1994 (DOS & ICF Macro, 2010). Since the Greater Amman Municipality (GAM) expanded in 2007, its population density has dramatically increased, e.g., in 2011 it was 286.7 person/km^2 while it was 62 person/km^2 in Jordan as a whole (Makhamreha and Almanasyeha, 2011).

2.5.1   Spatiality of Modern Metropolitan Amman

Despite Amman's relatively short modern history, its boundary has expanded geographically numerous times due to the dramatic population growth. Since the foundation of Jordan in 1921, the Amman municipality occupied an area of 31 square kilometers by the year of 1946 with a population of 60.000 inhabitants showing that the first considerable expansion towards the west took place in 1949. By 1959, the boundary of the municipality had expanded to include 50 square kilometers and the population had increased to 246,475 inhabitants. Since that time, the municipality has experienced continuous and rapid population growth and numerous boundary expansions. Hacker stressed that, a huge amount of land, totaled at about 50 square kilometers, was added to the 1957 limits in all directions with the exception of the south-east. By 1986, Amman's population had reached 870,000 inhabitants and the urban area had increased to 91 square kilometers. The only two expansions towards the eastern parts took place in 1966 and 1968. These expansions, however, were relatively small compared with their western counterparts.

1946

1959

1967

1972
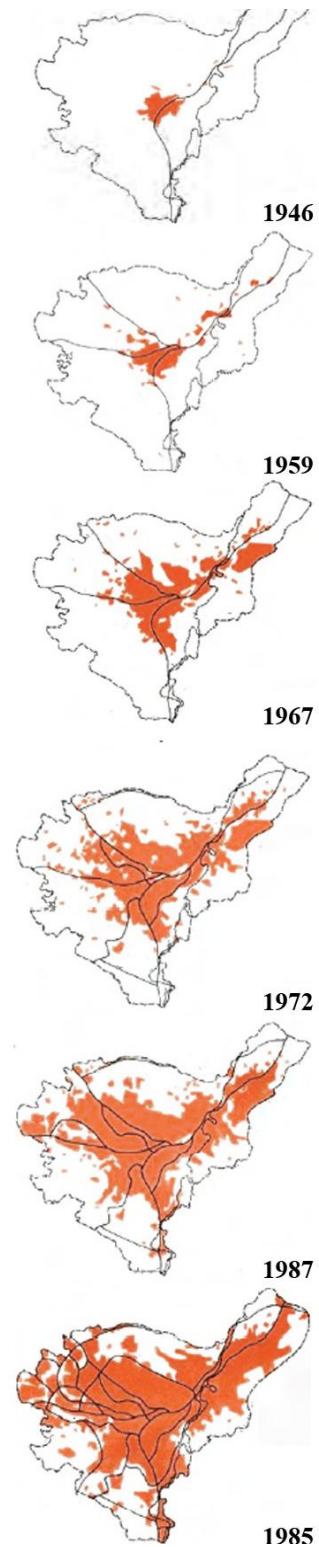
1987

1985

Figure 2.10 Spatial growth of Amman (1946 to 1985)

Source: GAM, 2008

These two small expansions might be related to the Arab Israeli War of 1967 which brought additional Palestinian refugees. In 1987, the municipal area of Amman immensely expanded in all directions, with the exception of the north-east, forming the Greater Amman Municipality (GAM) with an area of 680 km^2. In 1987, GAM was created, encompassing an area of 532 square kilometers. Subsequent boundary expansions in 2000, 2001 and 2005 increased the total GAM land area to approximately 680 square kilometers, which by that time had been divided into 20 local districts and 167 neighborhoods. In 2007, GAM witnessed another large expansion towards the south-west and south-east of Amman. As a result of this expansion, GAM's geographic boundary increased from 680 to 1662 square kilometers and an additional 190,000 residents were absorbed into the city. Keeping pace with this rapid boundary expansion, the population of Amman grew to approximately 2,200,000 persons by 2004.

2.5.2   East-West Divide in Amman and Manifestation of the Socio-Economic Spatial Segregation

This section highlights a socio-spatial phenomenon which has resulted from the previously mentioned political and socio-economic dimensions.

Though there is a lack of sufficient empirical proof on the fact that Amman is segregated not just in terms of its physical sittings but also in terms of the existing social classes and economic backgrounds of its residents, it's claimed that the city of Amman is divided into west and east parts and even into much smaller parts. This division is clearly highlighted in a multiplicity of sources, through the writings of popular literature in which this divide was presented as one of the major social problems in Amman. Debates on the divide were addressed in a number of journal articles, caricatures, television series, poetry and novels. In Seteney Shami's article she writes, "East Amman is the older part where residential dwellings are on the hillside and commercial areas are distributed in a traditional liner layout along the valleys. West Amman, on the other hand, is less densely populated and more fashionable. Most economic investments are centered in different districts there such as Abdali, Shmesani, Swefiyeh and Abdoun. However, a large physical and social contrast exists between East and West Amman" (Shami, 2007, p. 208).

Additionally, it has been mentioned in travel guides to Jordan. One piece of evidence at the formal level in the literature is in the writings of Ham and Greenway in describing Amman, in particular, the phenomenon of the 'two Ammans'. They clearly referred to such a phenomenon as being acknowledged by Ammanis:

> "Residents talk openly of two Ammans, although in truth there are many. Eastern Amman (which includes downtown) is home to the urbanized poor: conservative, more Islamic in its sympathies, and has vast Palestinian refugee camps on its fringe. Western Amman is a world apart, with leafy

residential districts, trendy cafes and bars, impressive art galleries, and young men and women walking openly arm in arm" (Ham and Greenway, 2003, cited in Potter at el., 2009).

The writings of Ham and Greenway confirm the recognition of the socio-cultural situation accompanied by the spatial transformation between East and West Amman in the popular discourse. It also demonstrates that the role played by popular discourse in popularizing and stimulating the debate on the East-West divide is crucial and draws attention to the contemporary socio-economic and spatial structure of Amman.

As mentioned earlier in this section, the claim that Amman in divided into eastern and western parts lacks comprehensive empirical evidence. Therefore, the line of division between East and West Amman is relative and dependent on the indicated measures. However, the most recent research that has been done in this area is the analysis of Mariam Ababsa (2010) who did intensive work in highlighting the social disparities between East and West Amman through addressing different lines of divisions between the two parts. In her empirical cartographic research, she demonstrates a marked morphological distinction resulting from various disparities between East and West Amman. Informal housing communities developed near the Palestinian camps with their self-built buildings located in East Amman while neighborhoods with family-owned four storey buildings, interspersed with villas and office blocks are found in West Amman. She adds that these morphological differences reflect the types of activities in each part, population density, employment rate, degree of citizenship[16] and lifestyle. According to Ababsa, the dividing line between the east and west neighborhoods of Amman defines West Amman by the area extending from Jabal Amman to Khalda and is bordered in the north by Wadi Hadadeh and in the South by Wadi Deir Ghbar. However, East Amman covers Amman's historical center and more than half of the city with its north and south expansions (map 2.4) (Ababsa, 2010).

In contrast to what seems to be obvious in the eye of the popular and scholarly discourses about the existence of a socio-economic and spatial divide in Amman, the formal discourse denies the existence of such a phenomenon and considers that such claims distort the history and the image of Amman

---

[16] The law of Jordan provides for the acquisition of Jordanian citizenship at birth to any child whose father is a Jordanian citizen, which implies that all Jordanian women who are married to foreigners are unable to pass their Jordanian nationality to their children. This is justified due to several facts but most importantly due to the fact that Jordan has the highest per capita percentage of refugees in the world and passing the citizenship will lead to a depletion of national resources. However, there are other classes of citizenship as Trans-Jordanians, Jordanians of Palestinian origin who receive services and aid from UNRWA and refugees holding only travel documents or residency permits (see Chapter 8.7.1 and 8.7.2).
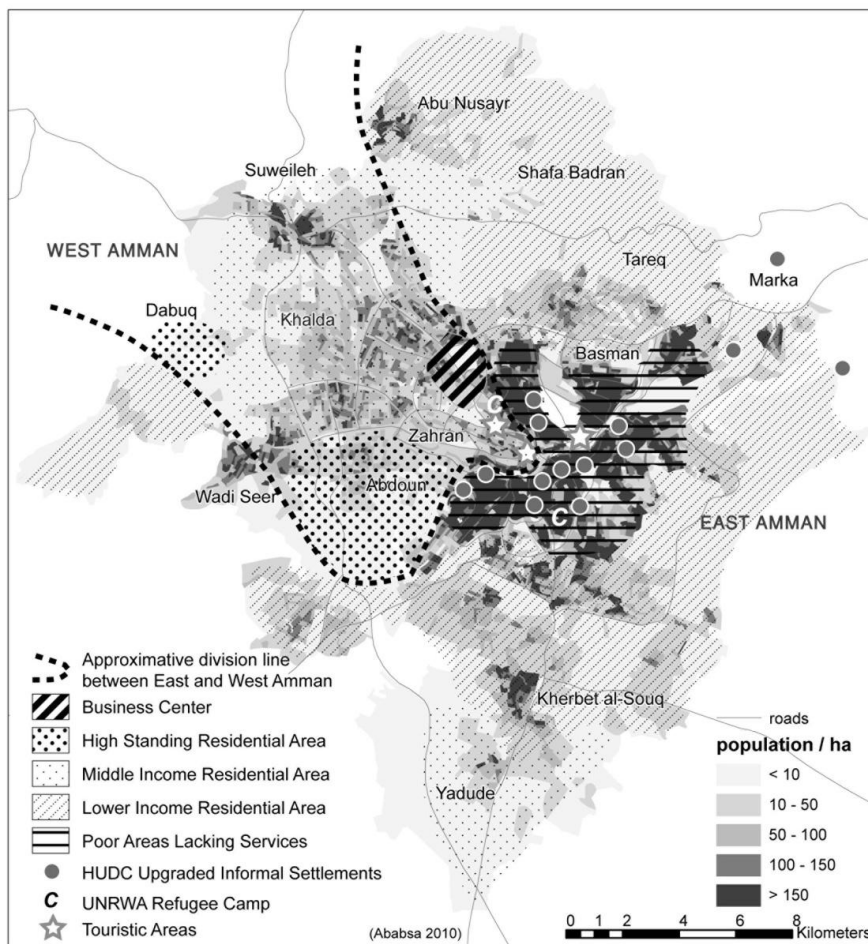
Figure 2.11 Amman urban morphology and approximate line of division between East and West Amman

Source: Ababsa, 2010

The case at the origin of Amman's division is supported by two arguments. The first argument relates this phenomenon to the post-World War II era and the Arab- Israeli War of 1948 that led to an influx of thousands of Palestinian refugees to Jordanian cities and particularly to Amman (Hacker, 1960; Munif, 1994; Rifai, 1996). However, other scholars suggest that a second associated factor of the divide emerged with the oil boom of the 1970s when the wealth split the city into two halves: the rich and the poor (Abu Khalil, 2007; Al Asad, 2008; Biegel, 1996; Shami, 2007). The main features of the two arguments are summarized as follows:

1. After World War II, a sudden wealth and economic vitality was brought to Amman by the influx of thousands of migrants from Palestine. A specific group of merchants enormously benefited from the high demand on resources and accumulated capital, yet the gap was widened between the rich and the poor (Munif, 1994). This resulted in some spatial consequences; Amman has experienced a rapid urban growth and expanded beyond its seasonal stream (Sail Amman) and the

marketplace (souk). Many large and luxurious houses began to spread over the hill slopes, namely in Jabal Amman and Jabal Weibdeh. Another manifestation of the wealth was the emergence of new marketplaces and large commercial buildings as well as the spatial stratification of Amman by income and class.

2. Until that time Amman was still growing in a balanced rhythm until the first wave of the Palestinian refugees who fled into Amman in the aftermath of the 1948 War (Munif, 1994). The vast majority of the refugees were poor; thus aggravating the already existing poverty, intensifying the gap and straining the infrastructure.

3. The influx of refugees increased the demand on housing and thus caused land and rent values to increase. Construction sites sprang up everywhere to fulfill the sudden and urgent housing needs.

4. The unification of Jordan and the West Bank in 1950 and the arrival of Palestinian refugees furthered the demand on housing and public buildings. Between 1938 and 1945 the population of Amman increased three-fold without any obvious socioeconomic changes, whereas between 1948 and 1952, Amman barely doubled its population. Subsequently, it witnessed a profound socio-economic change (Hacker, 1960).

5. The oil boom of 1973 stimulated fundamental socio-economic changes in Jordan. This argument is supported by a number or scholars who suggest that the flow of petrodollars and surplus capital were the driving force behind the divide (Abu Khalil, 2007; Al Asad, 2008; Biegel, 1996; Shami, 2007).

The socio-economic changes associated with the above mentioned arguments were also clearly witnessed at the spatial level in which land prices in Amman dramatically increased about 500% between 1970 and 1976 and another sharp increase of another 500% between 1975 and 1981 (Razzaz, 1993). Another manifest was witnessed with the spatial planning regulations that were implemented during that period. The zoning plans that were prepared by the Amman Municipality to respond to sudden population growth and the increasing demand on the residential units, classified the new residential zones into four categories: A, B, C, D where residential lands designated as category (A) had the largest plot area, largest setback, least density, and largest expense while residential lands of category (D) had the smallest plot size, smallest setbacks, largest density, and least expense. The vast majority of the lands (around 90%) were designated into (A) and (B) categories; thus, they were not affordable for the low income groups. The vision behind this zoning was to collect as much property fees as possible; however, it resulted in excluding the middle and low income groups (Potter, et al, 2009). Consequently, this has played a significant role in increasing the spatial segregation of the city (Biegel, 1996).

2.5.3 Initiatives Towards Social Equality in Amman

As Amman became an arena for different economical politics and actors who produced urban projects with contradicting ideologies, new campaigns were initiated at the political and governmental level to reduce the socio-economic disparities that were produced and manifested at the spatial level between the east and the west of the city.

Since King Abdullah II acceded to the throne in 1999, he has emphasized through many campaigns on the national and regional identity to overcome this phenomenon. Several major nation-wide reform programs were ordered and launched to promote strengthening the democratic institutions, empowering civil society and instituting durable economic improvements. These initiatives were ''Jordan First" in 2002, ''National Agenda" in 2005, ''We are all Jordan'' in 2006 and ''National Dialogue Commission'' in 2011. However, these campaigns attempted to articulate visions of political and economic reforms rather than social ones and lacked coherent and comprehensive implementation strategies. Additionally, the visions behind these initiatives were not adequately explained. According to the University of Jordan's Center for Strategic Studies, three-quarters of Jordanians had heard of "Jordan First"; however, only 16% of them knew that it was a strategic document on reform (Muasher, 2011; Scherlder, 2012). Thus, it was reduced into a slogan that was supported or attacked depending on one's political orientation and personal interpretation of that slogan.

At the action level, the Greater Amman Municipality (GAM) initiated an extension of its role beyond the administrative, regulatory and infrastructure provider to counteract the social threats of such neoliberal policies. In doing so, GAM implemented different projects to reduce the gap between west and east Amman through heritage conservation projects and public space creation in the city as a main melting pot where all people from different backgrounds meet and share their experiences (Daher, 2008). In 2000, the location of the municipality administration was moved into a new location close to downtown Amman in Ras al-Ain to make the municipality equally accessible to residents from all districts of the city. Another important building was built in that area, the al-Hussein Cultural Centre which was formerly a playground for children from Jabal Amman and Jabal Nadhif (Ababsa, 2011). On the far eastern side of Ras al-Ain, the new National Museum was constructed in 2006 to help reinforce the importance of the historic center. Artists and cultural and social activists were invited to take part in bridging the social communication gaps between East and West Amman. An open theater in February 2005 on the slopes of Jabal Amman was opened "to build a bridge between the East and West of the city" and to make art accessible to the most underprivileged living in the eastern part of the city (Ababsa, 2007).

Another important contribution by GAM was the regeneration of Rainbow Street in Jabal Amman in 2005 and Wakalat Street in the Sweifieh district (both streets belong to the case studies of this research, see

chapter 6.4.3 and 6.4.4). Both projects shared the aim of creating inclusive public space for all residents (Daher, 2008). The regeneration included adding minimal architectural interventions and emphasized on creating more space and urban pockets with panoramic views where people don't have to pay for accessing such spaces as in the case of many neoliberal gentrified space in Amman. Furthermore, some annual events were organized to preserve the identity and the heritage of their sites such as the outdoor market "Souq JARA" in Rainbow Street which is held annually by the Jabal Amman Residents (figure 2.10) Association in cooperation with GAM with the aim of providing the local residents, both women and men who work at home, as well as local charities, the chance to promote their products (Freij, 2012).

Figure 2.12 Souk JARA, booths showcasing handicrafts and handmade items
Source: The Jordan Times, 2012

Another important project was the revitalization of the downtown "Wadi Amman" (figure 2.11). The municipality launched the project in 2008 to revive 40 hectares of the downtown area by integrating neighborhoods through creating pedestrian zones connecting the Roman amphitheater in downtown with the citadel and enabling residents to experience their national heritage, which has been abandoned and neglected by the majority of residents of West Amman due to their stereotypic image of all sites located in East Amman (Ababsa, 2011). A major tourist development has been also realized with the participation of the residents and shop owners. In addition, 10% of the project lands were dedicated for social housing as well. The ultimate goal announced on the municipality's website is "creating a more viable environment for the eastern areas of Amman and linking it with West Amman (Ababsa, 2011; GAM, 2014).
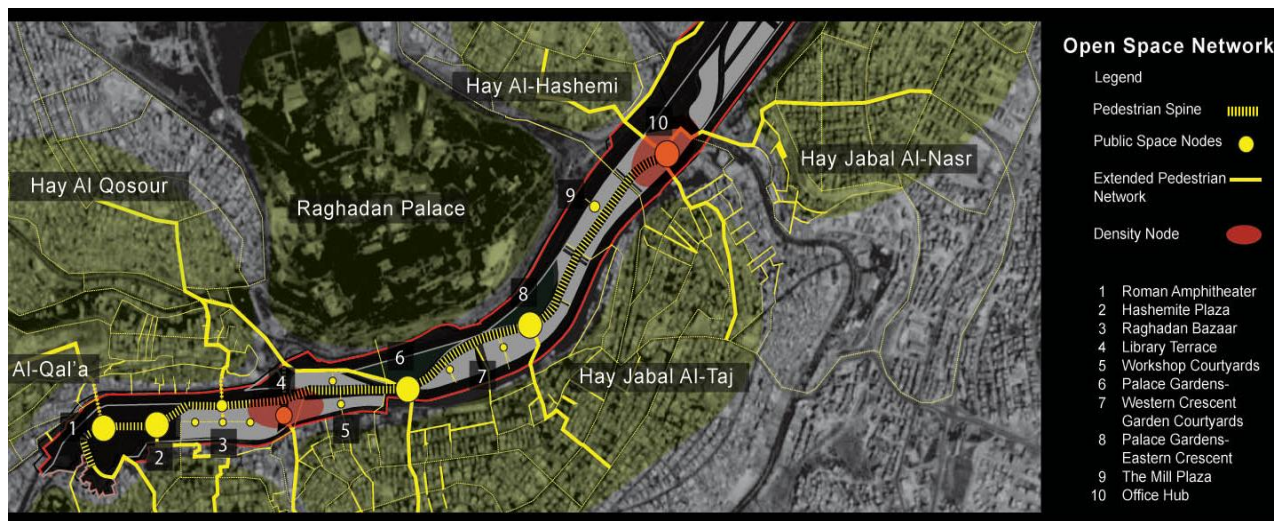
Figure 2.13 Developed areas within Wadi Amman project

Source: GAM, 2010

2.6 Planning in Amman

Based on the mentioned literature on Amman, it's obvious that the city was spatiality developed according to different socio-economical conditions and not according to a master plan as in the case of many other modern metropolitan cities in the world. However, there were several attempts at the spatial level to regulate the growth of Amman and to control the development of the city since its early beginnings in the 19th century till present time. Before the independence of Jordan, there were several planning attempts by the British Mandate to regulate the land use of Amman and in many cases these plans were financed mainly with foreign aid (Abu-Dayyeh, 2004). At that time, planning was done either by foreign planning firms and local planning consultants or by consultants from outside Jordan. The planning in Amman, at the formal level, started in 1929 when the British mandate established a central Department of Lands and Survey to organize land ownership within the country. Nine years later in 1938 they prepared a roadway plan as well. It was prepared by Andrew Park Mitchell, a British military officer in Amman. In 1954-1955, a plan for the city's future expansion and growth was prepared with the assistance of Mack Lock and Partners, a United Nations' consulting cooperation (Abu Ghasalah, 2007).

From 1954 to 1988, four Master Plans of Amman were prepared to regulate land use and to shape the growth of the city to accommodate an estimated population of two million by 2005. The last of these was the Greater Amman Comprehensive Development Plan, GACDP (1985-2005), which was initiated in 1983 and funded by the United States Agency for International Development (USAID) (Amman Municipality, 1987 in Potter, et al, 2007). The main feature of these plans was a proposed ring and radial road network, which is the only part that has since then been implemented. The over four year detailed

research, analysis and production of the 1987 GACDP was indeed comprehensive, and it has remained as a significant resource for ongoing planning of the city and its surroundings for many years. However, when GAM was created in 1987 and prepared the comprehensive plan in 1988, the municipality was half of its current population and one-third of its current land area[17] (see section 2.5.1). With the flow of capital, the comprehensive master plan was unable to fulfill all the new and large investments in real estate and the other industrial and commercial activities (Abu-Dayyeh, 2004; Abu Ghasalah, 2007). In short, although the Greater Amman Comprehensive Development Plan (GACDP) formed a comprehensive framework for the development of Amman to 2025, it had its shortcomings.

In Abu Dayyeh's article "Persisting vision: plans for a modern Arab capital, Amman, 1955–2002", he argues that the major shortcoming of GACDP was "the failure to conceptualize the master plan as a living document to be used in the municipality's daily practice". He then justified this statement by the fact that the plans visions of the GACDP were based on a British centralized planning ideology focusing on limiting urban growth in the peripheral and suburban areas, the establishment of Green Belts and the channeling of new growth into two satellite towns (Map 2.12). The satellite towns were located to the south and east of the Greater Amman area, a limited satellite located to the immediate south of Queen Alia Airport, and the second more substantial area lying to the south-east of the city on the Ring Road joining Zarqa to Queen Alia Airport (Abu-Dayyeh, 2004).
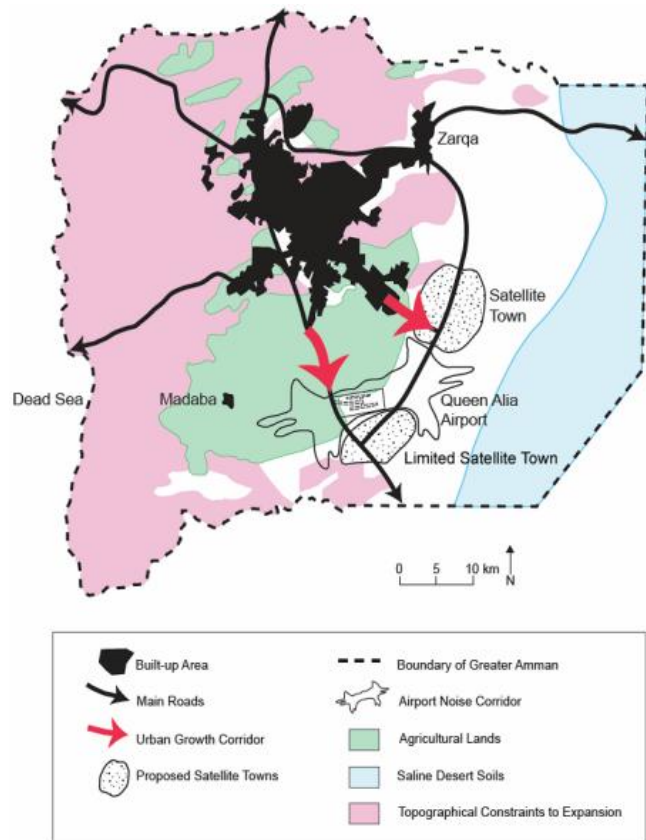
Figure 2.14 Planned regional settlement pattern for Amman, including the Amman Development Corridor
Source: Robert, 2007

The decision that was made in 1985 to expand the municipality's boundaries to include the suburbs and the peripheries beyond its municipal boundaries to be geographically amalgamated into a single governmental entity called "Greater Amman" (Dar Al-Handasah Consultants, 1988) has however caused

---

[17] When that plan was officially adopted in 1988 ,the municipality encompassed an area of 532 square kilometers. The subsequent boundary expansions in 2000, 2001 and 2005 increased the total GAM land area to approximately 680 square kilometers. At the start of Amman 2025, it was planned to be 1,662 square kilometers.

this plan to be too weak to meet the emerging planning issues in Amman. Although this introduced a regional perspective into the city's planning process, it has caused inflation in the area's land market by raising land prices through over-zoning the areas beyond the boundaries of the municipality. Zoning increased the value of peripheral land and inflation which had its spatial consequence. The high-priced lands were too expensive for including social housing or providing public buildings and public open spaces.

2.6.1 Amman 2025, the Metropolitan Growth Plan (MGP)

The rapid uncontrolled growth of the city fueled with the influx of Gulf countries investments along with some political issues on its acceptance and enactment sealed the fate of this plan to never be formally adopted and realized. Consequently, planning in Amman has not been guided and regulated over 25 years by a master plan; instead it was regulated and governed by the city's outdated zoning bylaws (Al Abed and Neimat, 2006).

To respond to the rapid population growth and to face the numerous real estate development projects that began in 2003 and threatened to extremely distort the morphology and image of Amman, GAM developed a vision and created a new set of policy tools to control the city's long-term growth. GAM together with the Amman Institute for Urban Development (Ai)[18] worked on creating a new master plan "The Metropolitan Growth Plan (MGP)" as a new approach to planning in Jordan which defines the physical planning and policy framework that will guide the growth and development of the Greater Amman Municipality (GAM). The MGP aims to answers some fundamental questions such as where Amman will grow and how. Spurred by GAM's recent annexation, which almost tripled the city's land base, the MGP is a strategic response to these questions presented in ten component plans.

The Amman 2025 plan was conceived to be unconventional in terms of the process in which it will be realized. It aims to combine the planning phase with the implementation one to respond to the ongoing dynamic planning challenges in Amman. Analysis and legislative interventions were brought closer together in time and practice (Beauregard, R., & Marpillero-Colomina, 2011). Additionally, unlike the previously prepared master of Amman, engagement of different actors of consultants, professionals, and community members along with municipal staff was an integral part of the process.

The innovative part in the substance of the plan was to respond and to respect the unique physical form of Amman while making the city accessible, investor-friendly and environmentally sustainable. Thus, the

---

[18] Amman Institute is a non-profit organization that was established in 2008 by the Greater Amman Municipality (GAM) as an initiative for planning the growth of the city through 2025. The Amman Plan has received international recognition including 2007 Town Planning Leadership Award and the Asia-Pacific City-of-the-Year Award for Leadership.

plan introduced an approach of high-density, mixed-use (HDMU) development to resist urban sprawl and encourage compact growth and adopted a regional perspective by amalgamating over 1,000 sq. km. to control "spill-over" development (Ai, 2011). Many of the planning guide lines of the MGP, except for the regional perspective, were not addressed in both GACDP and Amman's current land development regulations.

The guidelines for the Amman Plan were based on both responding to the current planning conditions and considering the future challenges of the city. The planning strategies are based on two foundational assumptions: A population growth of approximately four million residents by 2025 and on an ongoing flow of foreign capital into real estate development (Ai, 2011). To deal with the population growth, the vision is to absorb the new population with minimum additional infrastructure costs. In doing so, the plan emphasizes on intensification (also known as in-fill, urban consolidation) of the existing urban structure and the limiting expansion of some perimeter designated areas. Intensified areas are a set of different zones arrayed from the highest development in the core of the downtown to the lowest development in the periphery with the range of densities varying between 10 and 15 persons per dunum[19]. Development, moreover, is to be concentrated within the urban envelope, an area of urban compact growth that encompasses the development extant in 2008. This aims to limit the urban sprawl as well as to minimize constructing new road networks, public facilities and water and sewer connections, to preserve agricultural land and to conserve the natural heritage sites. In regards to the second assumption (ongoing flow of foreigner capital for large-scale investment in real estate), it was considered in the plan through three compacted areas where all tall buildings will be concentrated. In addition, mixed–use, mid-rise buildings will be sited along ten transportation corridors that emanate from the central core and reach to the city's peripheries. The Amman Master Plan 2025 is divided into eight phases with each phase representing a functional issue and its corresponding planning document. The phases are:

I.	Amman Plan for Tall Buildings
II.	Corridor Intensification Strategy
III.	Industrial Lands Policy
IV.	IVA. Outlying Settlements Policy
V.	IVB. Airport Corridor Plan
VI.	Metropolitan Growth Plan
VII.	Area Plans
VIII.	Community Plans
IX.	Planning Initiatives

As in the listed phases above, the Amman Plan for Tall Buildings is to be the first to be implemented and it's meant to respond to the most challenging issue facing the city; that is, the undesirable impact of large-

---

[19] A dunum (or dönüm) is a unit of land area measure which equals 1,000 square meters or 10,764 square feet. It originated in the Ottoman Empire. Jordan adopted using the metric dunum since in 1928.

scale, HDMU developments on the city's traditional landscape. The later phases represent the three scales that were used to organize the planning process: (1) the metropolitan scale of 1,662 square kilometers, (2) eight planning areas that comprise the metropolitan area, and (3) a community scale consisting of 228 neighborhoods. In terms of master plans, the Metropolitan Growth Plan lays out the overall vision for the GAM region and is thus the phase most deserving of that label. The final phase involves specific planning initiatives such as housing and heritage plans. GAM is in this planning process as a regulatory actor. Its contribution articulates around three interrelated roles that will be the policy mechanism for the implementation. These pivotal roles are through: (1) regulation of land use of development permitted in different perimeter areas and in the special zones, (2) provision of new infrastructure, particularly roads and transit lines as well as water and sewer connections, and (3) introduction of development charges and incentives that return to GAM some of the financial benefits created by the impact of densification and the designation of special zones.
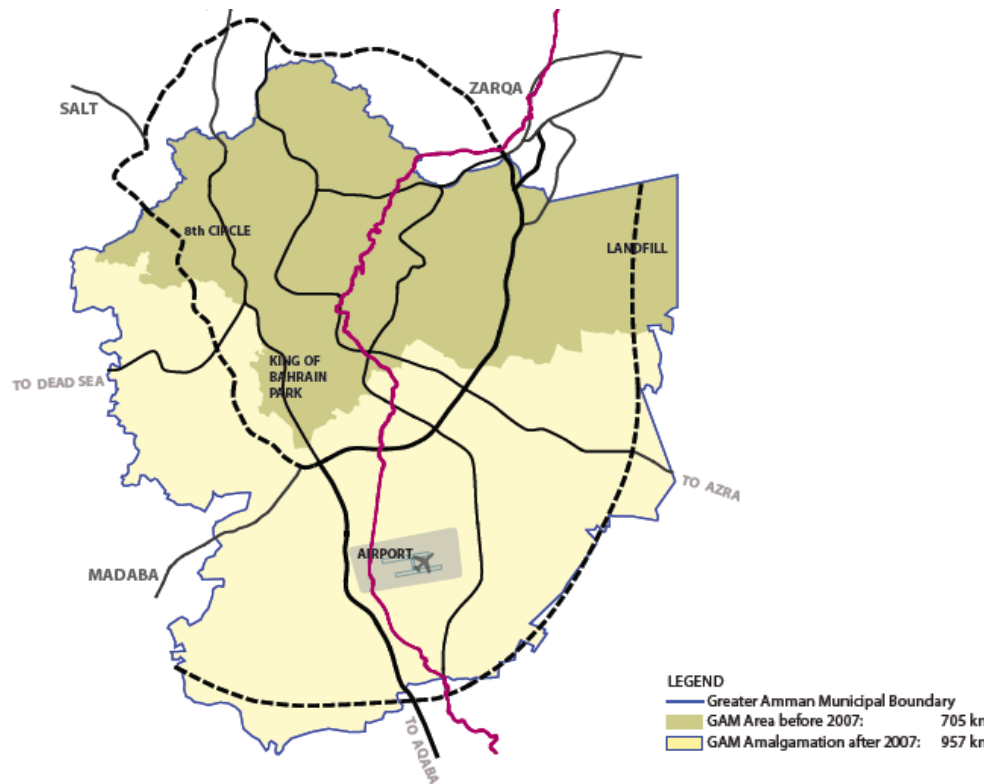
Figure 2.15 Metropolitan Growth Plan: Amman Expansion

Source: GAM, 2008

2.6.2   Summary of Chapter Two

During the 18th century and before, Amman was conceived as a part of a larger spatial entity called Albalqa. By the beginning of the 19th century Amman started to have simple physical features. A tangible development of Amman started to take place in the second half of the 19th century. The construction of the Hijaz railway caused a major shift, transferring Amman from a small village into a town with a high social diversity. Spatially, Amman at that time was divided into separated ethnic-based territorial quarters. The only shared space at that time was the market place which was, by all means, the only public space through which all ethnically diverse groups met and interact. It played a key role in building bridges across different groups and unifying norms and accents. With the development and population growth of Amman, schools, mosques and markets were then the spaces of public gatherings that shaped the first social life in Amman. As the village of Amman started to take its shape as a city, shops, grocery stores and bakeries were the signs of an urbanized lifestyle. Cafes then followed and were considered the core of Amman's public sphere where people could meet and socialize; political coherence was formed by these cafe gatherings.

 In addition to Amman's high rate of natural increase, a sudden uncontrolled growth of Amman´s population occurred due two major migration waves; the first was after the Arab-Israeli War of 1948 and the second wave after the Arab-Israeli War of 1967. Additionally, about 300,000 Jordanians returned back from the Gulf countries as a result of the 1990 Gulf Crisis, as well as the return of many thousands of Jordanians students from Iraq.

At the spatial development level, Amman had consequently witnessed rapid uncontrolled urban growth in the 1970s fueled by the inflow of investments and remittances from the Arab Gulf States. However, the spatial development did not correspond to all expansion challenges. This has resulted in a concentration of population in certain areas and an increase of population density. Consequently, several spatial and social problems emerged, such as shortages in water, food, housing and job opportunities.

Modern Jordan has traditionally followed a pro-liberal policy and has encouraged and legitimized privatization as a policy towards economical revival and renascence. Opening the doors widely to expertise and capital from international and regional agencies reflects the fact that Jordan is heavily dependent on external sources of capital in managing its economy. Jordan is one of the major recipients of foreign aid from the United States. It draws on foreign assistance (particularly from the United Nations) to support its large refugee camps. It relies on remittances from Jordanians working in the Gulf States and elsewhere to maintain its economy. With a GDP of approximately US$12.6 billion in 2005, remittances of approximately US$2.0 billion and foreign aid from the United States of just under US$0.5 billion, external funds comprise approximately one-fifth of Jordan's economy.

Jordan's diplomacy and non-confrontational approach with the United States and the neighboring countries, along with its overall political stability especially during the Arab Spring revolution in most of the surrounding countries in the Middle East, has made it a destination for refugees from Palestine, Lebanon, Iraq, Syria, Libya, Egypt and from all parts of the Middle East who are looking for a new home.

Concerning the phenomenon of economic transformation toward a more neoliberal, privatized and individualized economy, the literature shows that the growth of wealth originally appeared from a few merchants during World War II, and then immense wealth accumulated through monopolies that took advantage of the several waves of Palestinian refugees who fled to the city in 1948. Thus, substantial socio-economic changes marked the roots of Amman as a divided city. The divide, until today, was built across many paradoxes: education, culture, lifestyle, language, zoning and many others. Since the 1970s an unprecedented economic growth has accentuated the divide and increased spatial segregation in the city. The reason why many scholars associate the divide with the 1970s era might be due to the phenomenal expansion of the city toward the north-western part of the city.

The socio-economic transformation/divide in Amman has a spatial dimension and has been increasingly associated with the urban dualism between East and West Amman, where in West Amman the fashionable and bright spaces can be found while East Amman is slummy and highly occupied with limited social spaces. This high level of socio-economic inequality has resulted in a spatial segregation where middle and low income people are living in less quality neighborhoods in the eastern side of Amman while the higher income and elite groups who have largely enforced the social divide through their mobility are living in the fashionable neighborhoods in the western side of Amman. This unhealthy gap between different groups caused social instability and unrest in the city and consequently affected the spatial distribution of the different groups where different categories of social classes showed different tendencies toward different social spaces in Amman.

3 THEORETICAL CONSTRUCTS

3.1 Introduction

This part of the research deals directly with the theories in which the concept of space and its relation to society is argued and examined. Furthermore, some spatial-socio theoretical constructs are highlighted in this chapter, namely the "production of space" as discussed by Henry Lefebvre (1991 [1974]) in which he considers space as an on-going product of social practices. In addition, Lefebvre's theory is further argued in Hillier and Hanson's point of view as they refer in their "Space Syntax Theory" (1984) to the architectural and spatial arrangement of ordering in space as a reflection of the ordering of relations between people. This chapter aims not only to give a critique of investigated notions but also to present them in a critical correlative manner that facilitate the comprehension of space with relation to society.

3.2 Urban Public Space

The city space through history has always been an integral part of its inhabitants' everyday lives. In the European context from the earliest urban settlements to the Greek, Roman, medieval, renaissance and baroque cities as well as the cities from the enlightenment and industrial age, city space has been an integral part of society as evidenced in descriptions, paintings and engravings left behind The market place has always represented the main gathering space where all people meet and socialize. In addition to the market place, roads, streets and spaces between buildings formed another system of connective space where social information of all kinds was exchanged (Gehl and Gemzøe, 2003).

However, due to the rapid urbanization and population growth of cities, the role and character of public space has changed and therefore the term "public space" has become "multifaceted and conceptually slippery" (Weintraub, 1995, P. 281). This has resulted in an international debate concerning a proper definition and meaning of public space.

To better understand the term public space in the context of this research, it is important to refer to the perceptional development and various definitions from different point of views. This aims to from a comprehensive understanding of this term before investigating it from particular perspectives.

From a physical point of view, open space is defined as undeveloped natural land and water in an urban settlement that is not covered by cars or buildings. The definition includes the light above the space as well (Tankel, 1936, cited in Woolley, 2003). From a wider physical perspective, Cranz (1982) considers that open space is not limited to cover only the undeveloped areas, but it flows also to cover the parks of the city and further to the urban open spaces inside the city. All open spaces inside the city are then

defined to be all the spaces that are accessible to people either as individuals or groups and that belong to the public realm of the city (Lynch, 1990; Carr et al, 1992). Urban green pockets, streets networks, street sidewalks, and plazas are areas accommodating a wide range of human interaction and activities of everyday discourse within a secured natural urban sitting (Gehl, 1987; Reicher and Kemme, 2009).

On the social practices level, Jan Gehl, a Danish architect, made in his book *Life between Buildings* an intensive analysis of the users' behavioral patterns in public spaces in Copenhagen and he distinguished three types of users' social activities within a given public space: necessary activities, optional activities and social activities. The necessary activities include the activities that users of public space are more or less obliged to do as part of their regular lives, such as shopping and waiting for public transport. This type of activity is influenced slightly by the physical environment and will take place under almost all conditions apart from the exterior physical conditions. Optional activities describe the activities that take place according to people's wishes and availability of time, such as walking in the park, meeting friends, or standing to watch a show in a pedestrian street or in a plaza. Unlike the necessary activities, the physical characters of the surrounding environment such as the provided street furniture and weather conditions affect the willingness of the users to do an optional activity. This kind of activities is dependent on the surrounding environment's physical conditions. Finally, social activities combine both necessary and optional activities, but the difference is that they include the existence of at least one other person for social purposes such as children playgrounds, communal periodical activities such as festivals and passive social activities that include watching and listening to other users (Wooley, 2003).

type of activity	quality of the physical environment		
	Low	Medium	High
Necessary activity (obligatory)	◯	◯	◯
Optional activity (free choice)	◯	◯	◯
Social activity (spontaneous)	◯	◯	◯

Table 1 Influence of physical conditions of a given public space on the incidence of necessary, optional and social activities

Source: Gehl, 1987

Including the city functional spaces in the understanding of space has added another physical and urban dimension in which space could accordingly be perceived and defined. Space in this frame could be defined as all types of spaces that are bounded by buildings in town and other localities including varying elevations (Krier, 1991 [1975]). Considering the social dimension, public space could also include closed spaces where public gatherings take place.

However, despite the fact that public space could be defined by its physical and functional attributes, the property and the legal ownership of the public space affect the way in which it is perceived and therefore the number of users of that space. This could explain why some spaces are shared with more people than other spaces. Thus, open space can be classified into three hierarchal spaces (Newman, 1972): public space (all people have equal rights to the space such as parks, city market and streets), semi-public (with specific opening hours or for certain groups of people such as sports playgrounds and university students' shared open areas) and private open space (private properties such as private gardens).

3.2.1   Public Space as a Socio-spatial Concept

In the post-civil and industrial society of today's theorists, like Camillo Sitte and Micheal Sorkin, many questions about the entity and the role of public space have been raised such as: What role does a public space play within our new societies? What kind of public space would respond to contemporary lifestyles? Are public spaces important to people's lives? And to what extent do privately controlled public spaces substitute urban communal spaces? From these proposed questions and many others, it's clear that the ongoing change of society's lifestyle and technology's intervention in everyday life have multiplied and complicated the role of public space in the current urbanized and modern life. Many theorists and thinkers have, in the contemporary conceptualization of space, emphasized on the functional and ritual role of public space in expressing and binding the society through wide array of collective activities that can take place, whether in the course of daily life or periodic events such as festivals or political demonstrations (Carr et al., 1992). Public space is also for the whole community (Drummond, 2000) to share and use by those who do not individually control it and all residents have equal rights to use it (Habraken, 1998; Miao, 2001). From a social point of view, other writers defined public space with a particular emphasize on the social temporal dimension as Madanipour (1992, 1999) who acknowledges the public urban space as not only all buildings, objects and spaces in the urban environment, but also the people, events and relationships with them. In that regard, he argues that social space is a fundamental part of everyday life, and that 'our spatial behavior' is defined by the space around us therefore, defining space is an integral part of our social existence. (Madanipour, 1996). He further elaborates that objects and relationships are defined through a larger context with the institutional arrangement that assigns them functions and gives them meaning. This allocates them in a larger realm at the social reality level that

enables them to participate in the communication process and to develop a sense of identity (Madanipour, 1999, 2003).

In order to answer the proposed questions of this research and to explore socio-economic and spatial impact on the performance of the public spaces in Amman, this research will focus on those active or passive public spaces which are owned by the public authority and are for all social groups without obligation of any monetary payment. Additionally, public space as a social product defined by the society will be investigated. Therefore, the subsequent sections will present theories in which the notion of space is argued in mutual relation to the society. Section (4.3) and (4.5) will synthesize some of these theories that relate to the society-space interrelation from different points of view including the conceptualization of Lefebvre's theory "The Production of Space [La Production de l'Espace]", where he describes space from a politico-economic point of view and the understanding of Hillier and Hanson's "Space Syntax Theory" in which they refer to an architectural and urban empirical point of view in conceptualizing space.

3.3 The Production of Social Space - Lefebvre's Theory

> Social space is not a thing among other things, nor a product among other products: rather, it subsumes things produced, and encompasses their interrelationships in their coexistence and simultaneity-their (relative) order and/or (relative disorder. Thus cannot be reduced in rank of a simple object (Lefebvre, 1991 [1974], p.73).

Lefebvre considers space, "social space", as an on-going production of social practices and relations, "social product", of different societies which he calls "modes of production". Within their particular relations, they produce their particular spaces and other societies' social practices call for a new space. In other words and derived from his writings in *The Right to the City* (Lefebvre, 1968), the practices of a given society appropriate space as their tool, medium and milieu (Stanek, 2011). Lefebvre also identifies various kinds of space for everyday discourse, such as street corners, market places, shopping centers and so on, as organized codes which are part of the interaction between 'subjects' and their space and surroundings. These codes construct the spatial system of the space (Lefebvre, 1991 [1974], p.16).

In explaining how space is produced, Lefebvre developed in his theory a "conceptual triad" that is based on physical, mental and social spaces. He identifies those spaces with three "moments" that are: the perceived, conceived, and lived space. This intangible triad was later operated into "spatial terms" resulting into the second parallel triad of spatial practice which refers to the perceived space, representations of space which is related to the conceived space and representational spaces which refer to the lived space (Levebvre, 1991 [1974]).

The above mentioned integral elements of the overlapping triad are considered as the core of Lefebvre's theory by many scholars who investigated his work, including Rob Shields in his book *Lefebvre, Love and Struggle: Spatial Dialectics* (1999); Edward Soja in *The Spatiality of Social Life: Towards a Transformative Reauthorization* (1995); Stuart Elden in *Understanding Henri Lefebvre: Theory and the Possible* (2004); Goonewardena, K. et al. in *Space, Difference, Everyday Life: Reading Henri Lefebvre* (2008); Christian Scmid in *Stadt, Raum and Gesellschaft: Henri Lefebvre und die Theorie der Production des Raumes* (2005) and Andy Merrifield in *Henry Lefebvre: A Critical Introduction* (2006). All of them agree on the three moments of space and about the correspondence between both the mental and the spatial triad (Stanek, 2011).
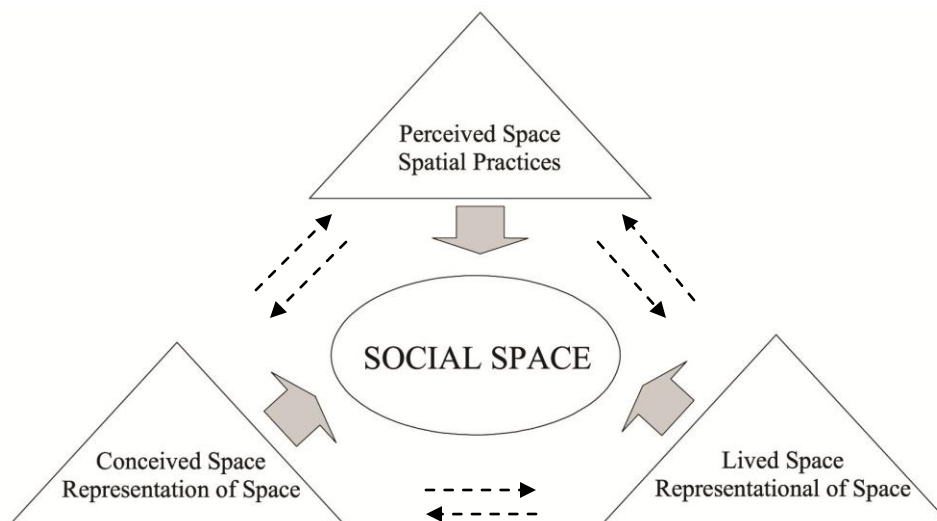
Figure 3.1 Lefebvre spatial triad in explaining how space is produced: perceived, conceived and the lived spaces

1. **Spatial practice (perceived space)**: is defined as the daily life of a group of people living in a common territory. It refers as well to the process of production and reproduction of social relations. Social practices also insure continuity and cohesion. "This cohesion implies a guaranteed level of competence and a specific level of performance" (Levefbvre, 1991[1974], p. 33). The social practices of a society produce that society space and appropriate it. According to Lefebvre, the perceived space is a physical one (Elden, 2006).

2. **Representation of space (conceived space)**: denotes the conceptualized space of scientists, planners and urbanists, technocrats, architects, theorists, painters and social engineers, as well as other artists, who tried to identify what is lived and what is perceived with what is conceived (Lefebvre, 1991(1974), p.38). According to Lefebvre "representation of space" signifies the dominant space of any society (mode of production), and the conception of this kind of space tends toward a system of verbal signs and intellectually worked out signs. According to Lefebvre, the conceived space is a mental construct and imagined one (Elden, 2006).

3. **Representational space (lived space)**: refers to the space that is directly "lived" and experienced through its associated images and symbols, and therefore the space of inhabitants and users which is modified in everyday life (Elden, 2006). Representational space is produced as a result of the dialectical interaction between physical space and social practices, in which the physical space is changed or appropriated as it is imagined or described after it's passively experienced by users, artists, philosophers and writers. Consequently, unlike the representation of space (conceived), representational space tends toward, more or less, coherent systems of nonverbal symbols and signs

(music, sounds, evacuation and architectural construction) (Lefebvre, 1991[1974], p.39). David Harvey calls this space "the spaces of representation" which are linked to the lived space of sensations and imaginations (Harvey, 2004).

3.3.1   Lefebvre Differentiated Spaces

Based on the conceptual triad and considering that every society (mode of production) emphasizes on one of these elements, Lefebvre's approach of conceptualizing space has differentiated four categories according to the historical conditions of their productions. The four differentiated spaces are: absolute space, abstracted space, differential space and dominated space

- **Absolute space**

Absolute space is religio-political space in character which is made up of sacred locations: temples, palaces, monuments and places that are distinguished in a certain way. These spaces are mostly considered iconic, assuming meanings and purely mental "imaginary". Absolute spaces are characterized by being designed in a specific meaningful geometry (square, rectangle, curve, sphere, triangle, etc.). In rare cases it might be indicated with symbolic elements such as stone(s), or by a post, or simply by the hollowness and emptiness of the space. Greek agoras and Roman forums are part of the absolute space. Religious, political, private, family, individual and public spaces have no distinction and are considered all equally less important in relation to the absolute space (Lefebvre, 1991[1974], p.240, 241).

- **Abstract space**

Abstract space emerged from absolute space, which has in time lost its dominance and force as a base of representational spaces. It emerged with the medieval town which was the departure point for western European capital accumulation. Abstract space is also the space of the postwar capitalist and neo-capitalist society (Stank, 2011). Along with the countryside under its domination, the town was the main subject that dominated this period. The urban space within the towns became as an arena of compromise between the medieval feudal space and the capitalist space which included the accumulation of wealth, power, technology, money, work and resources. Abstract space has undergone a process that further on led to an abstraction in actions that sought toward the capitalist "trinity" of land-capital-labor which was constructed in an institutional sphere with three distinctive characteristics: **a)** global and dominant - the space of sovereignty, where constraints are implemented, and hence a repressive space; **b)** not homogeneous in its essence but specific in order to control different spaces which are further subdivided into spaces for work and spaces for leisure, and into day-time and night-time spaces – political power creates fragmentation in this type of space in order to control it; and finally **c)** hierarchal in its nature, ranging from the poorest places to the noblest. The strategy of classification distributes the various social

strata and classes across the available territory, keeping them separate. This is done through institutional and administrative subdivision, by scientific and technical specialization, by land use plans and by promoting different spaces for different uses (Lefebvre, 1991[1974], p.282).

> …conceive and construct dominant spaces ruling over dominated spaces … They subject space to a logistics, believing thereby that they can either suppress conflicts and contradictions, or at least understand them in order to combat them. Against this, however, the intrinsic connection between logic and violence suggests that these agents in fact revive conflicts and aggravate contradictions (Lefebvre, 1991[1974], p. 46).

Abstract space, on first inspection, appears homogeneous. Nevertheless, it is in itself multiform, heterogeneous and fractured; "*it simply has homogeneity as its goal*" (Lefebvre, 1991[1974], p. 304), and holds together fragments in a homogeneous totality. This apparently homogenous abstract space is broken down into highly complex model sectors: the transportation system, the urban network, the health sector, the education sector, trade and marketing, the school system, the work world with its labor force, governmental and private organizations and institutions, and the capital market and its banking system. Consequently, society is gradually broken-down into never-ending entities which already have their own organizational subdivisions. In this space the "commodities" along with its "logic" and strategies and the power of money are funded through the vast networks of banks, business centers, motorways, airports and other productive entities (Lefebvre, 1991[1974], p. 53). Despite that, abstract space is global and tries to promote homogeneity with its multifold; it encompasses conflicts and contradictions between its different entities, between economic growth and social development, between the social and the political power, and between quality and quantity. As abstract space emerged from the absolute space, the contradictions and conflicts between the different entities of abstract space call for a new kind of space where differences are celebrated. This is the space of 'the right to difference'.

- **Differential space**

Differential space has emerged as a result of the fragmentations and contradictions within abstract space. It has emerged to neutralize the two conflictual extremes in the history of space, absolute space and abstract space. In differential space, social practice, "social space", achieves a state of freedom from the abstract space of standardized activities, "space of consumption", which according to Lefebvre dominated the town and made it perform as a machine, or automaton, which is social in nature. "The town is indeed a machine, but it is also something more, and something better: a machine appropriated to a certain use - to the use of a social group." (Lefebvre, 1991 [1974], p.345). Thus, in this differential space what dominates is the architecture of pleasure and joy, not trade, power or political agendas. Yet, abstract space is transformed toward a qualitative space, "the consumption of space", the space of everyday life where people can practice their human nature by means of music, festivals and theaters. Differential space

denies the quantitative approach of the capitalist abstract space, "a space that doesn't look superficially different but that is different" *(Merrifield, 2006, p. 113)*. This differentiation split the neo-capitalist space into two categories: spaces devoted for production and spaces devoted for the purpose of consumption of space. Vernacular architecture, tourism and recreation become major spaces of consumption. Therefore, differential space receives huge investment and yields profitability.

- **Dominated and appropriated spaces**

Lefebvre distinguished another two differentiated spaces: the dominated and appropriated spaces. The difference is that the dominated space is the space transformed and mediated by technology or by practice and controlled by the institutions of political and economic power in modern world, such as motorways that slice "through space like a great knife". Dominated space is usually "closed, sterilized, and emptied out" (Lefebvre, 1991[1974], p.164-165). However, appropriated space is natural and personalized to accommodate the needs and possibilities of a particular group of the society. For Lefebvre appropriated space reflects a state of freedom from capitalism and globalization power, or generally from the forces that have turned space into the abstract. Transformation from abstract space (capitalism and globalization), Lefebvre suggests that it is a society's effort to abolish the capitalist power in space. This could be achieved through revelation, not a political revelation that stands for political change at the state level, but rather an ideological one that is "not actually aligned with bourgeois ideology". Hence, the transformation of society suggests a collective ownership and management of space, a permanent participation of interested parties with their multiple, varied or even contradictory interests (Lefebvre, 1991 [1974], p. 422).

In Lefebvre's analysis, dominated and appropriated space should be integrated in a balanced relationship with each other. Nevertheless, in contemporary society dominated space has become excessively dominant through the part played by the military, the state and political power (McAuley, 2005).
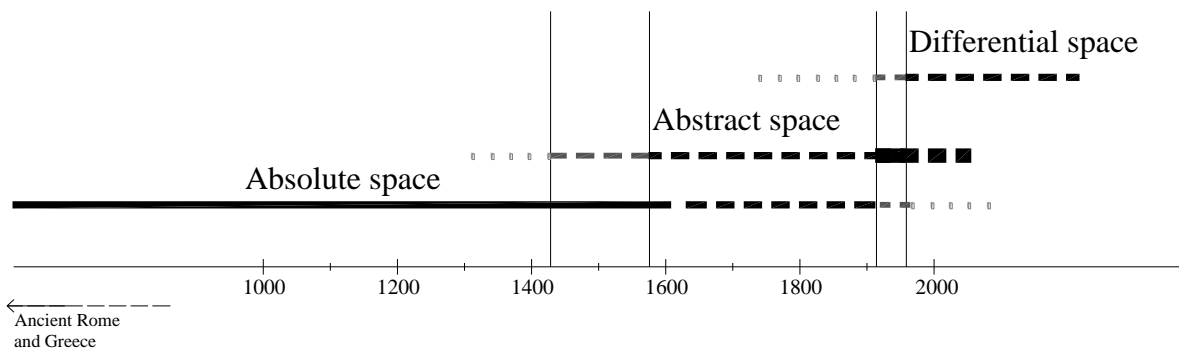
Figure 3.2 Lefebvre's chronological diagram of space in history

3.4 Space Syntax- Hillier and Hanson's Theory

The space syntax theory (SST) (Hillier and Hanson, 1984 and 1987) relates directly to space like Lefebvre's theory of "the production of space" and tries to investigate society-space relation. The difference is that in Lefebvre's theory he refers to the social practices of the societies to reveal how the physical space is produced, while in the space syntax theory, Hillier and Hanson refer to the physical and spatial ordering of buildings, "social objects", in space as a reflection of the ordering of relation between people of different societies (Hillier, 2005). Thus, according to their assertion, analyzing and interpreting spatial qualities of artifacts would reveal the social rules that regulate the interface among people.

While the space syntax theory stands on an empirical basis, some theorists as Paul-Henry Chombart de Lauwe, one of the pioneers of French postwar urban sociology, and Manuel Castells criticized Lefebvre´s definition of space due to the philosophical and theatrical bases that it stands on rather than the empirical one. Although it refers to architecture and physical environment, it lacks an empirical dimension and profound knowledge of the economic and technological data about the processes of urbanization and about their social and political organization (Stanek, 2011).

In establishing the space syntax theory, Hillier and Hanson begin with the argument that there is a problem in the way that space is studied and conceptualized in different sciences. Space was either studied in an abstracted way as a natural phenomenon, "desocialized", or as a pure social phenomenon in which social theorists have conceptualized society, namely as a relation between a material realm of physical space without social content in itself, and an abstract realm of social relations and institutions without a spatial dimension, "despatialized" (Hillier and Hanson, 2005). According to space syntax, society must be described in the terms of its intrinsic spatiality. Space syntax indicates that there is a strong relation between the spatial morphological order and the social logic of space where spatial patterns can carry social information and content.

Space syntax theory asserts that what important in space is the relations between the arranged elements within that space rather than the characteristics of the elements themselves. Those relations at the local level are responsible for creating a system of relation at the global level. The elements, the parts, affect the whole and the whole emerges from the parts in their distinctive configurational position (Magda, 2003).

Furthermore, space syntax refers to the biological concepts of phenotype and genotype to illustrate how individuals represent phenotype with their rules, beliefs, values and practices that continuously transmit information governing their form, genotype. In this metaphor, the phenotype is a spatial concept while the genotype is a transpatial and informational one (Hillier and Hanson, 2005, p. 44). However, despite the

similarities between the two systems, as genetic instructions are to a biological system, spatio-temporal reality and activity are to a discrete system, the mechanism of which the genotype-phenotype operates in is "inverted" because the information is not in the individuals' activity but in the built environment. Thus, the consistency in human activity at the social level is not the product of a biological genotype but of an artefactual genotype: one that is retrieved as a description from reality itself which has already been constructed by an informational structure within an environment of human spatio-temporal reality and activity (Hillier and Hanson, 2005, p. 44).

4 RESEARCH FOCUS AND FRAMEWORK

Based on the broad overview of context of public spaces in Amman, the historical review on the socio-economic-and-political driving forces of the creation of public spaces in Amman in Chapter 2 and on the space-society theoretical notions in chapter, this chapter presents the research problem, questions and objectives. It additionally highlights the methodological approach in answering the questions and fulfilling the objectives of this research. Furthermore, it brings linkages between the theoretical formulation of the approaches and the realization of the research objectives.

4.1 Research Problem

Based on the distinctive literature on Amman's evolution and urban spaces development in modern history, it is evident that the multi-layered political, economic and social beginnings of the city have not been comprehensively narrated, properly documented and synthesized yet, particularly in relation to the parallel evolution of its public space. Additionally, the process in which the space is produced during the development of the city is understudied which calls for a crucial need for a more critical analysis of its diverse and intriguing evolution (Daher, 2010; Al Asad, personal communication, 2012). Despite the fact that the rich inherent qualities of Amman's urban heritage recently have only been partially explored and incorporated into formal state projects of pubic space provision (Daher, 2010), there is still a need to cover other hidden areas in order to deepen the understanding of the recently produced public spaces in Amman, in particular those 'informal' public spaces, which are favored by many people and are not explored comprehensively by scholars yet.

Although there are several academic articles and master theses[20] that have tackled the public space issue, none has comprehensively studied public space with all the dynamic forces underpinning its production. Most of the researchers have studied it in an abstracted manner focusing on individual cases abestracted from their spatial and economic surroundings. Several studies have been dedicated to public spaces in Amman's city center, namely al-Saha al-Hashimiyyah downtown (image in appendix B), especially with the change in its design. One master thesis did a comprehensive study of children play environments in terms of their physical design. Another study was made to describe the quality of recreational local parks in Amman and another one defines the patterns of designs for Amman's recreational parks (see Chapter 6.2). In short, different studies emphasized either on certain cases or certain activities apart from their context on the global level of the multiple socio-economic and spatial steering forces of the production of these spaces. Thus, studies of public space in Amman lack comprehensiveness in terms of what types of

---

[20] None of the Jordanian Universities offers PhD programs in architecture, spatial planning or landscape planning. Therefore literature on public spaces is found in Master theses und students' graduation projects.

public spaces are produced, how people negotiate in theses spaces and what their preferences are among these produced spaces. Moreover, how these spaces are managed or should be managed, what design elements they should include and most importantly how the society of Amman responds to the different types of public spaces have also not been addressed in research.

Furthermore, in the last decade, Amman's urban landscape has witnessed the development of several new public spaces in the form of parks, urban plazas and commercial streets. Recently, the Greater Amman Municipality (GAM) has embarked on a public space building campaign in East and West Amman (GAM, 2008). The planning processes in which these spaces are produced, as well as the performance of these new spaces, are not yet explored and interrelated.

4.2   Research Objectives

Given the lack of critical analysis of the produced public space in Amman (section 4.2) and considering the crises of identity that has resulted in the multi-layered political, economic and social beginnings of Amman, this research aims to fulfill the following objectives:

- To investigate the different modes of production of public space in Amman, in general, and in the city center, in particular, to reveal their typologies, interrelations and their impact on the spatial planning practice in the city.

- To understand how urban transformation associated with the current neoliberal and privatization modes participated in the crises of identity in the perception of the public space in Amman.

- To examine whether the emerged development projects of public spaces in Amman are generated from the city's distinctive social and spatial context.

- To study the relationship between the social and spatial structure of Amman; and

- To draw a proper conceptualization of Amman's public space by analyzing the social and physical performing dimensions of the spaces of the research's selected sites.

This research will revolve around the mentioned objectives. The first two objectives will be investigated through interrelating some parts of the analysis with the literature review of Amman and with the theoretical epistemological understanding of space in relation to the society as a whole. The next two objectives will be translated into a methodological process that will eventually build the knowledge of this research. The last objective will be achieved through linking some of the findings to the theoretical paradigms of the notion of public space. This will be later discussed with detailed elaboration in the last chapter (Chapter 11).

4.3 Research Questions

This research mainly aims at providing an understanding of the driving forces of the production of public space in Amman, and accordingly, their impact on the quality and the character of the produced spaces and their social and physical performances. In doing so, the five objectives of the research are represented in following five questions.

1. What are the modes that produce the public spaces in Amman?
2. What are the produced social spaces of the emerging socio-economic modes in Amman?
3. How does the physical structure of public open spaces in Amman articulate with the social structure?
4. What is the role of public space in enhancing the civic-collective identity of the fast growing city of Amman?
5. What are the recommendations that could be rendered for planning institutions to insure the sustainable role of public spaces in Amman as an arena of everyday life practices for all social classes?

5 METHODOLOGY AND DATA ANALYSIS METHODS

Based on the literature review of the analyzed context of Amman in Chapter 2 and on the theoretical departures in Chapter 4, this chapter presents key methodological issues that are related to the research methodology of choosing an interpretative approach. Additionally, this chapter discusses the research design that adopts an epistemological approach oriented by theoretical perspectives that's to be reflected on the imbedded case study of this research. They will be analyzed and investigated through the "Grounded Theory" methodology that will conclude the theoretical interpretation through constructing a conceptualization of data. This will be achieved through coding a wide range of data of the different collection methods and categorizing them into certain logic and relations to build the knowledge of this research. Furthermore, this chapter presents the sampling process and the selection criteria of the units of analysis.

5.1 Research Methodology

The selection of an appropriate research methodology depends on the research project that is to be investigated. This research is, to a large extent, a qualitative research. It aims to understand the way public spaces in Amman emerge and therefore the way they perform and are consequently perceived. For this reason, this research adopts a combination of the qualitative exploratory-case study approach (Yin, 2003; see also Eisenhardt, 1989) and the Grounded Theory (GT) approach (Glaser and Straus, 1967), where dated collection is primarily based on fieldwork in Amman. This will aim to investigate a contemporary phenomenon within its real-life context for building theory from a comparative analysis of different case studies (units of analysis) (Yin, 2003, p. 13). In addition, this research includes a quantitative part as an auxiliary method to frame the fieldwork, like using numbers and statistics that are already collected and presented in different chapters of the research as secondary data to support the data collected in the fieldwork. Both qualitative and quantitative methods are complementary in this research. Triangulation of both approaches will be implemented to guarantee the reliability and the validity of the analysis. Triangulation of multiple sources of analysis is implemented to enhance the confidence, creditability and the validation of the research findings (Greene, et al, 2005). Figure 5.1 provides an overview of the combination of the qualitative and quantitative methods applied in this research.
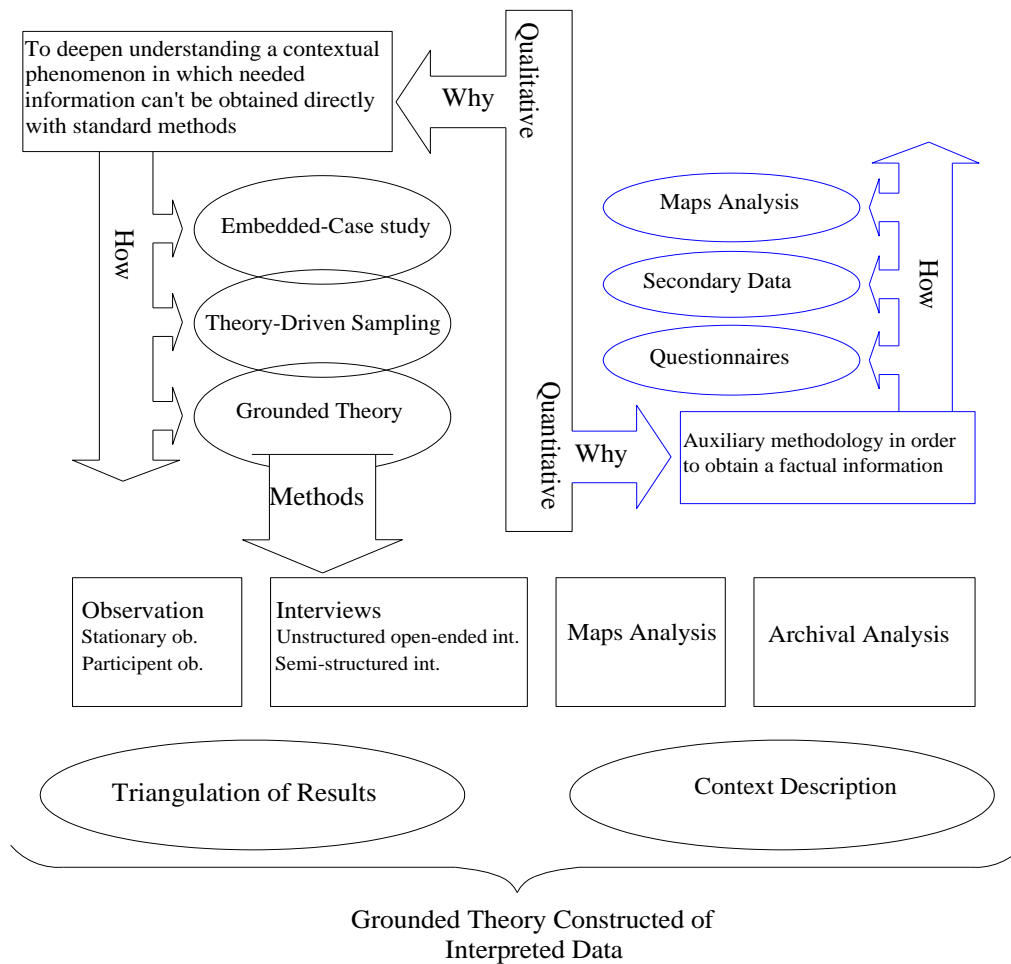
Figure 5.1 Qualitative vs. Quantitative research methods

5.2 Research Design

In social research it is always challenging to find appropriate research design for conducting the research project. However, adopting qualitative methodology suggests following an epistemological approach that helps to determine the methodology, appropriate theoretical framework and research methods. This section presents the theoretical perspectives underpinning the methodology (Crotty, 2003):

Method: The techniques used to collect the relevant data for the research questions and objectives; for this research, it will be exploratory multiple case studies (Yin, 2003).

Methodology: The strategy, plan of action and concepts that determine the selection and use of specific methods and interrelating methods to obtain the desired concluded knowledge and interpreted data. In this

research, Grounded Theory (Glaser and Straus, 1967; 1990; 1994) and case study approach are the implemented methodologies.

Theorotical perspective: The philosophical approaches highlighting the methodology and therefore providing a context for the research process.

Epistemology: The philosophy of knowledge accommodated by a broad set of approaches. It is embedded in the theoretical perspective.

In constructing the research design, the researcher sets four research phases, namely:

1. The pre-empirical phase (phase 1) considers that the pre-knowledge of the research about the socio-spatial and economic context of Amman and is achieved through the researcher's personal perception of the context since the researcher comes from the same cultural background and experiences the same phenomenon as any other user of public spaces in Amman. Furthermore, the literature available on Amman has been used in analyzing the context and tracing the urban transformation of the city. It aims to detect the existing problem of public space and people lived environment in Amman through relating the context to the existing theories and concepts investigating the public spaces from a socio-spatial perspective to develop a better understanding of the research problem and gaps. Based on a deep understanding of the research problem through the existing literature, preliminary field visits have been done to formulate the research objectives and questions to orient the research.

2. Phase two defines the research design process starting with the adopted epistemology (constructionism), where the theoretical perspective of the study is described (interpretivism), the methodology (Grounded Theory) (Section 5.4), and the methods this research adopts (e.g. embedded case study, discussed more in section 5.5.1) (Crotty, 1998).

3. Subsequently, phase three includes the actual working process of the two-fold empirical parts of the theoretical sampling and data gathering and analysis using Grounded Theory where the theoretical part is re-discussed and differentiated based on its relevance to the context and then embarks on a chronological review with the current evolution of the planning legislative system in Amman. This aims to appraise the hidden points of the literature review and therefore to construct a common theoretical ground to conceptualize and reveal the driving forces and modes lying behind the produced social space in the society of Amman.

4. Phase four finally seeks to build theory through answering the research questions and contribute to the knowledge available about the public spaces in Amman from a comparative analysis of the

empirical cases to develop the Grounded Theory. Figure 5.2 gives an outline of the research process.
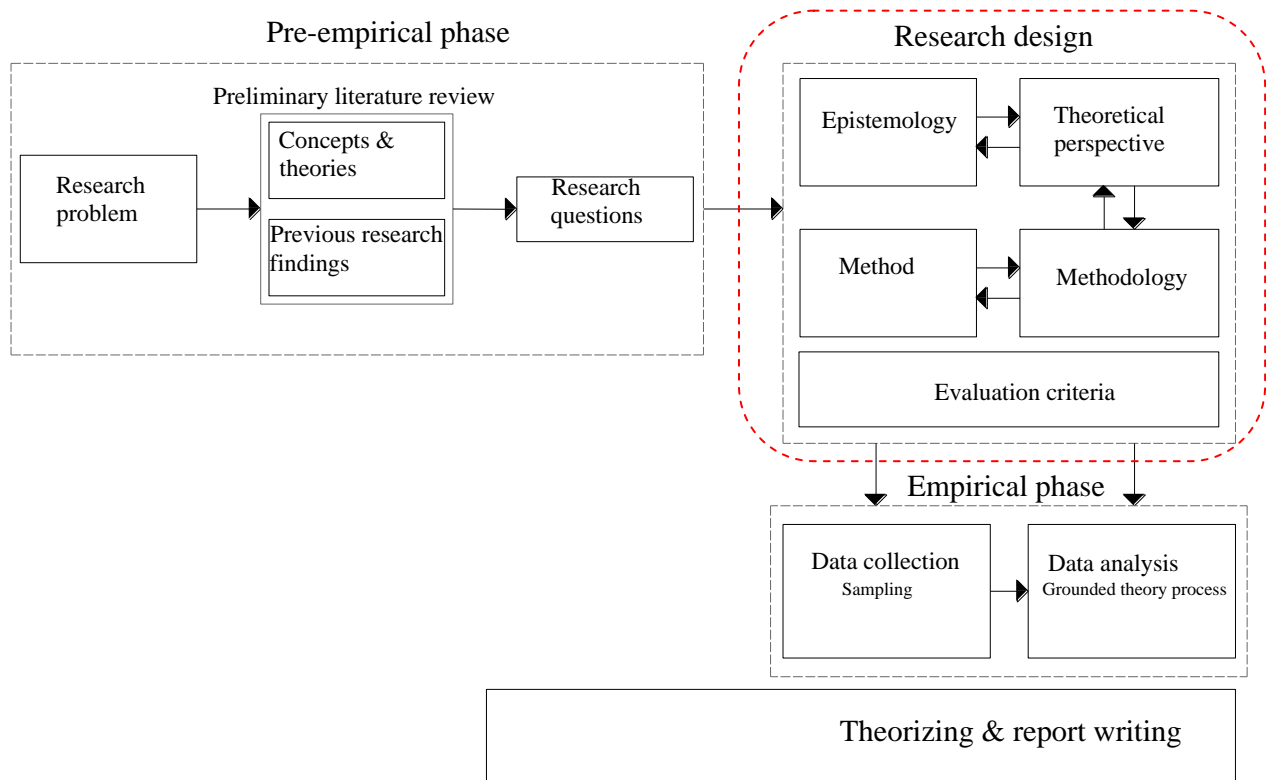
Figure 5.2 Research design elements in relation to the whole research process

Ultimately, based on this methodology the empirical phase is anticipated to: 1) explain why public space is a critical issue in the city of Amman; 2) highlight the urban transformation associated with the current socio-economic neoliberalisation and privatization of planning strategies; 3) examine whether the new urban planning development projects of public space is related to the city's original social and spatial context; 4) analyze the different modes of production of the public space within Amman; and 5) finally examine the spatial aspects of planning social spaces in Amman through analyzing the relation between the social structure and spatial structure of these social spaces by the means of the social and physical performing dimension of the public spaces in the selected case studies.

In this research, public space will be the operational unit to gain the knowledge to fulfill the research objectives. Based on the research methodology, this study sheds light on selected cases in Amman,

namely in the downtown area, to conceptualize the public spaces and further to generalize the understanding of the emerging social spaces at the macro level in Amman.

5.3   Choosing an Interpretive Approach

This research aims to understand the circumstances related to the socio-economic dimensions participating in producing the public spaces in Amman. Therefore, this study is explanatory and exploratory in its nature and seeks to conceptualize the phenomenon of the interrelationship between the lived environment represented by the public open spaces in Amman and its people. In order to address the research problem and answer the research questions, this study will be carried out using the Grounded Theory approach (Glaser and Straus, 1967) for building theory through the comparative analysis of multiple case studies (Eisenhardt, 1989).

5.4   Grounded Theory Approach

Grounded Theory (GT) is an interpretive qualitative research theory that generates the whole research methodology (Corbin and Holt, 2005). It was originally conceived by Strauss and Corbin (1967) and defined as "a general methodology for developing theory that is grounded in data systematically gathered and analyzed" (Strauss and Corbbin, 1994, P. 273). Grounded Theory, in contrast to the theory obtained by logic-deductive methods, includes systematic inductive concepts for collecting and analyzing data to build theoretical frameworks that explain the data (Charmak, 2006). Thus, attention is drawn to a number of cognitive processes that are further common features of qualitative research and includes: (1) comprehending, (2) synthesizing, (3) theorizing, and (4) recontextualisation (Goulding, 2002).

The methodology was first presented by two sociologists, Glaser and Strauss, in their book *The Discovery of Grounded Theory* in1967. The book provides a strong intellectual rationale for using qualitative research to develop theoretical analysis. It came at a critcal point for social sciences when qualitative research was viewed as preliminary to the 'real' methodologies of quantative research which can provide systematic social scientific research (Charmaz, 2000). A further aim of this approach was to encourage new and creative research in which Grounded Theory was intended as a methodology for developing theory that is grounded in data that is systematically gathered and analyzed. In this approach, the theory evolves during the research process itself and is a product of contentious interplay between analysis and data collection (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987; Strauss and Corbin, 1994, 1990; Charmaz, 2006).

Grounded Theory differs from other qualitative methods for two main reasons: (1) It is independent from explicit expectations of what the research might find, or from personal beliefs and philosophies (Pole and

Lampard 2002, P. 206), thus allowing the researcher to make discoveries without being biased to his/her pre-knowledge, and (2) it is an approach that leaves itself open to charges of relativism (Pole and Lampard 2002, P. 206). These two major principles make Grounded Theory an outstanding tool for analysis of social studies, particularly when there is little known about the situation or phenomenon under investigation (Glaser and Strauss 1967; Martin and Taylor 1986; Sarantakos, 2005). Due to the reasons just mentioned, Grounded Theory was chosen for this study, as little spatial planning, architectural and social researches have previously been undertaken in the field of public spaces in Amman with regard to its relation to the political, socio-economical and spatial context and in terms of the user's perception and conceptualization of public spaces. Furthermore, Grounded Theory was selected after reviewing different possible approaches' strengths and weaknesses. In addition, the subsequent key points influenced the choice of the Grounded Theory approach:

1. It is a methodology that has as its central aim the objective of theory building, rather than theory testing. Given the lack of an integrated theory in the literature regarding the conceptualization of public open spaces in Jordan, this theory is an inductive approach which allows it to emerge from the investigation of the experience of the population.

2. It has a set of well established guidelines both for conducting research and for interpreting the data. Furthermore, despite the fact that there has been some debate regarding the divergence in the application of Grounded Theory between the two originators, there is less disagreement over the nature of the theory's development than, for example, with phenomenology (Goulding, 2006).

3. It is especially renowned for its application on the study of human behavior, which is one of the main themes and focus of this research.

4. The main data collection method is based on fieldwork – working with people in their natural settings.

In contrast to other conventional research models, Grounded Theory adopts an inductive approach where data collection, coding, memo taking and analysis occur in parallel. The main concern of this process is not to develop the research problems, objectives, questions and theoretical understanding or literature review but to enable the researcher to discover the main concerns of the participants and analyze ways to understand the contextual phenomenon after entering the field.
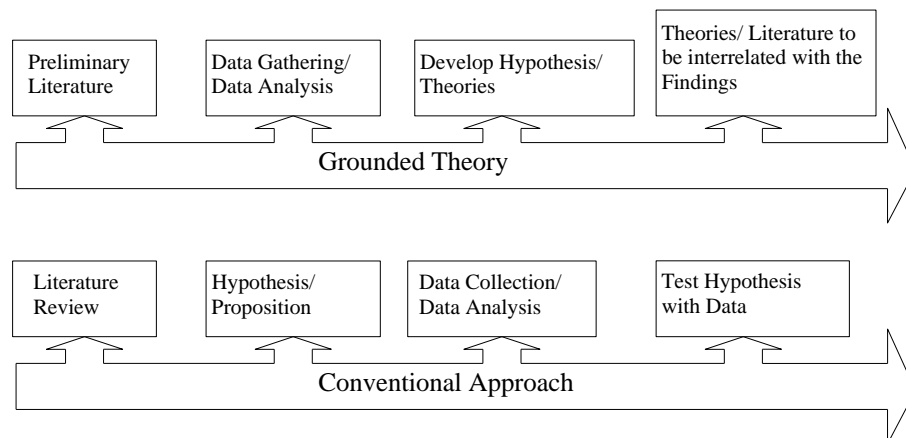
Figure 5.3 Comparison between conventional research methods and Grounded Theory

Resource: researcher own constructed diagram based on Jones (2005)

5.4.1   Coding

In Grounded Theory the end result of building a theory is achieved through constructing a conceptualization of data through coding and using a method of constant comparison at different levels. Through analyzing the data mainly in the form of transcripts, observations, interviews or literature, it is fractured into conceptual line-by-line codes grouping similar codes into concepts, abstracting concepts into categories and finally, moving through a process of abstraction. These levels fall within the logic of the following hierarchal order:

Open coding: Codes at this phase are preliminarily constructed from the literature review and data collected and read several times which is then tentatively labeled as chunks of data that summarize what is seen (not based on a concert theory or hypothesis – just based on the meaning that emerges from the data with the help of the literature review and the departure theories). This coding analyzes the transcript words and establishes the properties of each code.

Axial coding: After the "line by line" analysis, an axial coding is constructed by identifying relationships among the open codes. Finding connections among codes will make it easier to understand interrelations among different codes.

Selective coding: Selective coding is done after having the preliminary interrelated codes. At this phase some categories are selected to be the core of interpretations by drawing relations between these categories. These relationships are developed and refined towards describing the phenomenon, casual conditions, context, intervening conditions, consequences, actions and strategies.

5.4.2 Theoretical Sampling

Since this research aims to conceptualize the role of public within the political, socio-economic and spatial context of Amman, both the selection of the case studies and the sampling were based on theoretical bases rather than on statistical ones. Glaser and Strauss (1967) defined theoretical sampling as "the process of data collection for generating theory whereby the analyst jointly collects codes and analyzes his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges" (Glaser and Strauss 1967, P.50). Theoretical sampling could be employed at different stages of the data collection depending on the researcher's sampling approach and on the area of the research. However, some believe that theoretical sampling becomes valuable once the categories have been developed as it enables the researcher to confirm, clarify and expand the analysis categories (Charmaz, 2006).
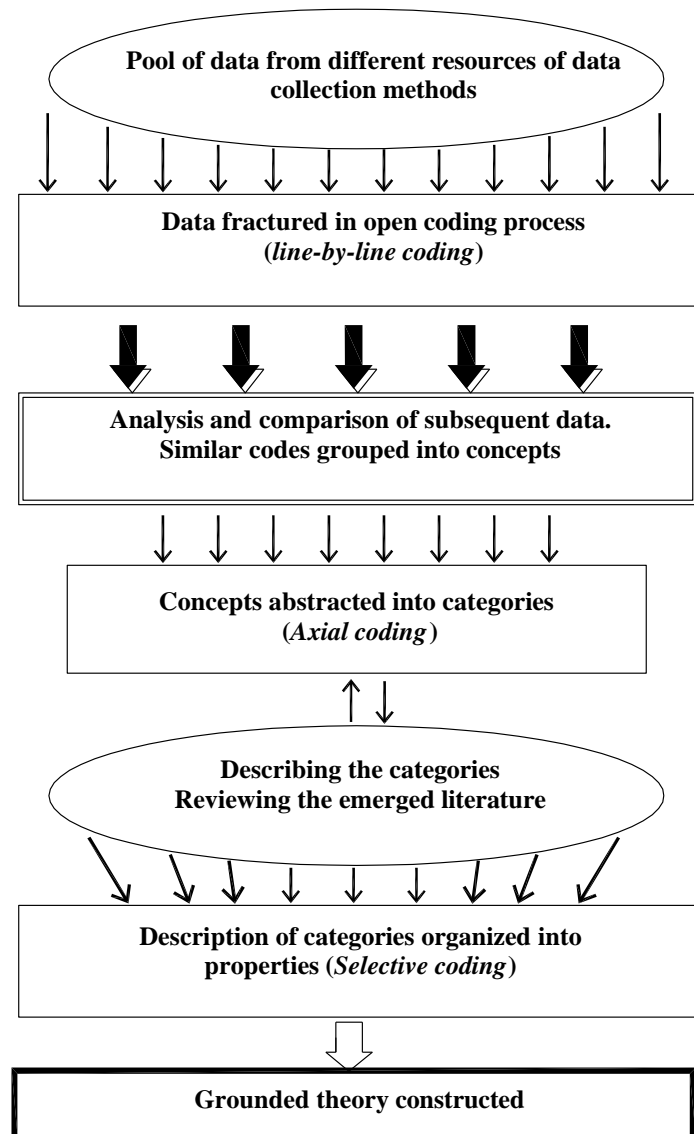
Figure 5.4 Phases of coding

In theory-driven sampling the researcher can't know in advance what to sample for and where it will lead (Glaser, 1992; Coyle, 1997). According to Grounded Theory, groups are chosen when they are needed rather than before the theory initially starts to develop. Further individuals, situations and places may need to be incorporated in order to strengthen the findings (Figure 5.5). In other words, the process of data collection for generating theory is done by the the analyst who jointly collects, codes and analyses the data and decides what data to collect next and where to find it in order to develop the theory as it is emerging (Glaser, 1978, P. 36). In this research, theoretical sampling is employed from the beginning of the data collection phase as concepts began to take place.

5.5 Exploratory Case Studies

When conducting empirical research, the first and most important condition for differentiating among various research strategies is to identify the type of research question being asked. According to Yin (2003) the research strategy has to be relevant to the type of research questions. Consequently, due to the nature of this research, this study followed a case study approach for conducting a detailed study of multiple social units located within clear physical boundaries (Payne and Payne, 2004). The case studies selected in this research adopts Yin's definition of case study from a social point of view. "A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2003, P. 13). Consequently, the choice of case study as the research strategy is to cover a phenomenon within contextual conditions.
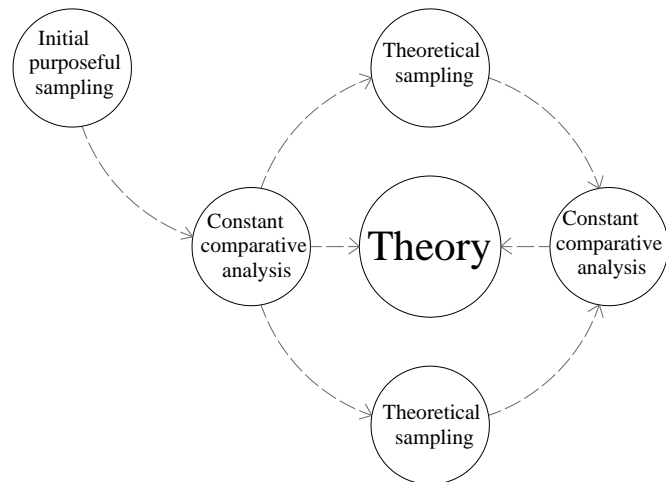
Figure 5.5 Research sampling process

5.5.1 Multiple Case Study Design

For this research, the method chosen was an exploratory, multiple case study design: exploratory because the research attempts to explore situations in which the studied phenomenon (urban transformation, produced public spaces, and social structure) has "no clear, single set of outcomes" (Yin, 1993, P. 15) and multiple case study design because the multiplicity will promote richness and depth from diverse cases that are sharing one phenomenon (Stake, 2000). At the conceptual level, embedded-case studies are suggested to deepen understanding and explanation of the findings (Glaser and Straus, 1967). The multiple case study approach is chosen as well to enhance confidence and generalizability to the findings of the study through "strengthening the precision, the validity and stability of the findings by looking at a range of similar and contrasting cases," (Miles and Huberman, 1994, P. 29) and to guarantee the validity and the readability of the collected data (Yin, 1993) particularly because "evidence from multiple cases is often considered more compelling" (Yin, 1993, P. 45). However, a multiple case study approach has the disadvantage that the complexity of the cases is reduced to a few comparable variables and this will consequently result in losing the idiosyncrasies of the individual cases (Stoecker, 1991).

The different methods of data collection aim to address the research questions and emphasize a multiple-evidence approach (multiple/ embedded case study). Because of the multiple-evidence approach, a broad range of historical, attitudinal and behavioral issues are additionally addressed. Thus, the findings and conclusions in this study are more likely to be convincing due to the application of a multiple-evidence research methodology.

The fieldwork in Amman was divided into three phases with certain logistics. The first one was a preliminary exploratory survey, aiming to understand the study areas and define the research problem. Furthermore, contact with the relevant local planning authorities and agencies was established and the orientation of the study was acknowledged at this phase.

The second phase included the intensive fieldwork applying the Grounded Theory approach where the researcher gathered information from the context without any preconceived knowledge (or bias to any preconceived knowledge). This phase included conducting interviews with the users of the selected public spaces as well as interviews with key informants of planners and architects who participate in the new development projects, particularly to these related to the creation of public spaces. Maps and archival records were collected at this stage as well.

The third phase of the fieldwork was devoted to bridging the data gap and collecting the missing information. It aimed as well to gather more data to examine whether the collected data reached a saturation point or there were still more facts to explore from the field. However, the analysis began after the second fieldwork. The necessity of a third fieldwork was considered as the previous analysis required an additional data input, which was not achieved during the second phase of the fieldwork.
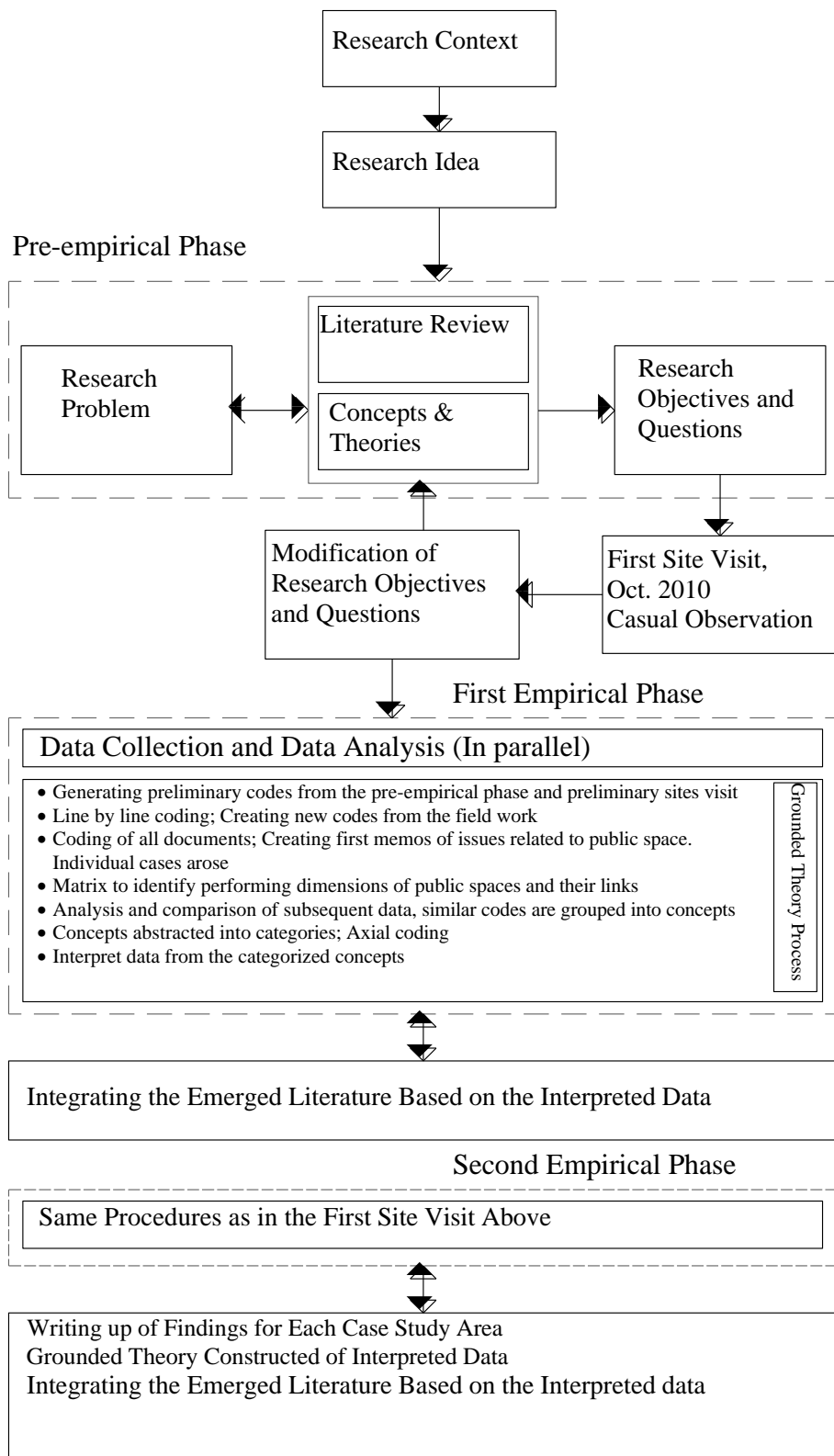
Figure 5.6 Research process

6 DEFINING THE CASE STUDY AREA AND UNITS OF ANALYSIS

6.1 Introduction

The definition and selection of the units of analysis in this research is directly related to the research questions (Yin, 2003). Since this research aims to investigate a socio-spatial phenomenon in the context of Amman, selecting the research case studies was subject to a theoretical and empirical process rather than to a statistical one. As mentioned in chapter 5.2 the first phase was conducted for the purpose of exploring, at the general level, the typologies of public spaces that exist in Amman. Therefore, in this phase the researcher tried to analyze and categorize public spaces in the city to get a basic understanding of the current typologies of the existing spaces. This phase of the fieldwork took place in the summer of 2011. The selection of the research case studies took place in the second phase where a comprehensive study was scaled down to specific public spaces with a particular emphasis on the ones located in the city center in the downtown area where public spaces are highly significant in everyday life. In this phase, a post occupancy observational mapping of user activities and behavior was done with the aim to investigate the complexity of the contentiously changing nature of the public sphere that has resulted from the structural changes in the Amman society, in most cases through fundamental political, economical and social transformations.

6.2 Public Spaces in Amman

With the rapid expansion of Amman, the provision of public space has recently received more emphasis from researchers, professional and academic practitioners, NGOs and governmental organizations. This was due to several reasons. In addition to the fact that the provision of public space in Amman is becoming a necessity for humanizing the city and harmonizing the multi-ethnic and nationality groups, at the research level there is a gap in the knowledge in many dimensions about the public spaces in Amman. Most of the studies and literature about Amman public spaces and parks deal with the architectural and design aspects of the physical characteristics of the public spaces. Not many researchers have focused on the behavioral patterns and the quality of design of urban public spaces (Mahadin, et al., 2005; Aljafari, 2006).

In the Greater Amman Municipality (GAM), the design and management of public spaces belong to the Department of Gardens. This department is responsible for all services related to the public spaces including creating and rehabilitating parks, streetscaping, city beautification and preparing all the design

documents and action plans for all new public space projects within the boundary of the Greater Amman Municipality.

All researches and studies done by the Department of Gardens mainly focused on the physical aspects of the gardens, playgrounds, walkways, agriculture, and built-up canopies and their maintenance. Findings of their studies showed that there hasn't been any maintenance for many parks and other public spaces in Amman since their construction. Additionally, there is a lack of park furniture and there is a bad attitude towards the properties of public spaces and existing gardens due to the lack of proper management and missing security units (Aljafari, 2006).

Another study has been done by Alma'ni and Shamayleh (2002) on the 8000 m^2 Al Alphia park located in the Tela' Al Ali district to define the patterns of designs for Amman recreational parks. The study evaluated the park design according to many factors such as site topography, climate, ecology, surroundings and the social and cultural context of the area. A demographic study was covered as well in order to compare the park service zone with international standards. The findings of the study indicated that the park design didn't take into consideration the study analyzed elements and the site analysis as well. The design of the parks should be reconsidered and designed by professional landscape architects and urban designers. They further add that most of Amman's parks are leftover areas and their locations and design have to be reconsidered (Alma'ni and Shamayleh, 2002).

Al Qawasmi (1993) conducted a study on some of Amman's urban spaces to determine people's actual use of these urban spaces as they perceived. This study was made in order to give orientations and starting points to designers for creating human spaces that fit people's uses and awareness of space. In his study he examined different types of urban spaces that exist in the city of Amman, such as squares, plazas, gardens and parks. The study methodology was based on observations to determine the kind of activities pursued in each space, the cultural use patterns and the role of the space in the city. Results of the behavioral observation classified people's uses and experiences in urban spaces into three categories: necessary, optional, and social activity. It was found out that there is a direct relationship between people's responses and behaviors and the physical properties of the public space such as the availability of sufficient seating, amount of greenery, paving materials, and focal elements that encourage the usage of space. It was recommended to reconsider the traditional aesthetic-oriented approaches for designing urban spaces and apply empirical and behavioral study for designing human urban spaces (al Qawasmi, 1993).

Another important study to explore people's perception and behavior patterns was done in two different public spaces, Jabal Al Hussein Sukina Plaza and the 11th August Street Plaza in Shmeisani, in order to

test the proposed hypothesis that the behavioral patterns in any designed space rely on the designer's personal perception and understanding of the behavioral and usage patterns of the individuals within it. Findings indicated that people's preference of public spaces was characterized by simplicity over those with complexity of design (Mahadin et al., 2005).

Another study was made to describe the quality of recreational local parks in Amman. This study was concerned with studying the patterns of design and patterns of use for a number of local parks in Amman by observing, interviewing, and applying visual survey analysis. The study revealed that most uses for the selected parks were social activities. Most of the users came for sitting, meeting friends and walking. It explored four main patterns of designs for Amman parks which are: centralized, geometric, terraced, and axial patterns. These patterns contain typical facilities around the design patterns without considering specific sites attributes. Their locations were not carefully chosen which limited the accessibility for specific user groups. The study explored aspects including the ignorance of environmental issues in the design process for parks especially for seating orientation related to sun movement. Lack of park furniture and seating elements for users were also mentioned (Al Heyari, 2004).

With the introduction of several new public spaces in a new character since the last two decades, new user behavioral patterns appear. In evaluating whether the recent public space projects implemented by GAM are successfully functioning or not, the CSBE carried out a study in 2011 on three of the street pattern public spaces that the Greater Amman Municipality rehabilitated to facilitate pedestrian activities through investigating the behavioral patterns of the users of these spaces. The three public spaces are: Rainbow Street in Jabal Amman, Wakalat Street in Sweifieh and Cultural Avenue in Shmeisani. Findings showed that the emerging users' behavioral patterns follow two categories: socially acceptable behavioral patterns such as walking, seating, playing music and skating and the socially unacceptable behavioral patterning including car cruising, harassing and vandalism. Findings showed as well that the cultural avenue is the least successful public space among the two others although it's beautifully and modern designed.

Considering the studies and researches on public spaces of Amman, few examined the public spaces from a comprehensive macro and micro scale. Public space can't be studied as a separate physical unit abstracted from its bigger context. All studies of individual cases have provided knowledge about these specific cases without relating the performance of theses spaces in terms of the overall context of public space. Therefore, this research decided to choose more than one unit of analysis to better gain a comprehensive understanding of the common performance of the public space in Amman in general and therefore to characterize the emerged public spaces and understand the modes underpinning their production, reproduction and co-production.

6.3 Selection of the Public Spaces, Theory-based Criteria

The selection of case studies is based on the research objectives and questions which aim to understand the sphere of public spaces of people's everyday life in Amman. Hence, the selection of the units of the analysis is a theory-driven rather than a statistical one.

In addition to the research questions, objective and literature review that provided theoretical orientations to the quantity and quality of the selected case studies, the preliminary mapping of the public spaces which was conducted in the first fieldwork (chapter 5.1) has assisted in providing some guidelines for the selection criteria. The observational mapping in the first field visit aimed to identify a preliminary list of the existing public spaces that are potential for investigating the research questions and objectives. The second step in this process was to categorize these spaces in certain groups (in terms of location, typology, size, and so on). In the third phase the selection of certain public spaces representing each category was done. The selection criteria were divided then into two parts, theoretical and empirical. At the theoretical level, the selected spaces needed to be public and meet the researcher's theory-based self-constructed definition of public spaces. Thus, the first step was to be specific about the meaning of public spaces in this research. To do so, the researcher referred to preceding definitions of public spaces, especially the ones that conceptualize it from a socio-spatial point of view, and then synthesize them in relation to the context of Amman (chapter 4.3).

At the theoretical level, the selected public spaces have basically to offer an arena that allows for different types of activities (Reicher and Kemme, 2009), encompassing necessary, optional and social activities (Gehl, 1987). Theses spaces should be for the whole community (Drummond, 2000) where all residents have the right to use (Miao, 2001) and none individually control them (Habraken, 1998). These spaces refer to all physical boundaries and social relations that determine the use of that space within the non-private realms. These public realms include both formal and informal public spaces such as squares, traditional streets and roads, pavements, sidewalks, periodical markets, plazas (namely the ones with historical value associated with the mosques), traditional neighborhood stairs, vacant lands, roadsides and informal gathering edge-spaces that allows communal access and use rights without negotiations (Madanipour, 1999). In addition to that, according to the Greater Amman Municipality (GAM), "Both active and passive open space, and constitutes 'Green Areas' that contain canopy trees and sitting areas rather than physical development. Open space includes Parks Sports Fields, Buffer Strips, Public Gardens/Landscaping, and cultural heritage sites and corridors." (Open space definition in GAM's latest public announcement for the new master plan of the metropolitan Amman).

These society-space related definitions of public spaces are connected to the context of Amman in order to develop a comprehensive definition of the units of analysis of this research. The preliminary observation in the first site visit revealed a number of typologies of public spaces meeting the above defined understandings. However, this research was not concerned with all of these typologies. It studied merely the emerging typologies in the form of commercial streets, urban plazas and parks. Additional attention was particularly given to the shopping malls as a special type of public space due to its popularity and users' preference among other types of public spaces. Following are the recorded typologies of the public space in Amman:

- Communal steps between neighborhoods
- Street circles
- Streets
- Urban plazas
- Neighborhood parks
- Recreational parks
- Theme\ educational parks and public gardens
- Informal gathering spaces
- Regional parks
- Shopping malls (special form of public spaces)
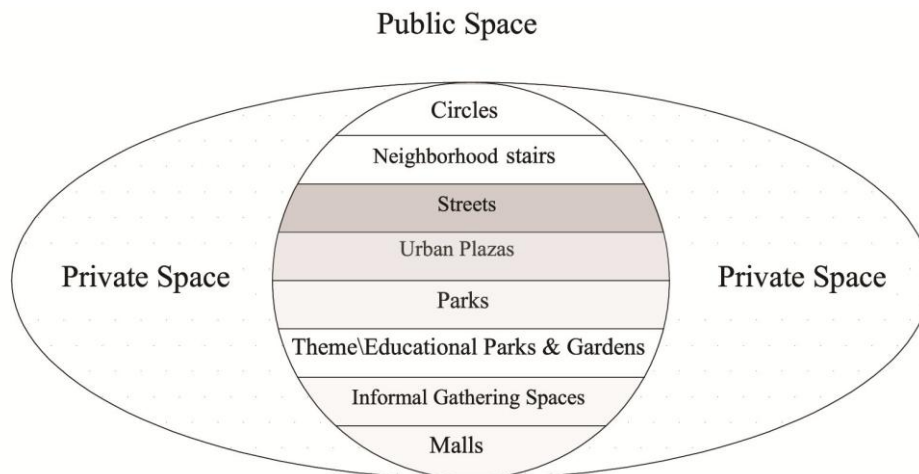
Figure 6.1 Definition diagram of the study area with the highlighted part indicating the focus areas in this research

To avoid any possible confusion with any of the definitions of public spaces, in this research the definition of the public space was constructed based on the synthesis of the adopted definitions and the existing public spaces in Amman. Public space in this research refers to all physical spaces where all people can come together in which the social relations determine the use of that space within the non-private and fully/partially privately-owned but publically used realms (Madanipour, 1999). These public realms, in the context of Amman, include both formal and informal (Al Asad, 2011), active and passive

spaces (GAM, 2008), such as parks, plazas (namely the ones with historical value associated with the mosques), pedestrian zones, malls, squares, traditional streets and sides of roads, pavements, sidewalks, periodical markets, traditional neighborhood stairs, vacant lands and informal gathering edge-spaces that allow communal access and use rights without negotiations, whether in public, private, communal or unknown property. Thus, the land that might be publicly or privately owned but has been left vacant and is being used by local people or venders (Brown, 2006).

This constructed definition includes the closed and private form of public spaces. During the first field trip, the researcher considered including shopping malls as a privately-owned public space. Malls are preferred among most social classes in Amman due to their high accessibility, functionality, management and safety.

6.4   Selection of the Public Spaces – Empirical-based Criteria

Based on the investigated literature about Amman's public spaces in chapter 3 and on the researcher's observations in the exploratory preliminary fieldwork, it has been found that the public realm in Amman, at the global level, consists mainly of a system of historic streets that follow the hilltops, the new arterial roads that follow its valleys (Wadis) and a newly constructed ring road and radial streets. However, the public spaces, at the micro level, consist of the steps between neighborhoods linking the valleys with the hilltops, the plazas in front of historical mosques, streets and squares that were developed as pedestrian friendly spaces and the informal spaces in different locations in the city neighborhoods.

The configuration of the public space in Amman was originally influenced by the confluence of important valleys (Wadis) within the city hills which gave it a distinct and unusual landscape setting. However, this system was once more readable but in the recent decades Amman has expanded and the system of the public space has turned to be fragmented just like the hilly nature of the city as a whole. Today, public spaces exist in a series of scattered, often degraded, places sandwiched between Amman's fragmented neighborhoods. According to the researcher's observation and the literature on public spaces, following is the explored categorization of the different typologies of public spaces in Amman:

1. Earlier communal public spaces in Amman that consist of historical streets, mosques, plazas and the steps between residential houses in which they defined boundaries of the neighborhoods and access to the downtown. Steps played an important role as a space of sociability in Amman.
2. New emerged typologies of public spaces such as pedestrian shopping streets, circles, urban strips and urban parks with its different shapes.
3. Renovation and rehabilitation projects of old public spaces which have a historical value in the history of Amman. (See Appendix 3 for photos of all selected spaces)

Based on the researcher's adopted definition in Section 6.1, the observations from the preliminary fieldwork and the available literature on the existing public spaces in Amman, the following pre-selection guidelines of public spaces was created in order to determine which spaces should be selected for the second phase of the analysis of this research.

The next step was to address the overall commonalities and specialties between these spaces. This primary study allowed the researcher to set the public spaces in categories. This categorization helped further to narrow down the selection to limited public spaces and therefore to move to the second phase of the analysis where limited public spaces were comprehensively analyzed and investigated, each category had different characteristics but all together created what this research aimed to build which is a general understanding of public space in Amman and the circumstances that led to the production of these spaces and therefore their performance. Finding commonalities between these spaces resulted in the following categorization:

- East| downtown| West Amman[21] public spaces
- Formal| informal (appropriated) public spaces
- Newly regenerated| historical public space
- Local|city scale public space
- Open|closed public space
- Conceived public spaces (produced through private involvement)

After defining the Empirical-based criteria of selection, each of the public spaces identified in the preliminary observation in the first phase were referred to one of the categories in the selection criteria. The aim of this step was to classify all spaces within a logical order that would enable this research to have a comprehensive selection of public spaces. Selecting public spaces in several locations in Amman (West, East and Downtown) was essential to consider the influence of the social and cultural aspects in each context and therefore its influence on the perception of the public spaces in these areas. Furthermore, the purpose for selecting cases with different construction dates aimed to form a better understanding of the process, in which the conceptualization and perception of public open spaces were formulated over a period of time.

Public Spaces in East Amman

1. Qala'a Archeological Site
2. Abu Darwish Plaza, Al Ashrafiyah
3. Al Basha'er Park, Jabal Al Joffe
4. The Lookout, Jabal Al Qala'a
5. Al Qadisiyah Park, Hashmi Al Shamali

---

[21] The terms West and East Amman are not defined merely within the geographical borders in terms of west and east. They refer partially to the geographical location within Amman; however, they refer also to the common understanding and perception of the locals of the West and East areas of Amman (see chapter 2.6).

Public Spaces in West Amman

1. Wakalat Street, Sweifieh
2. Airport Road
3. Mecca Mall
4. Taj Mall
5. King Hussein Park
6. Cultural Avenue
7. Queen Rania Al Abdallah Park
8. Abu Nsair Road "Talet Abu Nseer"
9. Safeway Bridge, Shmeisani
10. Housing Bank Park
11. Abdoun Circle

Public Spaces in Downtown

1. National Gallery of Fine Arts Park
2. Rainbow Street, Jabal Amman
3. Al Hashimiyah Plaza
4. Ras Al Ain Civic Center
5. Paris Square
6. Second Circle
7. King Faisal Street
8. Al Husseini Mosque Plaza, downtown

Informal/Appropriated Public Spaces

1. Abu Nsair Road "Talet Abu Nseer"
2. Sides of Airport Road

Newly Regenerated Public Spaces

1. Rainbow Street, Jabal Amman
2. Wakalat Street
3. King Faisal Street

Closed Public Spaces
1. Mecca Mall
2. Taj Mall

Conceived Public Spaces, Partially Privatized

1. Housing Bank Park
2. National Gallery of Fine Arts Park

1 Al Hussein National Parks
2 Airport Road
3 Wakalat Str.
4 Cultural Avenue
5 Housing Bank Park
6 Abdoun Circle
7 Sport City
10 Tajj Mall
12 Qala'a Archeological Site
13 Paris Square

15 Jordan National Gallery of Fine Arts
16 Rainbow Str.
17 Abu Darweesh Mosque Plaza
18. Alhusseini Mosque Plaza
19. King Faisal Str.
21 Mecca Mall
22 Abu Nuszir View
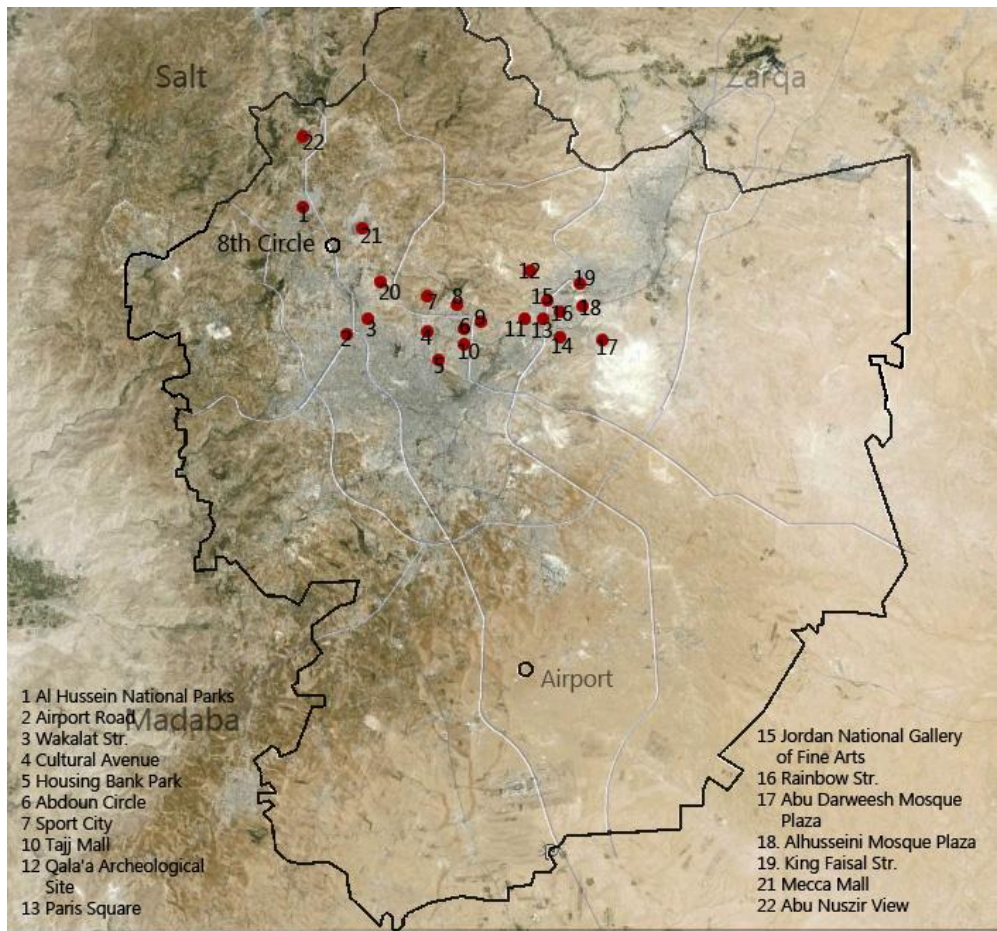
Figure 6.2 Location of the preliminary selected public spaces

Table 2 Criteria for Selecting the Case Studies

Public Space	Location			Sense		Durability		Scale		Accessibility		Ownership	
	West	Downtown	East	Formal	Informal	Newly dev.	Not dev.	Local	City	Closed	Open	Public	Private
Qala'a Archeological Site	×			×		×			×		×	×	
National Gallery Park		×		×		×		×			×		×
Rainbow Street		×		×		×		×			×	×	
Wakalat Street		×		×		×		×			×	×	
Al Hashimiyah Plaza		×		×		×			×		×	×	
Ras Al Ain Civic Center		×		×		×		×			×	×	
Paris Square		×		×			×	×			×	×	
Second Circle		×			×		×		×		×		
Abu Darwish Plaza		×		×		×			×		×	×	
King Faisal Street		×		×		×			×		×	×	
Al Husseini Mosque Plaza		×		×		×			×		×	×	
Airport Road	×				×		×						
King Hussein National Parks	×			×		×			×		×	×	
Mecca Mall	×			×			×		×	×			×
Taj Mall	×			×		×			×	×			×
Cultural Avenue	×			×		×		×			×	×	
Housing Bank Park	×			×		×		×			×	×	
Queen Rania Al Abdallah Park			×	×				×			×	×	
Al Basha'er Park, Jabal Al Joffe			×	×				×			×	×	
Abdoun Circle	×			×					×		×	×	
The Lookout, Jabal Al Qala'a		×		×					×		×	×	
Abu Nsair Road "Talet Abu Nseer"	×				×				×		×	×	
Al Qadisiyah Park			×	×				×			×	×	
Mahmoud Al Qudah Park			×	×				×			×	×	
Safeway Bridge, Shmeisani	×			×		×		×			×	×	

The showed matrix presents the compatibility between the different public spaces with the criteria of selection. The researcher defined the typologies that were analyzed according to the above matrix. Table 3 shows the selected public spaces according to the selection criteria.

Table 3 Selected public places in Amman

No.	Public Space	Location Criteria	Description
1.	Al Husseini Mosque Plaza	Downtown	The oldest public space in Amman in the heart of **downtown.**
2.	Wakalat Street	West Amman	**Pedestrian friendly** shopping public space in West Amman, which represents one of the most recently regenerated public spaces in Amman.
3.	Rainbow Street		
4.	Abu Darwish Mosque Plaza	East Amman	**Pedestrian** public space in East Amman with a historic symbolic value.
5.	King Faisal Street	Downtown	**City scale** public space with historical symbolic value.
6.	Housing Bank Park	West Amman	Conceived space: Publicly used but **partially privately owned** and operated.
7.	Taj Mall	West Amman	**Closed** public space (Shopping Mall)
8.	National Gallery Museum	Downtown	**Local scale** public space, involves **different actors in the production and management** of that space.
9.	Airport Road	South Amman	**Informal** public space produced by the users' needs.

The nine selected units of analysis are a number of urban spaces of street, plaza and park patterns within metropolitan Amman, namely in the downtown quarter in Amman municipal boundaries. However, one shopping mall is included in this research due to the need that emerged during the fieldwork to include this special type of public space. The selected spaces from the downtown area are: **Al Husseini Mosque Plaza**, **Rainbow Street** and **King Faisal Street**. These spaces consist of street pattern public spaces, and they serve as historic, dense, mixed-use streets which include a wide range of residential, commercial, retail, and institutional land-uses. Until the 1960s, these streets accommodated significant pedestrian traffic. Nevertheless, they have been dramatically transformed for predominantly vehicular traffic, on-street parking, and some basic public transit in the form of taxis and buses. From West Amman, **Wakalat Street** is selected as a new commercial street that emerged in the late 1990s and around fifteen years later it was renovated to be a pedestrian street[22]. From East Amman, **Abu Darwish Mosque Plaza** was selected as one of the most popular public spaces in East Amman due to its historical value. The plaza was renovated by GAM and introduced in a new layout encompassing new activities. As a privately

---

[22] The Greater Amman Municipality reopened Wakalat Street to vehicles in August 2013.

owned public space, **Taj Mall** in Abdoun was selected to cover the phenomenon in which shopping malls are becoming a popular typology of public space and preferred among most social classes. As an emerging informal public space, the **Airport Road** was selected. Last but not least, as a partially privately owned but publically used space, the **National Gallery of Arts Museum Park** in Weibdeh and the **Housing Bank Park** in Abdoun were selected. The Housing Bank Park is the first experience in Jordan of a public private partnership (PPP) for creating public spaces in Amman.

After selecting the case studies, the researcher did several exploratory site visits to the selected public spaces to be familiar with their spatiality and sociability. Parallel to the exploratory site visits, a secondary data collection took place in which site maps of these spaces including the built-up area map showing the building structure, land use map and road and street network of the selected spaces were gathered.
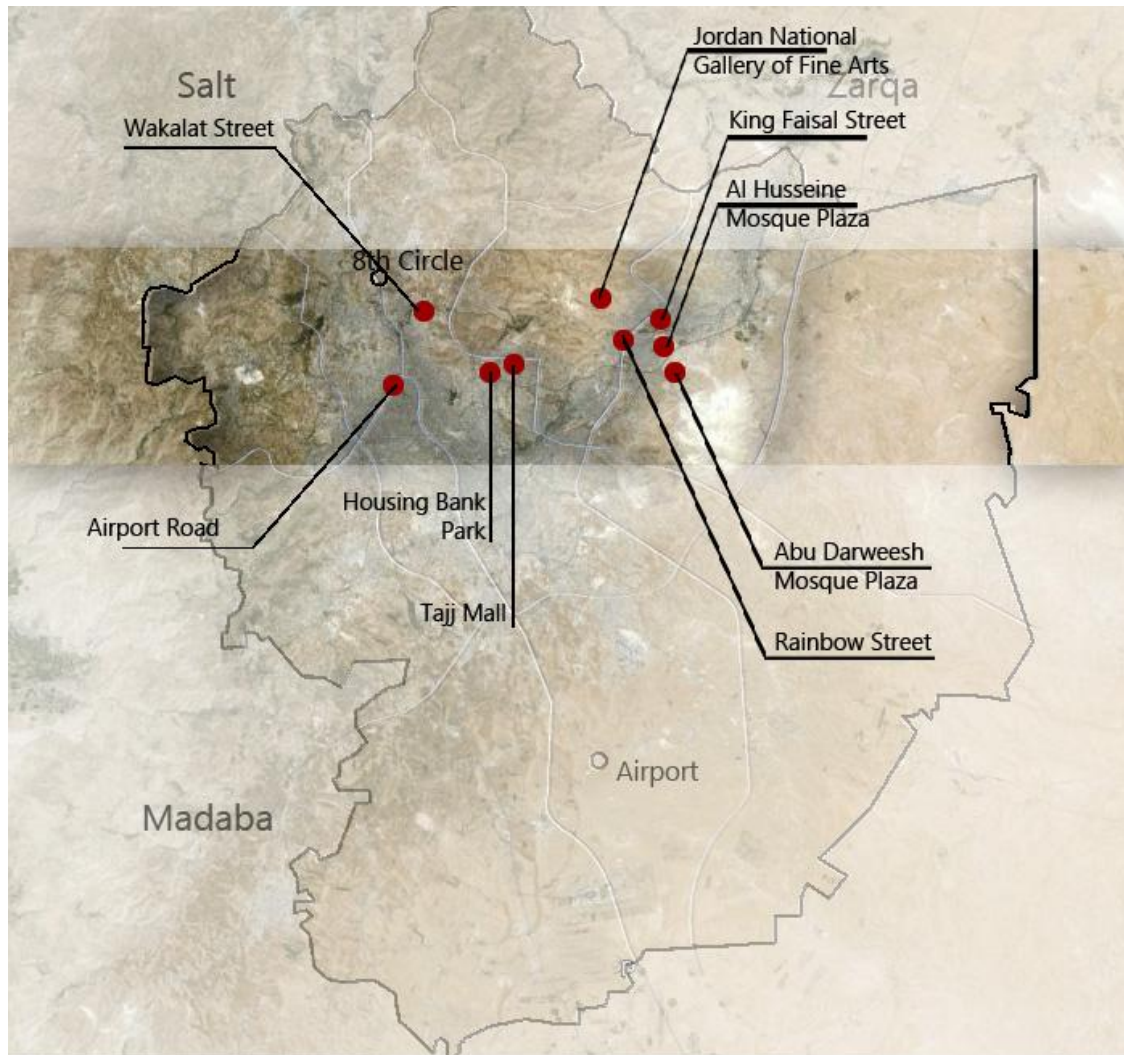
Figure 6.3 Location of the nine selected public spaces

6.5   Case Studies

6.5.1   Al Husseini Mosque Plaza (Formerly Umari Mosque), Downtown

Al Husseini Mosque is one of the first constructed projects since the establishment of the Hashemite Kingdom of Jordan. It was built between 1924 and 1927 along with the Raghdan Palace during the early time of Emir Abdullah's rule in Amman in 1921. The mosque's name "Al Husseini" refers to Sharif Hussein Bin Ali, the father of King Abdullah I. King Abdulla I laid the foundation stone in a celebration in 1923. It was the largest mosque in Amman at the time. Cement was used for the first time in building the mosque. A few years later in 1927, the mosque was partially destroyed due to the strongest earthquake that Amman witnessed until modern time. In the 1940s the inner courtyard was enlarged, an extension for ablutions was added, and the western minaret in which it is higher than the eastern minaret and has a stone

helmet was added (Bakij, 1983). The mosque was not built just for a functional necessity; it had along with Raghdan Palace another symbolic political importance where the two projects were constructed to show Emir Abdullah's presence in his new capital (Rogan, 1996). Until the Ottoman dominance, Al Husseini Mosque was called Al Umari Mosque and served as Amman's Congregational mosque.

However, the mosque was not in a good condition, so Emir Abdullah preferred to use the front area of Raghdan Palace (Saraya) for leading prayers on public occasions. Consequently, a new mosque was constructed on the site of the old, which was originally built on the remains of an old Byzantine basilica. The newly constructed mosque gave Amman a spiritual and spatial symbolic focal point. King Faisal Street, the broadest and main central avenue in Amman, has also emphasized Al Husseini Mosque. In addition to its functional spatial relation to Al Husseini Mosque, King Faisal Street is also a focal point for different official governmental ceremonies such as military parades (Rogan, 1996).
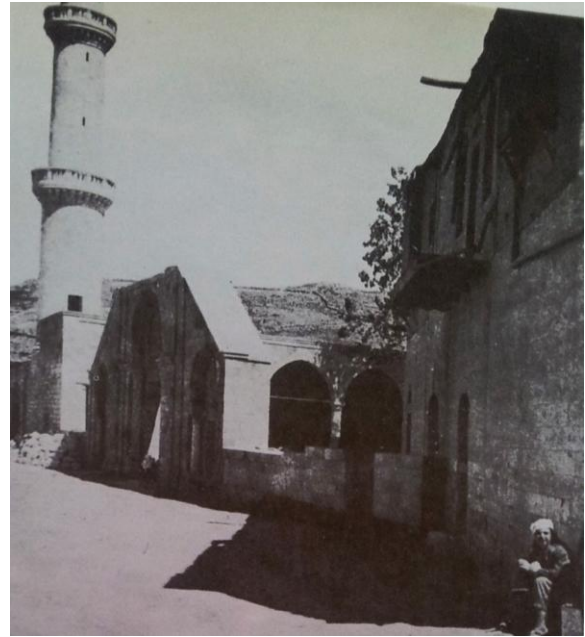
Figure 6.4 Al Husseini Mosque Plaza during the early years of the establishment of the Emirate, 1923-1927
Source: Bakij, 1980

Figure 6.5 The contemporary Al Husseini Mosque Plaza, 2013

Figure 6.6 Use of Al Husseini Mosque Plaza on Friday during al Duhur prayer time
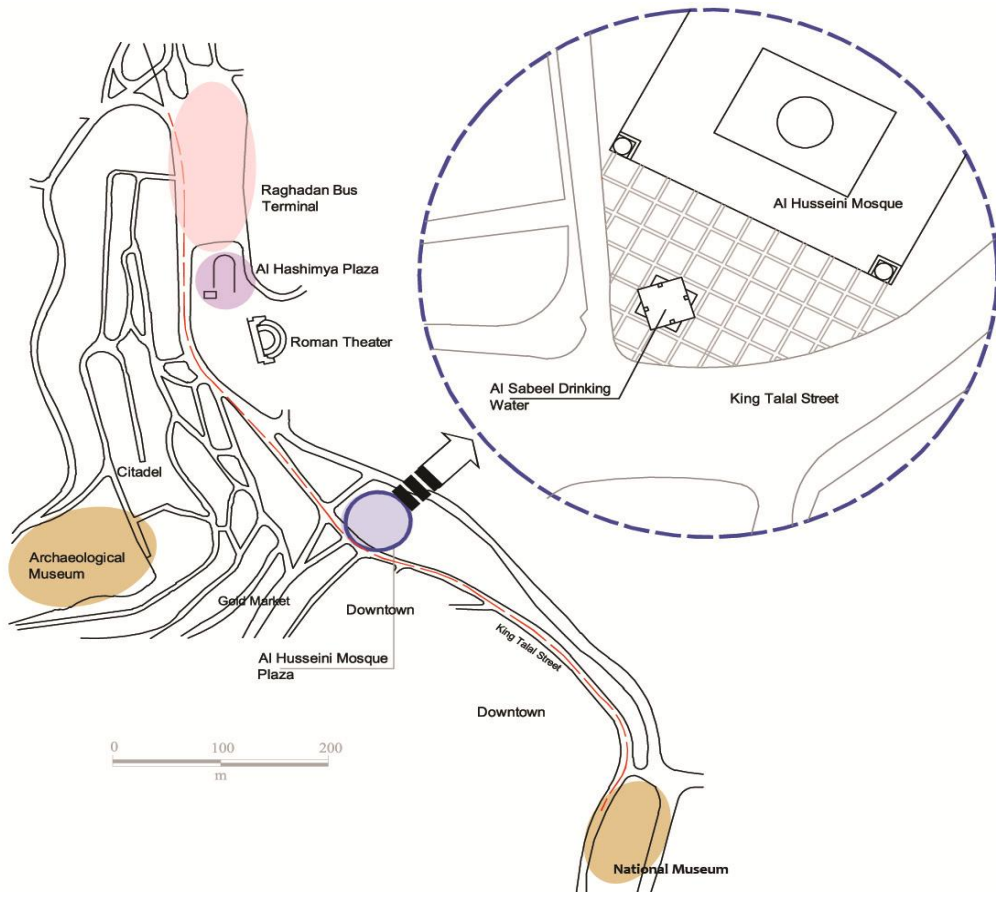
Map 6.1 Location of Al Husseini mosque with the enlarged part showing the plaza of the mosque and the attached Al Sabeel drinking water

Source: GAM, redrawn and presented by the researcher

6.5.2　King Faisal Street (Faisal Plaza or Sahet Faisal), Downtown

King Faisal Street (former Faisal Plaza or Sahet Faisal) is the first and therefore the oldest square in the heart of Amman. The idea was first proposed by the Prime Minister Ali Rukabi to create a new plaza for the new city of Amman in the 1920s.
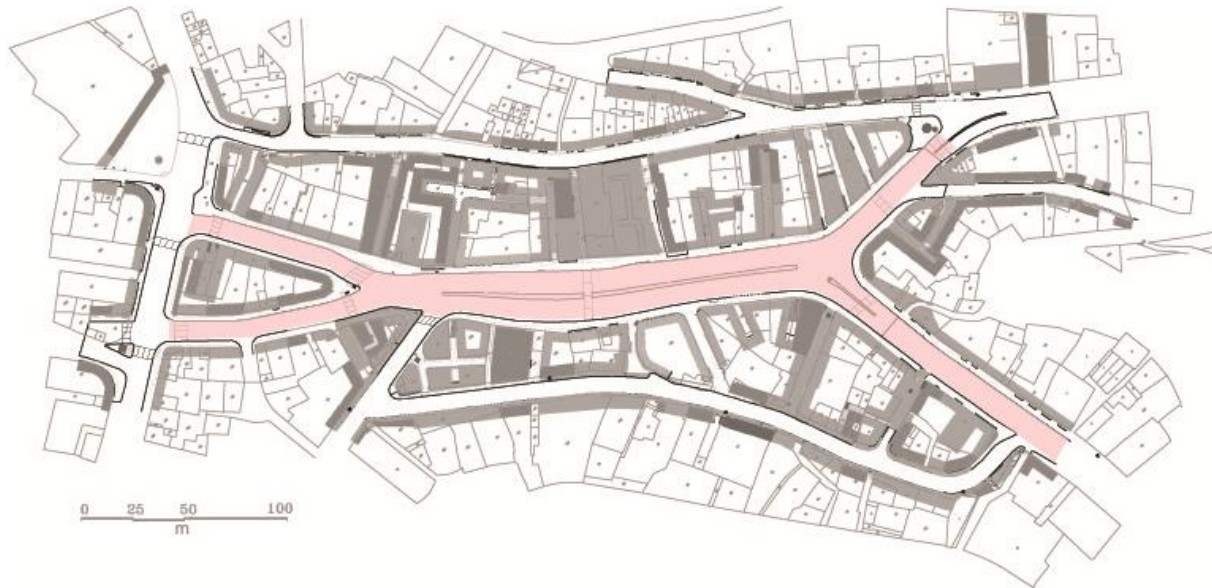
Map 6.2 Faisal Street/ Plaza in the latest development
Source: GAM, redrawn and presented by the researcher

Faisal Square was composed of an empty space surrounded by old residential buildings of brick and stone with roofs with wooden beams. Not higher than one storey, these buildings were the homes of Circassian immigrants who came to Jordan at the end of the 19th century and beginning of the 20th century (see chapter 2.3). Despite the simple spatial arrangement of the street, it was conceived to be Amman's urban space and beating heart at that time. During the 1930s King Abdullah I emphasized on the importance of Faisal Square and used it for political events and parades (Bakij, 1983). Among the important events that took place in Faisal Street was the official funeral procession of Sharif Hussein Bin Ali in 1931 (figure 6.7). Another national occasion was in 1939 when the late King Abdullah awarded medals to officers and soldiers of the Arab Legion. It acted at that time as an interface between the state and the public (figure 6.8).

Figure 6.7 The official funeral of Sharif Hussein bin Ali in Faisal Square in 1931
Source: Bakij, 1983

Figure 6.8 The late King Abdullah awarding medals to officers and soldiers on a national occasion in King Faisal Square
Source: Bakij, 1983

In 1946, Jordan became independent and was officially named the Hashemite Kingdom of Transjordan. During that time the same discourse of modernization continued and Faisal Plaza gained more attention in the political arena. Landscape and beautification elements were added, namely the middle island (Aljazeera) and greenery elements (figure 6.9). During the 1950s the square successfully continued to function and gained a regional reputation for its high level of mobility like other important neighboring Arabic capital cities such as Beirut, Damascus and Jerusalem. As the square became a transportation hub with a rising symbolic value, other complementary functions were added such as coffeehouses, shops and hotels.

Figure 6.9 King Faisal Square in the 1940s
Source: Postcard from Congress Library
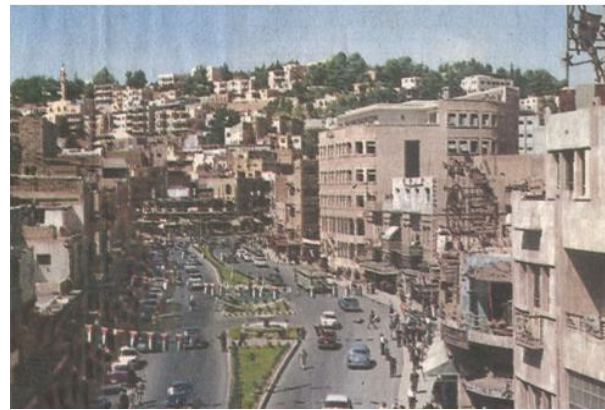
Figure 6.10 King Faisal Square in the 1950s
Source: Postcard from Congress Library

The square did not gain importance only at the regional level, but at the national level many significant events took place at the plaza and therefore consolidated its national identity parallel to the regional one. For example, several important events took place there: (1) in 1961the wedding of King Hussein and Muna; (2) in 1964 Pope XI's procession into the Plaza; (3) in1967 demonstration of Karamah Day; and (4) in 1968 demonstration of Aqsa Day. The 1970s marked the beginning of a second period of unprecedented urban growth for Amman fueled by the inflow of capital investment and remittances from the Arab Gulf States (see chapter 2.5). The surface area of the built-environment in Amman increased more than twofold, from 21 square kilometers in 1972 to 43 square kilometers in 1972 and to 54 square kilometers in 1982 (Razzaz, 1993).

With this expansion King Faisal Square started to witness the conflict between pedestrians and vehicles. The first traffic light was added in 1971 and gradually more congestion emerged. A shift of the perception of the squire was changed due to the invasion of vehicles over the plaza and gradually it was transformed into a typical congested street. During the 1980s and the 1990s Faisal Street started gradually to lose its high symbolic value while the conflict between the cars and pedestrians continued especially when the road was separated by railing. Currently, the street is being taken over by cars and the public perception of the street is gradually vanishing as a public space. Figure 6.9 illustrates the development of King Faisal Street from 1920 until present time.

The municipality of Amman noticed that King Faisal Street had lost its historical importance and turned out to be just one of many congested streets in the city. Therefore, in 2010 the municipality started with the rehabilitation of the street to restore its memory and to reinforce the urban public space in Amman. Work included stone flooring, pavements of sidewalks, renovating the stairs connecting King Faisal

Street with the upper neighborhoods, entrances of the houses and shops located directly on the street, infrastructure of water, electricity, sewage and communication, in addition to the work on the island (jazira) in the middle of the street.

Socio-Economic of Faisal Plaza/Square through Time

1920-1930
Spatial Shift of Amman from village to town

1930-1940
Transformation of Amman from town to city

1940-1950
from city to the Capital city of Jordan

1950-1960
Political presence and acknowledgement at the regional level

Creation of Faisal Square as a meeting place

Declaration of Faisal Square as the city Plaza

King Abdulla emphasized on the importance of Faisal Square

Ground for Political events and parade

Adding island to the street as well as Beautification landscape elements

Witnessed high level of mobility as in other Arabic capital cities

Transportation Hub

Emergence of coffeehouses, hotels and small shops

1960-1970
Consolidation of national identity with significant events taking place in Faisal Square

1970-1980
Beginning of domination of vehicles over pedestrians

1980-1990
Conflict of identity in Amman, Faisal street is not considered as the city square and symbol

1900-Present
Transformation into completely car street with less historic and symbolic value of the city

1961: Wedding of King Hussein and Muna

1964: Pope XI procession into the Plaza

Transformation into a metropolis

1971: First traffic light was added

Figure 6.11 The socio-economic change of Faisal Street in a chronological order

6.5.3 Rainbow Street, Downtown Area

The third selected public space in this research is located in the downtown area is Rainbow Street which is just as important as the first two selected public spaces. It is one of Amman oldest streets (originally and formally called Abu Bakr al Siddiq), located in Jabal Amman, adjacent to First Circle (Map 6.3). From the 1960s to the 1980s, it was one of Amman's most important commercial streets (Al Asad, 2011). Additionally, it had some official landmark buildings such as the headquarters of the Jordan River Foundation, the British Council building, the headquarters of the Jordan Petroleum Refinery Company,

the Embassy of Saudi Arabia and the Rainbow Cinema after in which the street was renamed. It is home as well to sites of Jordan's history, such as the al Mufti House, the residence of King Talal.

Just like the case of King Faisal Street, since the nineties, the street has started to lose its value and popularity. Since the eighties, Amman has started to expand and therefore new commercial centers started to emerge in other parts of the city and attracted new commercial investments. Hence, many shops owners and residents in Jabal Amman moved to other new centers. This resulted in declining commercial activity on Rainbow Street and made the owners and the users of the street move to other new commercially-active centers. This had another social dimension as well where a lot of residents left or abandoned their houses and moved to other fashionable areas. However, despite the fact that it had declined over the years, it never lost its elegance and charm (Al Asad, 2011).

The municipality of Amman noticed that Rainbow Street had lost some of its cultural and historical value and decided to rehabilitate the street and bring it back to life. In 2006 the street was regenerated by the Greater Amman Municipality (GAM) and TURATH[23] into a heritage attraction public space. The concept for the development was to bring people back to that historic space through minimal architectural interventions inside the street to preserve its historical and cultural value (Daher, 2012). Attracting more people was achieved by increasing sidewalk space and reducing the width of the street, and creating urban pockets and terraces with seating areas and panoramic views of Amman to attract people and movie theaters.

Due to that development, Rainbow Street became intensively populated with numerous companies, small antique stores, clothing boutiques, restaurants, bars and shisha shops. This has resulted in increasing the number of visitors to the street. The improvements allowed car access since making the street a car-free street didn't receive public approval from both residents of the neighborhood living there and shops keepers. However, cobblestones were added to slow traffic and to make it more pedestrian friendly.

---

[23] TURATH Architectural, urban design and research foundation specializing in architecture, urban regeneration, heritage conservation (adaptive reuse) and planning. It was founded and directed by Dr. Rami Daher who designed two public spaces in this dissertation, Wakalat and Rainbow Streets. TURATH worked closely with the Greater Amman Municipality (GAM) on several key public projects in the capital Amman centering on urban regeneration and public space design.

Map 6.3 Rainbow Street

6.5.4 Jordan National Gallery of Fine Arts Park (Jabal Al Weibdeh Park)

Jordan National Gallery of Fine Arts Park (known as Jabal Al Weibdeh Park) is one of the oldest parks in Amman located in the Al Weibdeh district with an area of 7,500 square meters. The construction of the park is not officially recognized and recorded; however, the old residents of the Al Weibdeh neighborhood estimate that the park dates back to the late 1950s (Al Asad, personal communication, 2012). The park was perceived as a pleasant green space to what was one of Amman's most elegant neighborhoods (Al Asad and Zureikat, 2005). Until the later 1970s the park succeeded in preserving itself in a good physical and social manner. The park was totally opened to public access until 2004. However, it was neglected and suffered from bad practices from the locals and poor maintenance.
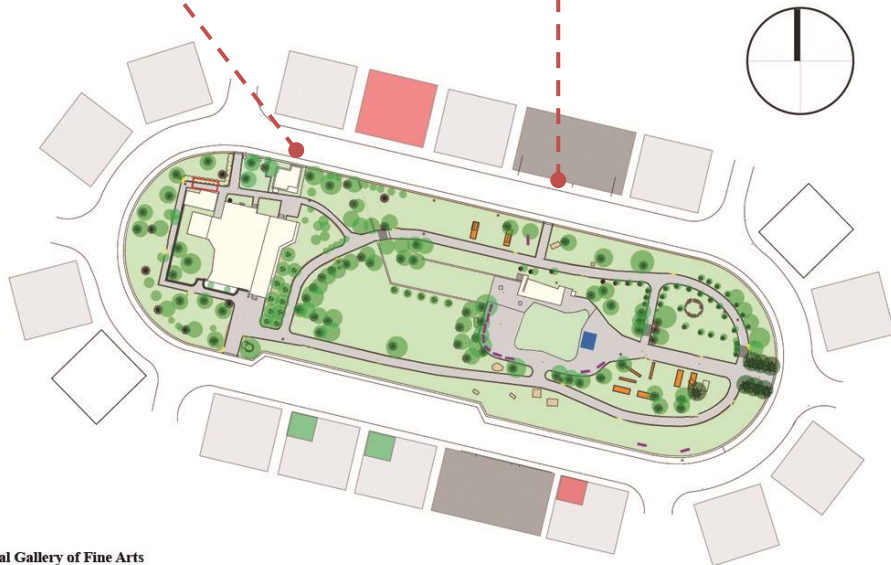
Map 6.4 Park of the National Gallery of Fine Arts (Al Weibdeh Park)

Jordan National Gallery of Fine Arts Park

Rainbow Street

Al Husseini Mosque Plaza

King Faisal Street
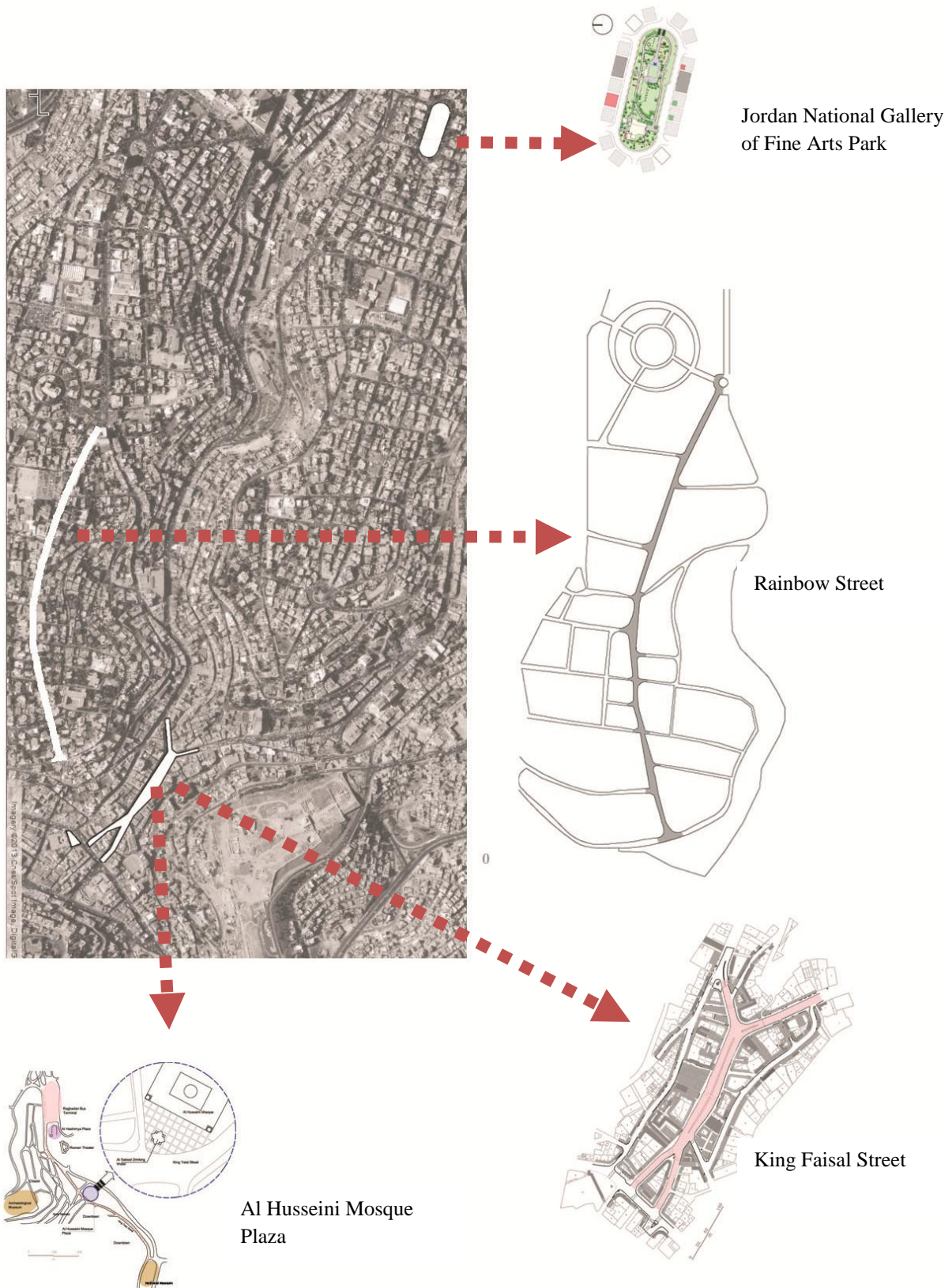
Map 6.5 The selected public spaces that are located within the city center area

6.5.5 Abu Darwish Mosque Plaza, East Amman

The plaza attached to the Abu Darwish Mosque is one of the oldest in Amman. The Abu Darwish Mosque was built in 1961 with a total area of 2,500 square meters at the top of Jebel Al Ashrafiyah, one of Amman's many hills. It consists of six domes and a 36-meter tall minaret. The alternate rows of black and white stone show a Levantine influence. More than 7,000 worshippers can be accommodated in the mosque. A small Islamic museum is housed inside. The mosque was funded by Abu Darwish (Mustafa Hassan), who owned the land and financed the building. Before the mosque was erected the Ashrafiyah area was sparsely populated. Directly adjacent to the mosque is the Al Bashir Hospital, known as the Ashrafiyah Hospital due to its location there. Abu Darwish noticed that women who came to look in on their sick relatives had no place to rest. To help them he built two rooms on his property that the ladies could use as a lounge. Later, he built two more rooms and rented them to the Ministry of Education for a school.

The design of the mosque was made by Abu Darwish himself and a local calligrapher did the inscriptions and paintings. The stones were brought in from Syria. There are two halls in the mosque. The first accommodates up to 2,000 worshippers and the other 400. There is also a library of more than 3,000 books and a small school for teaching the Holy Quran. The idea of unifying the call to prayer "Azaan" was born at Abu Darwish Mosque. The first Muezzin to perform the unified Azaan was Abu Asfour. It was broadcast to the 42 mosques in the city and heard all over Amman.

Abu Darwish Mosque Plaza was renovated by the Greater Amman Municipality (GAM) in 2009 on an area of 10,000 square meters to develop an historical site and to revitalize the local community's cultural and social life through the complex activities that provides job opportunities and create an attractive environment for tourism, shopping and sightseeing. The renovation and revitalization of the plaza included redesigning the plaza by joining the adjacent street between the plaza and the mosque to the plaza area (map 6.8 and 6.9). The concept of the design was to create a contemporary style that preserved the traditional architectural elements embracing the mosque with an open urban plaza that encourages social activities. The concept concentrated on creating an innovative project that emphasized the importance of distributing the cultural and social services provided by GAM to each citizen and visitor in Amman. The project included adding three new buildings of around 4,658 square meters that encompass nine commercial stores, underground parking, a public library, a cultural center and service units (Qatanani, personal communication, 2012).

Figure 6.12 Abu Darwish Mosque Plaza, East Amman
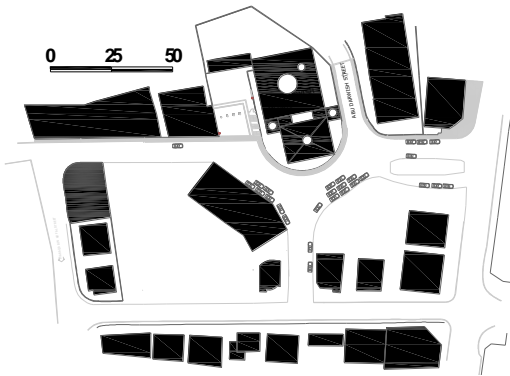
Map 6.6 Abu Darwish Mosque Plaza before the development, 2007

6.5.6   Wakalat Street, West Amman

Wakalat Street is located in the Sweifieh district, West Amman. It is a relatively young commercial street that primarily evolved during the 1990s and has hosted a number of trendy and fashionable clothing stores. Before upgrading the street, it was congested, fragmented and dominated by vehicle traffic (figure 6.14), but, it did perform as a public space that accommodated pedestrian needs (Al Asad, 2011).

In 2007, GAM in cooperation with TURATH upgraded the street to accommodate pedestrians as it was considered one of the major commercial streets in Amman. Pedestrianisation of Wakalat Street in the Sweifieh commercial district was considered to be the first implemented project in the field of providing a fully pedestrian public space on commercial streets in Amman (al Asad, 2011). It was conceived to be an "Anti Mall Space" that was inclusive, welcoming people from various destinations in Amman by being a vibrant urban space that retrieved public life from the shopping malls and encouraged pedestrian life in Amman (Daher, 2010). Unlike the previous form of the street which was congested and overwhelmed by vehicular traffic, the rehabilitation transformed the street into a vehicle-free street with open areas for sitting and walking. The development included as well organizing the commercial activities of the street with a proper signage system. Street furniture such as lighting elements, benches and garbage bins were also provided (figure 6.13 and 6.14).

Figure 6.13 Wakalat Street after the development (July, 2007)

Figure 6.14 Wakalat Street before the development (before July, 2007

The new development of the street included paving the street with different colored concrete interlock tiles, using a uniformed signage system, distributing light units along the street and adding green elements such as shrubs and canopy trees. The rehabilitation of the street created new activities for more users; people go there for shopping, sitting in one of its cafés, or even just for passive and active socializing.
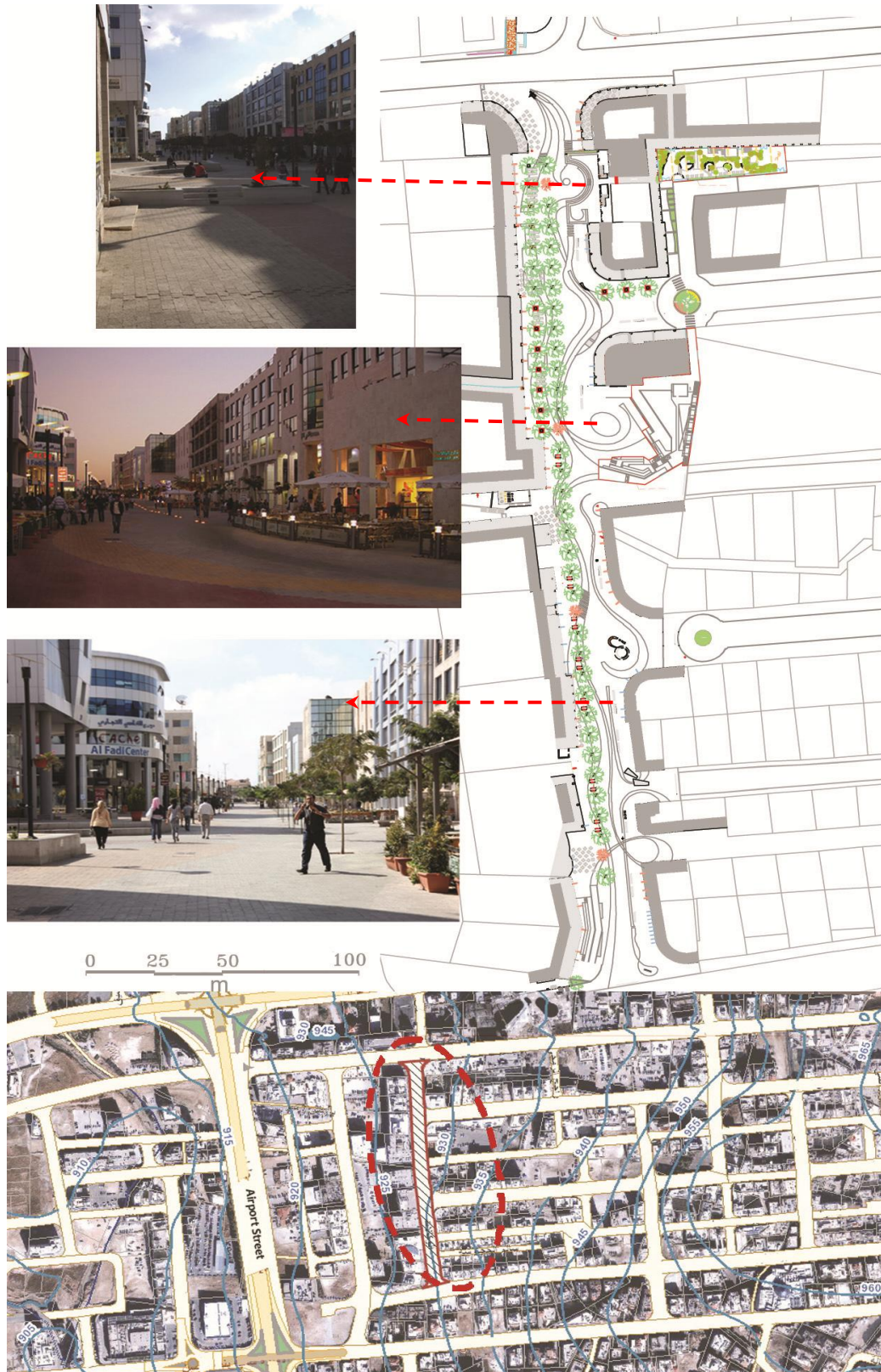
Map 6.7 Wakalat Street/ West Amman

6.5.7   Airport Road, Informal Public Space

Airport Road is one of the main arterial roads in Amman. It's officially known as "Queen Alia International Airport Street". It is the only connection to the Jordan national airport and continues from there to the south of Jordan. Along the airport road there are plenty of attraction points such as restaurants, hotels, colleges, universities, schools, public parks, non-governmental institutions governmental institutions, sport clubs, companies, banks, clinics, pharmacies, logistic agencies, mosques, training centers, associations, and other social infrastructure units. However, a big share of the local community in Amman perceives the sides of the road as a public open space and likes to go there for different activities such as barbequing in the summer and meeting friends away from the crowded city.
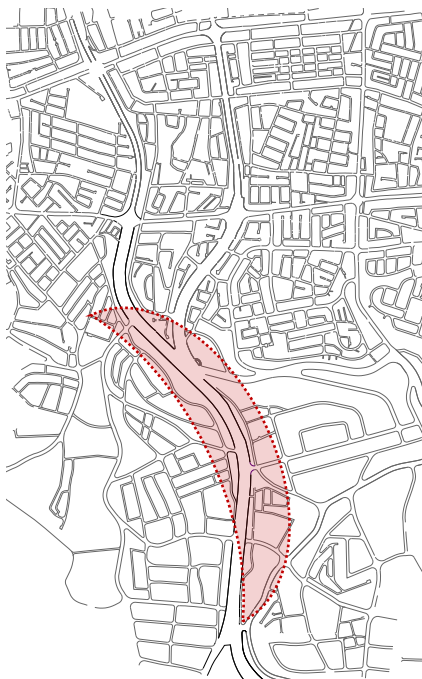
Map 6.8 Airport Road

Figure 6.15 Airport Road/Informal public space

Figure 6.16 Arial photo of Airport Road

Source: Google Earth, 2014

6.5.8   Housing Bank Park, Public-Private Co-produced Space

This park has a special character of being the first project realized through a public private partnership (PPP) between the Greater Amman Municipality (GAM) and a private actor (the Housing Bank). In this partnership the provision of the land was from the GAM and the construction of the park was done by the Housing Bank (map 6.12). In this partnership the GAM gained by providing the local community with a public space at a low cost and the Housing Bank gained by having another bank building without having to purchase the land in one of the most expensive areas in Amman.

The design of the 12,000 square meter vacant plot in the Abdoun district was prepared by In Lovejoy, London in 2006. The design included providing preliminary areas for two buildings of Housing Bank, areas for an exhibition and a theater. Additionally, an underground parking facility was incorporated. Following the submission and the approval by the GAM of the proposed schematic park design, the Housing Bank (investors) took full responsibility for the funding and utilizing the vacant lot –originally designated as a park with the exclusivity of having a rented building within the site. The project was considered by the GAM as a pilot experiment to examine the new PPP approach.
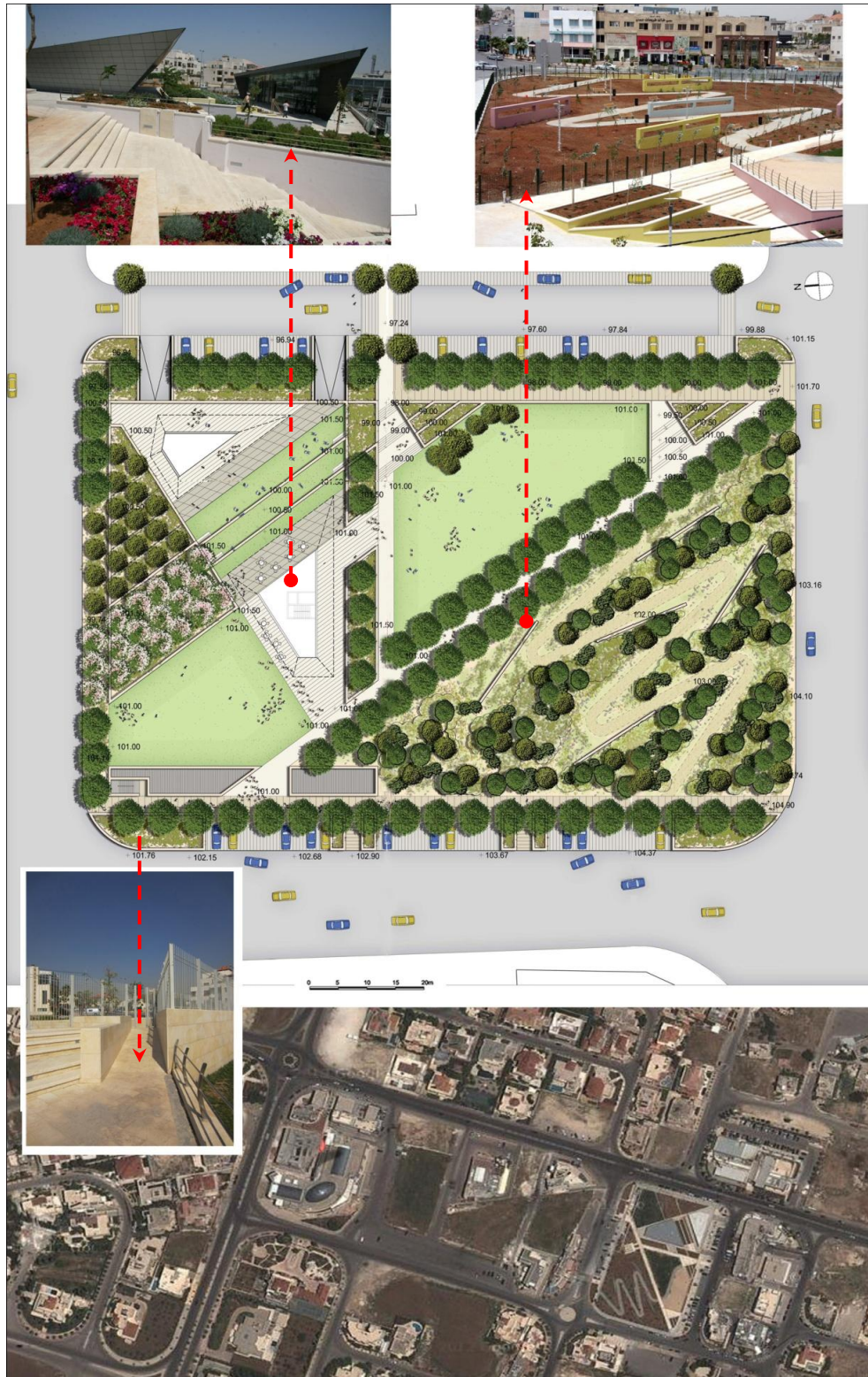
Map 6.9 Housing Bank Park

Source: Researcher, based on a map provided by the GAM

6.5.9 Taj Mall, Closed Public Space

Since the economic reform towards liberalization began in the beginning of the 21st century, the culture of shopping malls was introduced to the economic and social arena in Amman. Since then, Amman has witnessed the emergence of many mega shopping mall projects (table 4). In West Amman, Safeway was the first shopping mall realized in Amman in 1986 and then Majdi Mall in 1994, Amman Mall in 1996, Mecca Mall in 2003 (with the added extension completed in 2006), Abdoun Mall in 2001, Plaza Mall in 2004, City Mall in 2008, Baraka Mall in 2008 and Taj Mall in 2011. In East Amman another group of shopping malls were constructed: Istiklal Mall and Al Mukhtar Mall. However, the finishing quality, built up area and the rental costs were less than the malls built in West Amman where the high quality residential districts and the economic prosperity are located (see chapter 2.6.1- 2.6.3).

Since this research is interested with the emerging typologies of public spaces, Taj Mall was selected due to the fact that it is a recently constructed shopping mall project. Taj Mall covers an area of 150,000 square meters, five stories high, located in the heart of the Abdoun area on a vacant area that is skirted by the "Wadi Abdoun" area where goats actively graze next to humble concrete houses.

Table 4 Shopping Malls in Amman

Name	Built-up Area sq. m	Location	Year Opened
Safeway	16,300	West Amman, Shmesani district	1986
Majdi Mall	12,800	North-west Amman, Queen Rania Al Abdullah Street	1994
Amman Mall	35,800	West Amman, Gardens district	1996
Mecca Mall	195,000	North-west Amman Mecca Street	2003
Abdoun Mall	25,000	Abdoun	2001
City Mall	165,000	The North-west peripheries of Amman, King Abdulla II Street	2008
Plaza Mall	165,000	The North-west peripheries of Amman, King Abdulla II Street	2003
Plaza Mall	180,000	East Amman, Al Hashmi Al Shamali	2004
Baraka Mall	40,000	West Amman,Sweifieh	2008
Istiklal Mall	40,000	North Amman, Istiklal Street	2007
Al Mukhtar Mall	18,000	North-west Amman, Queen Rania Al Abdullah Street	2006
Taj Mall	150,000	Abdoun	2011

Figure 6.17 Taj Mall/West Amman

Source: Google Earth , 2014

Figure 6.18 Exteriors of Taj Mall

Figure 6.19 Multiple shopping levels in Taj Mall

7 EMPIRICAL FIELDWORK

In this chapter some methodological issues that assisted in carrying out this research are presented. To answer the research questions this chapter begins with developing some concepts and measuring dimensions for each of the research questions (section 7.1). Since this research uses a case study approach and Grounded Theory methodology, the related types of sources of evidences for investigating the developed measuring dimensions are indicated in section 7.4 and further explained in details in terms of the types and logistics of the observations and interviews being conducted. The sampling technique and the analysis method for generating different code categories are also explained in section 7.6 of this research. This chapter closes with mentioning some methodological limitations related to the applied methods, namely the ones encountered due to the political situation influenced by the Arab Spring at the time the fieldwork was carried out and consequently its impact on the user's willingness to participate in this research and the transparency and reliability of their contributions. These drawbacks created by the turbulent political sphere are pointed out in section 7.6. However, the Arab Spring has been eliminated as a focus area in this research for the purposes of covering comprehensively the main concerns of this research.

7.1 Operating the Research Questions

For investigating the research questions, it was important to understand the types of the proposed questions in order to imply the suitable strategies to achieve that. For example, research questions which focus mainly on "who" and "where" questions are likely oriented to surveys or analysis of archival documents. However, "what" questions call for different strategies depending on the type of the 'what' question being asked. It might require a survey and analysis of archive strategies if it is in a form of "how many" or "how much". Contrarily, questions starting with "how" or "why" are more explanatory and likely favor the use of case studies, surveys, archives and experiments (Yin, 2003). Table 4 shows the research questions in relation to the type of required study.

Table 5 Research questions in relation to the applied method

No.	Question	Type of required study
Q1	What are the modes that produce the public spaces in Amman?	Exploratory
Q2	What are the produced social spaces of the emerging socio-economic modes in Amman?	Exploratory
Q3	How does the physical structure of public open spaces in the Amman articulate with the social structure?	Explanatory
Q4	What is the role of public space in enhancing the civic-collective identity of the fast growing city of Amman?	Explanatory
Q5	What are the recommendations that can be rendered for planning institutions to insure the sustainable role of public spaces in Amman as an arena of everyday life practices for all social classes?	Exploratory

Once the "how" and "what" questions identify the type of research questions being asked, a further important clue to determine the research strategy is required to know whether the research should focus on contemporary phenomenon rather than historical events (Yin, 2003, P. 8). The strategy of this research follows neither pure historical nor experimental research approaches. In the mentioned two types of research, there is either no access to actual behavior as in the case of historical method or full control as in experimental methods where the researcher can control and manipulate behavior directly, precisely and systematically and focus on one or two variables. According to Yin, the case study strategy investigated through Grounded Theory methodology is located between these two extremes. It relies on many of the same techniques as in historical methods such as analysis of documents and archival records, but it adds other techniques such as direct observation and interviewing where some biases and personal interpretations might occur. In explaining that, Stoecker (1991) justified that case study comprises an all-encompassing method with the logic of design incorporating specific approaches to data collection and to data analysis. However, despite the fact that this research adopted multiple qualitative methods, it did not intend to be a fully qualitative research. The data collection sources, multiple evidence and the produced outcomes of this research were quite mixed with both qualitative and quantitative characters.

In order to answer the research questions, the first step was to define the dimension relating to the investigation of each of the research questions.

Q1: **Modes of production** are explored through:

- Literature review.

- Analysis of current planning projects of the production of public spaces. This is achieved by analyzing a number of selected case studies.

Q2: Impact of the modes of production on the performance of public spaces is investigated through measuring the following attributes of the public space in all of the selected case studies:

- **Justice**: The way in which the environmental benefits and costs are distributed among persons, according to some particular principles such as equality, need, intrinsic worth, affordability, effort expended, potential contribution or power. Justice is the criterion which balances the gains among different groups (Lynch, 1960).

- **Accessibility**: In the context of public spaces in Amman the term accessibility relates to the ability to reach these spaces, activities, resources, services, and information within these spaces including the quantity and diversity of the elements which can be reached (Lynch, 1960)

- **Durability**: The degree to which physical elements of a city resist wear and decay and return to their ability to function over long periods.

Q3: Users perception of public spaces is explored through:

- **Control ability**: The degree to which the use and access to spaces and activities, and their creation, repair, modification, and management are controlled by those who use, work or reside in them.

- **Sense and image**: The degree to which public space can be clearly perceived and mentally differentiated and structured in time and space by its residents and the degree to which that mental structure connects with their value and concepts – the match between environment, our sensory and mental capabilities and our cultural construction.

- **Inclusivity**: To what extend is the public space in Amman inclusive to all social classes and to all age groups.

Q4: The relation between the **social and physical structure** of the public spaces is investigated through:

- **Connectivity and integration of the public spaces**: To what extend are public spaces connected to the surroundings and accessible. Access and linkages are investigated through space syntax theory (explained in details in chapter 9, Triangulated Findings with the Spatiality of Public Spaces in Amman).

7.2 Applied Methods for Investigating the Research Questions Measuring Dimensions

For answering the research questions, the researcher developed a number of measuring dimensions which needed suitable methods to be accurately investigated.

To investigate the **modes of production of the public space (Q1)**

1. **Literature review**
   - Scholarly existing literature used as a data source related to the historical development of modern Amman to reveal the modes during different time frames participated strongly in the production and formation of public spaces in Amman. This kind of "technical literature" contributed to the development of the Grounded Theory (Glaser, 2008). The subsequent analysis of the literature directed the researcher to other sources of data for further analysis and increased the study's progress (Birks and Mills, 2011; Dick, 2005).

2. **Published and unpublished documents**
   - Government reports and policy/strategy documents.
   - Organizational documents and procedures manuals.
   - Newspapers and magazines.
   - Biographies and local novels describing the settings at a certain time.

To investigate the **impact of modes** on the performance of public spaces (Q2: justice, accessibility, durability)

1. **Observation of public spaces (stationary and participant observation)**
   - Exploration of the activities taking place at the selected public spaces during selected days in different seasons. Weekend days were a fertile source in which the researcher explored a huge range of activities that just took place during the weekend days.
   - Behavioral patterns of different users in the selected public spaces.

2. **Structured and semi-structured interviews with the users of public spaces**
   - Identification of public sphere forces.
   - Users' perception of public spaces in the selected case studies.
   - Activities taking place while being in the open space.

3. **Semi-structured and informal interviews with the neighborhood dwellers and shopkeepers**

- Perception of the new urban projects within their neighborhoods.
- Satisfaction with the newly developed urban projects.

4. **Expert interviews with officials, professionals and investors**

- Vision behind the recent development projects of public spaces (motivations and considerations).
- Policies and operational strategies in realising the urban public space projects.
- Public spaces in Amman as they are conceived, and if the process of making these social spaces is a bottom-up or a top-down process.
- Negotiation of the recently developed/regenerated/produced public spaces in Amman between developers and users.
- Challenges of the public-private co-produced urban spaces in Amman context, and what effects the private engagement has on the users of the open space.
- Links of the analysis of thefieldwork with the development approaches.

To investigate **the users' perception of the public spaces (Q3),** a number of measuring dimensions were developed including some shared dimensions with the other research questions and therefore they are investigated using a similar set of methods. However, the contribution in this case differed from the contribution for the other questions since the aim was to explore and reveal different issues. The methods for measuring the users' perceptions and attitudes towards the public spaces in the different selected spaces were:

1. **Observation of public spaces (stationary observation)**

- Exploration of the activities taking place at the selected public spaces.
- Investigation of the most frequent gender/age group attending these public spaces and therefore the appropriation of the public spaces and its impact on the whole atmosphere of the selected public spaces.
- Behavioral patterns of different users in the selected public spaces.
- Understanding of the users' perception of the public spaces by noticing the different activities.

2. **Structured and semi-structured interviews with the users of public spaces**

- Users' perceptions of public spaces in the selected case studies.
- Activities taking place while being in the open space.
- Interrelated and matched results generated from the observations with users expressed perceptions.
- Undeclared cultural rules and codes revealed which control the access to the public space activities taking place at the selected spaces and increase/limit the access to these public spaces.

Regarding the last research question of the role of public space in enhancing the civic-collective identity of the fast growing city Amman, no specific methods were designed. Hence, this aspect of public space was investigated through analysing and interconnecting the findings of the previous research questions.

7.3 Sampling Strategy

Just as in the selection of the case studies, the sampling strategy was theory-driven sampling; e.g. the researcher chose the participants sequentially based on theoretical consideration rather than statistical ones. The research sample needs to be representative and comparable, which is why both literal and theoretical replication strategy were applied (Yin 2003) The replication logic implies that cases are selected sequentially, so that they either predict similar results to the cases already selected (literal replication), or produce contrasting results but for predictable reasons (theoretical replication) (Yin 1991). For the observation, all users in all selected public spaces were equally observed at the time the observation was done. However, for the interviews the researcher prepared a preliminary list of the key informants to be interviewed. The following preliminary list of interviewees was prepared before conducting the second fieldwork trip where the actual analysis took place.

1. Dr Rami Daher, the designer and head of TURATH, who designed and supervised the construction of three of the selected public spaces in this research: the rehabilitation of Wakalat Street in Sweifieh, Rainbow Street in Jabal Amman and King Faisal Street/ Plaza, downtown.

2. Key informants from the GAM that represent the investor actor. The interviews aimed to provide an understanding of the municipality's vision of implementing such projects in different areas within its municipal area.

3. Key informants from research institutes, where fertile material and researches about public spaces in Amman have been done. In this research a number of interviews were conducted with Dr. Mohammad al Asad and Arch. Lara Zreiqat from the Center for the Study of the Built Environment[24] (CSBE).

4. Key informants from the Housing Bank that made a public private partnership (PPP) with the GAM to build a park within the land that had been provided to the Housing Bank from the GAM originally for other purposes.

Regarding the interviews with the users of the public spaces, the first category of interviewees was a wide cross-section of various visitors in terms of age, nationality, living location and social class. Bearing in mind that these variables shouldn't determine the sample at this stage but were defined to guide the first interviewed group. To avoid ambiguity and extreme cross-cultural perception, tourists were excluded from the sample.

---

[24] The Center for the Study of the Built Environment (CSBE) is a non-profit, private study and multidisciplinary research institution that aims at addressing the challenges that affect the built environment in Jordan and beyond. http://www.csbe.org/

In the interviews general questions were asked about the visitors' preferences among the various types of public open spaces existing within Amman and what influenced their choice of visiting these spaces, why they come and the nature of their experience in the different types of public spaces. There was also an emphasis on what they considered to be a typical representation of Amman. However, the interviews were not highly structured. Informants were encouraged to elaborate on the questions and even to tell stories that might divert the conversation to other areas. In regards to the length of the interviews, they varied between different interviewees; some lasted over an hour while others didn't take longer than 15 minutes.

After asking about particular patterns, new topics started to emerge, the sampling then became more oriented. The first few interviews were transcribed verbatim and line-by-line analyzed. The codes were categorized in groups to form clusters that enabled having conceptual value in identifying patterns, similarities or differences between different codes.

During the three field trips, the data collection was a continuous process where the researcher kept collecting data by applying the different methods as long as new information kept appearing. The data collection process ended when the "theoretical saturation" point had been reached and conducting more interviews and applying more data collection methods wouldn't add new knowledge to the investigated area of this research. The main criteria for the sampling were:

- Gender: It was important to include both females and males in the interviews. However, due to the theoretical sampling approach adopted in this research, in some interviews it was preferred to have females rather than males and vice versa depending on the investigated topic.

- Age: The investigation focused mainly on young people who represent the main group that attends the public spaces. However, some interviews were conducted with elderly people, namely shopkeepers/owners who have spend decades in the investigated spaces and have witnessed the gradual physical and social transformation of the selected public spaces. (Children and tourists were excluded).

- Nationality (from which country the interviewee is coming from and since when living in Amman): This was to investigate the variation of perception of public spaces between the locals and foreigners.

- Destination of origin: This was to identify variations of perception of public spaces between the residents and regular users of selected spaces and between the users who comes by means of transportation from other further neighborhoods.

However, in addition to the mentioned aspects for the preliminary sampling selection criteria, the user's willingness and acceptance to participate turned out to be one of the selection criteria. This was due to several different reasons, particularly due to the unstable political situation in the whole Middle East that was experiencing the revelations of the "Arab Spring" in many if its countries at the time this research was conducted (more details are in section 7.6). Many users refused to participate in the interviews or

asked not to be recorded. In many cases they questioned the purpose of the interview believing that the researcher might be a journalist or working for the state secrete services and collecting information for political purposes (see chapter 7.6).

Figure (7.1) shows the distribution of participants at each of the selected public spaces. Interviewing the participants took place in the three fieldwork timeframes (September 2011, October 2012 and July 2013). At each fieldwork, the selection of new participants was highly influenced by the results of the analysis of the previous fieldwork. That aimed to reveal further relevant data to the previous evolving categories.

Wakalat Str. (9)
- 2, Shop owners (clothes, cafe)
- 7, users (2 Females, 5 Males)

Rainbow Str (10)
- 1, Shop owners (Cafe)
- 9, Users (5 Females, 4 Males)

Housing Bank Park (5)
- 2, Bank adminstration
- 1, Guard of the park
- 3, Users of the park

Faisal Str. (5)
- 2, Shop owners
- 4 Users (2 Females, 2 Males)

Husaini Mosque Plaza (6)
- 2, vendors
- 4 Users (2 Females, 3 Males)

Tajj Mall (10)
- 1, waiter of a Cafe
- 4, Users (2, Females, 2 Males)
- 1 group discussion (4 participants)

Airport road (5)
- 2, Police officers
- 3 Users (1 Females, 2 Males)

Darweesh Mosque plaza (6)
- 2, Shop owners (clothes, cafe)
- 4, users (1 Females, 3 Males)

National Gallery Museum Park (5)
- 1, Restaurant administration
- 3, users (1 Females, 2 Males)

Figure 7.1 Distribution of interviews on research selected public spaces

In this research, the analysis process started with observing and interviewing the users of the different public spaces. For selecting the key informants from different institutes and NGOs, the researcher followed the same theoretical sampling process as in the selection of participants. The researcher was initially guided by the related literature and further by the interviewees themselves as the analysis aimed to understand the lived space "representation of space" from the users' point of view of everyday practices. The expert interviews aimed to understand and conceptualize the public space as it was conceived "representational space" from the "planners, decision makers" point of view. In this part, a number of representative informants were selected from different institutions and organizations. Based on the related literature the Greater Amman Municipality (GAM) represented a rich source of information

since all selected case studies were projects belonging to the GAM. In the GAM, the researcher conducted interviews with informants from the: (1) Studies and Design Department; (2) Amman Master Plan Department; (3) Amman Institute (Ai); and (4) Department of Gardens where all construction and regeneration projects of different types of public space projects are taking places. Furthermore, upon the recommendation of some of the informants from the first fieldwork, other governmental and non-governmental organizations were included for conducting interviews such as: the Center for the Study of the Built Environment (CSPE), Institut français du Proche-Orient (IFPO), TURATH planning and architectural firm as well as the Department of Social and Population Statistics (DOS) (figure 7.2).

5 GAM	• 1, Amman Institute (Ai) • 3, Studies and Design Department • 1, Amman Master Plan Department	1 TURATH	• 1, TURATH: Architecture and Urban Design Consultants
2 CSBE	• 2, Center for the Study of the Built Environment, CSBE	1 IFPO	• 1, Institut français du Proche-Orient (IFPO)
2 JU	• 2, Department of Architecture, University of Jordan	1 DoS	• 1, Department of Social and Population Statistics (DOS)
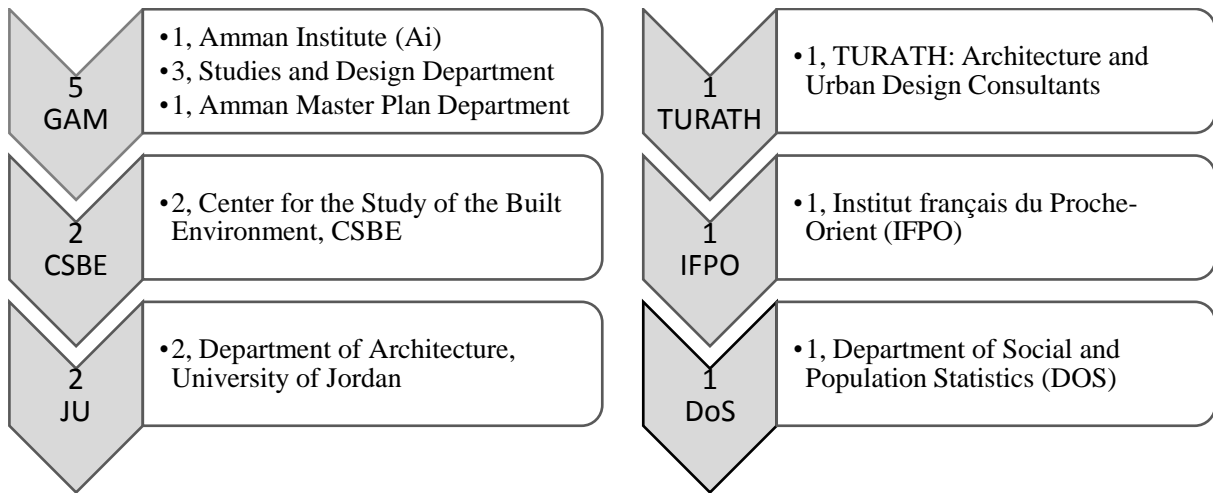
Figure 7.2 Participants of expert interviews

7.4 Data Gathering: Concepts and Methods

This section gives the chronological order of the data collection process and the rationality in investigating the research questions. In this research, data collection for the case studies relied basically on six sources of evidences: documents, archival records, interviews, direct observation, participant-observation and physical artifacts. To increase the data collection quality substantially, Yin drew attention to the use of (1) multiple sources of evidence, that is, evidence from two or more sources but converging on the same set of facts or findings, (2) a case study database, that is, a formal assembly of evidences distinct from the final case study report, and (3) a chain of evidence, that is, explicit links between the questions asked, the data collected and the conclusions drawn (Yin, 1993, P. 78).

Data collection and source of evidence mainly inform four key attributes (section 7.1), namely (1) justice and sociability, (2) controllability and durability, (3) connectivity and accessibility, and (4) sense and image. The mentioned attributes cover the physical and social characteristics of the public spaces in Amman. Thus, the analysis is conducted at two levels: at the spatial articulation and social level in terms

of what the value is that these public open spaces add to the social life of its surrounding settlements, and how public open spaces can participate in the ideological shift of the fragmented perception of urban social structure. At this phase, the data collection and analysis were conducted simultaneously using the Grounded Theory approach.

The fieldwork took place in several periods; however, an exploratory fieldwork was conducted prior to the actual ones in September 2010 for exploring the existing public spaces and their potentials as well as to reevaluate the research questions and objectives and to get a sense of the selected public spaces (See chapter 5.1). The first fieldwork took place in August 2011 and lasted two months; at this fieldwork the actual empirical analysis took place. It included intensive fieldwork implemented through applying the Grounded Theory approach. The second fieldwork was in October 2012 and lasted one month. The third field trip in September 2013was dedicated to bridging the data gap and collecting the missing information from the second field trip. It aimed as well to gather more data to examine whether the collected data from the first field visit reached the saturation point or there were still more facts to explore from the field. The third fieldwork considered that the previous analysis might have required an additional data input, which were not achieved during the second phase of the fieldwork.

7.4.1 Observation

Observation of different public spaces started at the very beginning of this research. The first observation took place in summer 2010 while writing the research proposal. At that time, casual visits were made to some of the selected public spaces (not all of them) for the purpose of developing the research questions and objectives. On the second field trip in 2011, the actual fieldwork began and the researcher started to become familiarized with the whole context of the selected public spaces and observe the surrounding environment. As a starting point, a few exploratory visits, just to gain a sense of the total context, were done. The initial visits started with open/casual observation where social, spatial and temporal mapping were done:

- Social mapping: To notice the number and kinds of people engaged in the observed public spaces.

- Spatial mapping: To notice the different locations of the majority of social groups, the facilities, and the location of specialized services provided.

- Temporal mapping: To describe the rhythm and the frequency of the activities taking place and the schedules for visiting each public space.

For this research, observation was one of the main methods for generating data to study users' behavior in public space with the aim of creating links between users and decision makers and to raise awareness of the social and physical issues associated with the provision of public spaces in Amman. Prior to the fieldwork, the researcher identified the use and purpose of observation (table 6). The technique of obtaining evidence from observation is not easy and requires particular thinking and communication skills (Bell, 2005). Therefore, preparing prior to the observation was achieved through the casual observation that had been conducted in the preliminary field to help in gaining the desired data.

The observations were intensively conducted over two seasons, namely in summer 2011 and the beginning of winter 2012, in two seasons in which the weather varied from extremely warm to cold in order to provide an opportunity to notice the differences in behavior, appropriating groups and the frequency of visits to the selected public spaces. Observed locations were chosen based on most pedestrian traffic. The observations took place during the week and the weekends spending between three and four days at each public space. The times of the day in which the observation were done were: (1) from 8:00 am to noontime; (2) noontime till the afternoon; (3) from 9:00 pm till the late evening. Pedestrians/users were observed alone, in couples and with families and friends. Observation included the whole spectrum of ages; however, children's behaviors and activities were not considered in the analysis. Furthermore, memos were taken of the observational data. Memos were written from the preliminary site visit until the analysis of the data and write up of the findings. Memos were vital as they provided a rich source of ideas and short narratives which could be revisited. They helped in directing attention to the emerging events and consequently to a new theory (Strauss and Corbin, 1990). Through the observation process, memos helped to recognize relationships, abstract integrative framework and more general problems. They were also a source of the direction for future theoretical sampling (Glaser, 1978).

Observation technique was a very rich source of information in this research; however, using this technique has some problems in terms of the ability to record all impressions of the observed behavioral patterns due to the complexity of the human behavior whether as individuals or groups (Jones and Somekh, 2005). Another problem related to observation is the possible various interpretations of human behavioral patterns which are likely influenced by the researcher's personal interpretations, those stamps from his/her constructed beliefs and perceptions of the whole surrounding dynamics (Goulding, 2006). To ensure the reliability and validity of the observation method and to avoid any possible subjectivity of the researcher's personal interpretation, this research used different methods to obtain source evidence.

7.4.2 Interviews

Interviews were used in this research to obtain data from visitor's experiences, how they perceived the public spaces. Another reason for choosing interviews as a data collection strategy was the exploratory nature of the research, since observation alone cannot convey people's thoughts about certain events, feelings and attitudes. Such knowledge can only be expressed but not observed (Patton, 1990). From that point of view, interviews were quite important for the data collection strategy and represented a natural overlapping of observation strategies.

Because this research is concerned with people's perceptions and attitudes in public spaces in Amman, the interviews were structured, semi-structured, group, face to face, open-ended, in-depth conversational interviews, as well as focused group and experts' discussions. In doing so, the researcher prepared for all types of interviews (table 6) which formed an informal list of questions as interview guide lines25. The guide questions relating to the interviews with the users were set up after a small pilot study in order to investigate whether the questions were clear enough and not misleading. Participants in all interview types were first informed about the researcher's occupation and about the survey's main objectives.

Table 6 Research Tools: Interviews

Interviews		
Interview type	**Population**	**Purpose**
Semi-structured and informal interviews	Users of public spaces of the selected areas	• Identification of public sphere forces • Users' perceptions • Activities while being in the open space
Semi-structured and informal interviews	Neighbourhood dwellers	• Attitude towards the new development brought to their neighborhood
Semi- and structured interviews	Officials, professionals, investors	• In total 12 interviews • Users' perception

The questions asked to the users in the interviews varied between questions exploring the experience of socializing in the public spaces, questions about their opinion of the importance of providing public social sittings in the city of Amman and questions evoking their feelings while being at the public spaces (questions of interviews with the users are in appendix A-2).

---

[25] The interview guideline-questions are attached to the thesis in appendix A-2.

Table 7 Variables to be determined in the interviews for evaluating a visitor's perception of the related public spaces and its related question phrasing

Type of interview question	Description and illustration	Question phrasing
Experience / behavior	To elicit a description of the visitor's experience, behaviors, actions while in the public space.	What do you feel …?
Opinions, values	To elicit what the visitor thinks about her/his experience, to reveal visitor intentions, and values.	What do you believe…?
Feelings	To elicit how the visitor reacts emotionally to her/his experience.	Do you feel excited, anxious, happy about …?
Background / demographic	To elicit the visitor's description of themselves to serve other aspects of the study involving facts concerning the visitor's profile	Nationality, distance of origin, educational level
Knowledge	To elicit factual information from the visitor or what the visitor considers factual.	Do you think…?

All interviews were recorded, transcribed and analyzed directly using the MAXQDA computer program (explained in the subsequent section 7.5.1). However, throughout the survey time the researcher kept referring to the literature and interconnecting it with the obtained data from the interviews. Memos and notes taken were an ongoing process through the whole data collection process.

7.5 Analyzing the Data, Methodological Triangulation

The data analysis process of this research involved qualitative and quantitative methods to reveal multiple aspects of a single empirical reality (Denzin, 1978 in Silverman, 2004). Methodological triangulation of both approached was implemented in this research to guarantee the reliability and the validity of the analysis.

"Triangulation" was first introduced by Norman Denzin (1978) and defined as "the combination of methodologies in the study of the same phenomenon" (Denzin, 1978, P. 291). The word "triangulation" is metaphorically derived from trigonometry and geometry and used to determine the exact location of a point/object by measuring angles to it from known points at any ends of a fixed baseline. Denzin, whose position was discussed by many scholars (e.g. Erzberger and Prein, 1997; Erzberger and Kelle, 2003, Flick 2007; Kelle, 2004, 2007) recommended triangulation as a strategy to analyze a single phenomenon from a different point of view to better understand that investigated phenomenon. In this research a single qualitative method is not enough to deliver comprehensive reliable knowledge about the dynamics and

powers existing in public space. Therefore, the researcher considered using different techniques to ensure the comprehensiveness, validity and feasibility of the findings. In the subsequent sections, the process in which the methodological triangulation was achieved will be discussed in detail.

7.5.1 Using MAXQDA

This research uses MAXQDA 11, a software program to facilitate Qualitative Data Analysis (QDA). MAXQDA is one of the few software programs[26] that offers support for mixed methods of qualitative and quantitative data and enables different kinds of triangulations between different sources of evidence. The qualitative data collected from the two occasions of fieldwork at the different case study locations were documented and processed by MAXQDA as different document group sets by the researcher. Methodological triangulation was another crucial reason for using MAXQDA because qualitative and quantitative data could be analyzed together. Additionally, the quantitative data delivered by user interviews, expert and key informant interviews, memo notes, observation protocols, etc. could be analyzed and linked in a highly interrelated and integrated way.

All the qualitative data that the researcher collected on the two occasions of fieldwork in Amman was transcribed and further imported to be analyzed with MAXQDA. As different methods were used (open interviews, observations, group discussions), the software offered the ability to arrange the corresponding data in different folders (document groups).
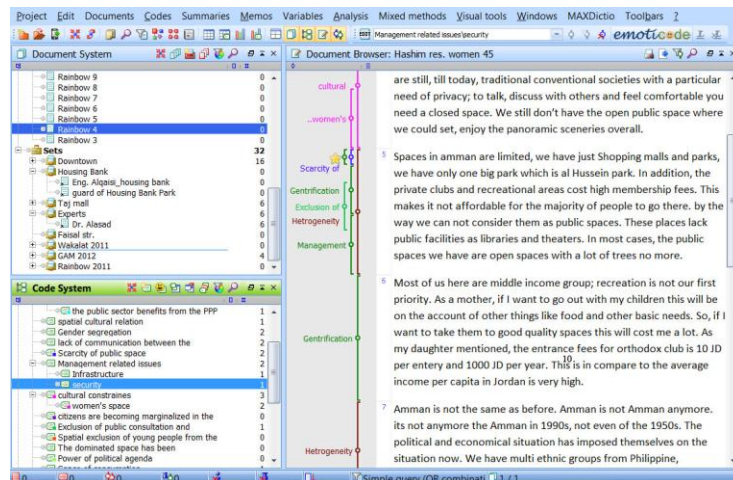
Figure 7.3 Transcripts arranged in the MAXQDA documents system and linked with the developed codes

---

[26] There are only a few software programs on the market that are designed to process both qualitative and quantities analysis. In addition to MAXQDA, the other mixed methods analysis programs are QDA Miner and NVivo.

In addition to the technical part of transcribing and analyzing the collected data, in parallel to the ongoing data analysis the researcher kept writing memos and reports of the planned occasions of fieldwork, data analysis activities and the purpose and the results of the different methods. This helped to keep track of the entire process.

7.5.2   Inductive Approach in the Analysis Process

The process implemented by using Grounded Theory calls for an inductive approach that allows the findings and the interpretations to emerge from the sequent themes inherited in the raw data. Unlike the deductive approach where key hypothesis are often informed prior to the analysis by the investigator, the inductive analysis process performs as an escalating spiral that starts at the bottom with a pool of unrelated data which reveals a hidden structure of codes underpinning the collected data. Moving up through the methodological spiral, the intensity of coding increases and more linkages between them are created and consequently the interpretation the build the knowledge of this research (figure 7.4).
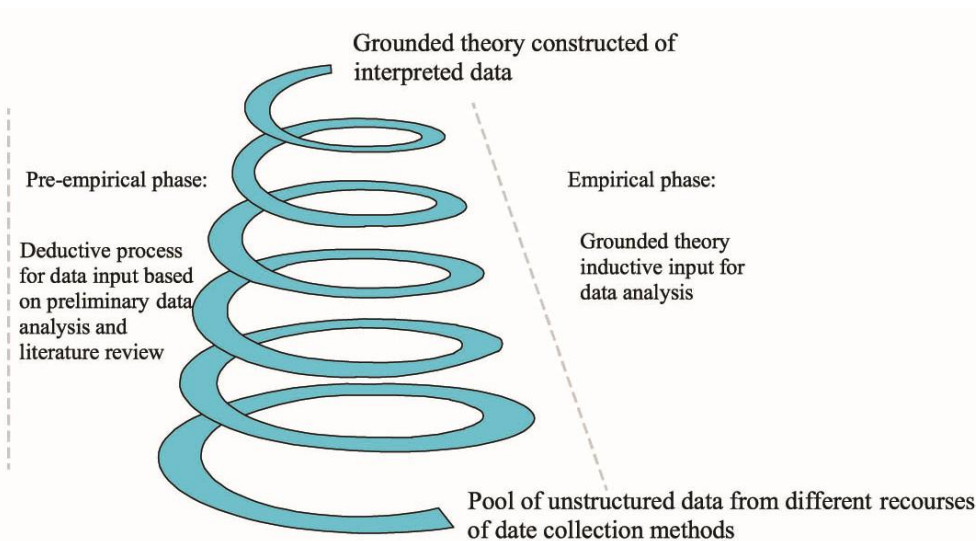
Figure 7.4 The theoretical spiral illustrating the process in which the theory of this research was constructed

It should be noted that the data analysis approach is mixed of both deductive and inductive approaches (figure 7.5). According to the literature review on Amman public spaces, theoretical notions on public space and the researcher's personal observations acted as an auxiliary source for generating the initial codes in the beginning of the data processing. The subsequent coding of the in-depth interviews were achieved through the ongoing development of new codes. The analysis of the subsequent chapters (chapter 8) went through multiple process of coding and interpretation.
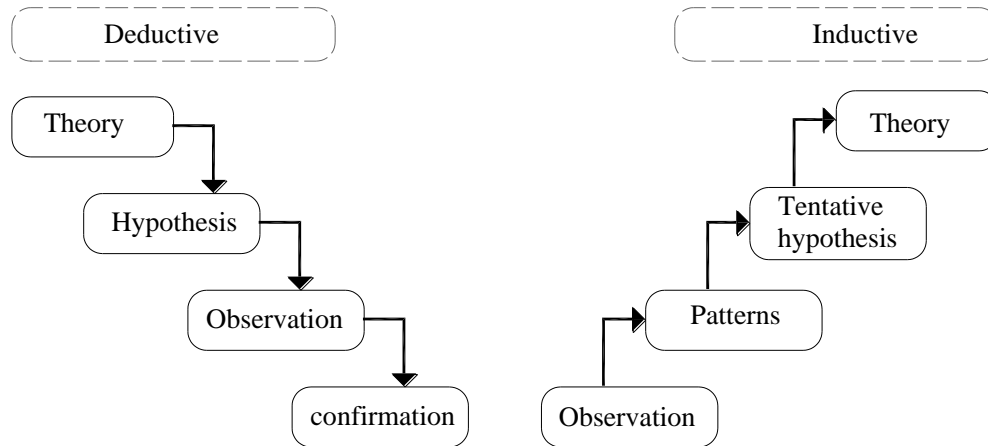
Figure 7.5 The deductive vs. inductive data analysis approach

7.5.3 The Coding Paradigm

The continuous inductive coding of the material showed gradually evolving patterns of codes generated in the different public spaces with connections arising between them, which made the differences between the selected open spaces visible. However, all case studies share some characteristics in terms of modes producing them and determining the rules of the negotiations between different codes. This triggered writing comments that clarified the links and meanings of certain codes. In doing so, the researcher developed something similar to organizing a 'raw' matrix that showed the codes relating to the three components of peoples' space: the conceived, perceived and lived spaces. Subsequently, the researcher identified the relation between the codes of each space and then drew a matrix of indicators that described the public space environment and the strength of each indicator on the basis of the frequency in which it repeated in the different data collection methods.

Table 8 Process of the inductive approach that is implemented in this research

Step	Inductive activity	Purpose	Grounded Theory phase
1	Transcribing the interviews conducted in the fieldwork and writing observation protocols	Preparing of raw data files	- Preparing of raw data files
2	Creating codes and themes from the pre-empirical phase, fieldwork, and preliminary literature review	Using auxiliary sources for generating the initial codes	- General categorizations

3	Importing data into MAXQDA and arranging in document system	Initial coding and generating of new codes	- Starting with the coding process, line-by-line coding - Testing validity of predefined codes - Getting a feeling for the data
4	Intensified coding Initial grouping of coding	Reading all documents and linking them to the coding system Generating sub-codes Identifying a few individual codes (see section 7.6)	- Establishing links between codes - Evolving differences and similarities between case study areas - Doing some extra analysis to understand the impact of the non-related individual temporary phenomenon
5	Building up a 'space matrix' that highlights the codes of the conceived, perceived and lived spaces	Creating a matrix to identify codes and attributes of each space and their links	- Forming spheres related to public space and their connections - Analyzing and comparing subsequent data, grouping similar codes into concepts
6	Focusing on codes revealing the powers controlling each space	Discovering the individual characters of the different cases	- Deepening the understanding of the individual cases - Reviewing the emerged literature
7	Conducting a second fieldwork with a better understanding of the context and more focused analysis	Examining the reliability of the generated codes Intensifying the analysis Covering the gap of the analysis from the first fieldwork	- Improving the reliability and validity of coding - Abstracting concepts into categories; axial coding - Executing methodological triangulation
8	Writing up the analysis integrated with the interpretations	Creating descriptive narrative accounts of the case studies	- Integrating the emerged literature based on the emerged code interpreted data
9	Writing up the findings for each case study area	Interpreting the data from the categorized concepts	- Connecting individual cases with the other case studies and with the overall focus of this research
10	Using Grounded Theory to interpret data	Condensing presentation of findings	- Enabling comparison of issues related to public space conditions across the selected study areas

7.6 Spatio-temporal Phenomenon Influencing the Field Research, "Arab Spring"

In late 2010, at the proposal writing stage of this research in Amman, the researcher did some preliminary site visits to get a sense of the topic of this research and to develop the research questions and objectives. During that time it was rarely noticed during the researcher's observations or participants' observations of the exploratory sites visit that there were central codes dominating the whole public sphere and street narratives in Amman. A few months later after traveling back to Germany to start working on the disputation, the first wave of Arab Spring began in Tunisia. One year later, the revolutionary movement

of the Arab Spring escalated and extended to reach other Arabic countries. All demonstrations and strikes in these countries were taking place in streets and plazas that have symbolic values. Being abroad and informed about the political situation in Amman only through the media and the western news sources, the researcher had some doubts about the actual situation in Amman and about the feasibility of conducting the fieldwork in the selected public spaces in Amman where all the dynamics of the uprisings took place. These kinds of social activities might have an enormous impact on the perception of theses spaces and therefore on the behaviors and practices that take place there. A lot of question marks were raised at that time whether the situation in Jordan would escalate to witness the same fate as in the neighboring countries. This unclear situation caused hesitation and uncertainty for the researcher whether the focus of this research should consider the other value of public spaces as arenas for democracy and political negations, or eliminate that consideration completely from the analysis. The decision was not easy without being at the heart of the event and eventually evaluating the situation as it is in reality in Amman. Thus, the researcher decided to reconsider this issue after traveling to Amman and starting with the data collection and analysis. Accordingly, the type of collected data would influence whether to consider the Arabic Spring political issue in this research or to eliminate it.

In the subsequent three sections, background literature about the Arab Spring in the region of the Middle East and North Africa, in general, and in Amman, in particular, is provided. Subsequently, the Arab Spring is presented in terms of its spatiality. Eventually, the researcher's perception and remarks regarding the Arab Spring in Amman will be discussed and consequently the logic of eliminating its impact from the focus of this research.

7.6.1   Arab Spring, Sequential Political Deficiencies

The sequential eruptions of the Arab Spring have caused a fundamental shift in the national and regional strategic balance in the whole Middle East (Helfont and Helfont, 2012). It was expressed differently in the Arabic countries in the Middle East and North Africa depending on the political social and economic situation in each country. In Tunisia, where the Arab Spring started, a vegetable cart seller called Mohamed Bouazizi burned himself with fire in one of the public streets expressing his frustration from the whole political system. In solidarity with Bouazizi anti-regime protests rose up and quickly spread throughout Tunisia. The action of Bouazizi sparked the revolution and eventually toppled the 23-year rule of Ben Ali, the president. The uprisings extended later to Algeria and by February 2011 to Egypt where the citizens expressed their demand for change peacefully. However, the situation in Egypt escalated and violent clashes occurred which ended the 30-year regime of Husni Mubarak.

In the Gulf region, the Arab Spring had less of a dramatic impact. For example, in Bahrain it took the form of a series of demonstrations for more political freedom and equality for the Shia population[27]. The demonstrations developed to demand the end of the monarchy system (Helfont and Helfont, 2011). On the other hand, in Libya and Syria, the demonstrations gradually developed to be violent and extremely bloody and turned into civil war. Although the Arab Spring had sweeping changes in many of the Arabic countries in the Middle East, it had less impact in Jordan, but it has indeed charged the public sphere there.

7.6.2   Arab Spring in Jordan

Giving the brief overview presented in section 7.6.1 on the impact of Arab Spring in the Arabic region, in this section an elaboration on the Arab Spring in Jordan is provided. The focus will be on the main driving forces that participated in shaping the socio-political landscape in Amman and not on the individual incidents of protests in the city.

Jordan, as many countries in the region, has a long tradition of protests. In the early 1950s, Jordan's first constitution allowed the right to establish and join political parties, as well as to political assembly (Al Attiyat et al., 2005; Schwelder, 2012). Despite the fact that this right was suspended in 1957 and was not reinstated until after 1989, protests happened and people asked for more freedom in that regards. However, in1989 a "political reopening" occurred for the same right of political assembly and multiple political parties, activism, public debate, and a free and active press. Accordingly, if a political demonstration was planned to take place, the organizing group would inform the government and need formal permission for that political activity. All the details, where the protest would take place, the activities organized and the number of people participating should be indicated in order to get permission. However, the permit system was suspended in the 1990s and reconsidered in only 2001 as a temporary law. Traditionally, the government often responded by limiting the organized group and not allowing an open protest. The government would suggest different public places than the intended ones, not wanting march protests as it wanted to relegate protest activities to stationary and easily-contained places. Thus, the protesters in Jordan have had to negotiate with the government for years to be able to protest. In 2003, the law was modified to not permit the groups who do not have citizenship to protest in public. (Schwelder, 2012). In addition to the citizenship condition, the law stated that the organizing group of the protests was personally responsible and would be arrested for any damage to public property and/or

---

[27] "Shia" is the second domination of Islam it represents around 10%-20% of the world's Muslim body while Suni consists 75-90% of the world's Muslim community. The short form of the historic phrase Shīʻatul, meaning followers or of Muhammad's son-in-law and cousin Ali, whom the Shia believe to be Muhammad's successor in the Caliphate. Sunnis are a majority in most Muslim communities

infrastructure or for insulting a foreign regime during the gathering (Schwelder, 2012). Hence, protesting is not a new phenomenon in Jordan and therefore the demonstrations that occurred due to Arab Spring were not the first of its kind in Amman and did not develop into unpredictable practices and consequences as in the case of other surrounding countries.

Besides the fact that the people in Jordan are relatively empowered and informed about how to properly carry out a political act, the escalation of the protests were relatively controlled by the several reforms that were done by King Abdullah II who emphasized through many campaigns on the national identity since acceding to the throne in 1999. Since then several major wide reform programs were established to strengthen the national sense of belonging and identity and to introduce and promote concepts of modern democratic decentralized institutions, empowering civil society and achieving economic prosperity. Among these initiatives were "Jordan First" in 2002, "National Agenda" in 2005 and "We are all Jordan" in 2006. However, the impact of these initiatives was not as promising as the visions behind it. It has had little impact on Jordan's political and economic landscape. The king's practice of compiling a list of reforms has been ineffective (Schwelder, 2012) (see chapter 2.5.3).

Jordan like most Arab states couldn't ignore the sweeping change of the Arab Spring, yet in Jordan the demand for change manifested differently. In Amman, the Arab Spring was experienced on three different scales: the national, regional and international scales. At the national level, Jordan was influenced by the domestic situation of the stumbling economy, unemployment, corruption and inflation which have encouraged the people to express their dissatisfaction with the regime's politics and to demand for change. At the regional and international level, there were other contradicting forces influencing the domestic situation and political decision-making. As Jordan is strategically located between two politically competing forces, it has become a strategic battleground between those who seek a democratic region with political freedom, and those who want to maintain the status quo (Helfont and Helfont, 2012). On the one side the Sunni majority of the Gulf Monarchies aims to maintain a regional economic and political stability. In 2012 the Gulf Cooperation Council (GCC) invited Jordan to join the wealthy gulf bloc, in an attempt to offer a stable and successful economy, new investments, jobs and security ties in exchange for limiting political freedom and compelling the people to quit demanding for more political rights (Helfont and Helfont, 2012). For the same reasons Saudi Arabia allocated billions of dollars to its neighbors in Egypt, Jordan, Bahrain, Syria and elsewhere in hopes they would resist political change delivered by the uprisings that might subsequently threaten its own stability and politics (Richter and Banerjee, 2011).

In addition to the forces pushing for a democratic region and those who want to maintain the region politically and economically stable, another very influential third force is pushing for increased political reform in Jordan as this seems to be the best way to control the protests against King Abdullah II (Richter and Banerjee, 2011). This third powerful force is the push coming from the United States (US) that increased its economic and military support for Jordan which is already the second largest per-capita recipient of American economic aid. In 2012, Jordan received $682.7 million in total military and economic aid, which was the highest among the previous U.S. commitments[28] (Helfont and Helfont, 2012).

7.6.3   Spatiality of Arab Spring in Amman

The physical landscape of Amman has profoundly changed for many reasons, namely the high population growth and the economical shift towards privatization (see chapter 2). From the establishment of Amman until the late 1990s, downtown used to be the center of Amman and therefore hosted all public collective activities including protests, especially the ones of the Muslim brotherhood which used to shut down downtown to put pressure on the government to listen to their demands. However, in the present time downtown no longer represents the commercial, financial and administrative center in the city as it did before (Al Asad, 2011; Makhamreha and Almanasyeha, 2011; Schwelder, 2012). West Amman since the late 1990s has gradually been structured to facilitate spaces of global capital. Many large projects are distributed in different parts of West Amman to create a cosmopolitan city that is far from the traditional part of the city where social political practices might take place. In most of West Amman projects, for example the Abdali neoliberal project, a low or middle-class citizen can't afford the over-prized cafes, recreational paid facilities and food consumption places. Most of these projects are constructed for the elite and business people. This governmental strategy is automatically excluding and blocking low-income citizens from these socio-economic perception-wise gated spaces.

Despite the fact that Amman's downtown has gradually lost its importance as an administrative and financial center, it still has high symbolic value and spatially fertile areas for demonstrators. Protestors want to operate in places that have high impact and large populations, are spatially visible from slow traffic areas and where their gathering is not interrupted by high traffic, overpass or underpass roads. Amman's downtown might not be as influential as it once was but it is still perceived by many as a core space for protests. Due to more educated people, globalization, modernity and the availability of different technologies and free social media, public space is not the main arena for political visibility as before.

---

[28] In 2008 the U.S. and the Jordanian government reached an agreement whereby the United States agreed to provide a total of $660 million in annual foreign assistance to Jordan over a five-year period. See: Jeremy M. Sharp, Jordan: Background and U.S. Relations (Washington, D.C.: Congressional Research Service, 2011, P. 20).

Television, radio and smart phones have all helped in the direct forecasting of events. The availability of low-cost internet has enabled the public to have a wider perspective of their countries' economic situations and political deficiencies (Helfont and Helfont, 2012). Therefore, it is no longer possible for the government to completely control the transformation of the narratives between the people or even to suppress their visible rejection and deny their government policies. In conclusion, the narrative of the demonstrations was partially influenced by use of space in Amman. Investigating the other invisible aspects of the protest culture could be helpful in understanding the nature of future protests.

7.6.4   Influence of Arab Spring on the Research Fieldwork

Spending several days at each site of the selected case studies helped profoundly in deepening the understanding of this research and how to best achieve its objectives without being distracted with other issues that might convert the focus of this research. The different data collection methods that the researcher used revealed that the situation in Jordan, namely Amman, is not fundamentally at the street-daily life level influenced with the extreme uprisings happening in the surrounding Arabic countries. While observing the people's daily activities and practices in the public spaces, the researcher didn't witness a single protest activity in any of the selected public spaces during the three field visits. In fact, the researcher found out from the different data collection techniques especially from the observations and interviews that what matters for most of the users in the public spaces in Amman is to feel publically and politically safe and therefore they preferred to avoid taking place in any of the public demonstrations outside. Most people in Amman complain about the bad economic conditions especially from the high prices. However, the majority of Amman's young and well-educated population is not interested in getting involved in any anti-regime activities as a way to express their dissatisfaction with the current politics and governmental strategies. This attitude seems to be not only adopted at the spatial practice level, but also at the ideological level.

Based on the preliminary assessment done by the researcher to evaluate the impact of the political situation on the spatial practices associated with the desire to comprehensively cover the main concerns of this research, the Arab Spring was eliminated as a focus area in this thesis. Nevertheless, although the Arab Spring does not fundamentally affect the spatial practices of the users of the public space in Amman, it had some negative impacts at the social level and made people more cautious and conservative to express their actual beliefs in the public arena. Furthermore, it is important to mention that the tension brought by the Arab Spring affected the participants' willingness to participate in this research, and therefore influenced the participants' openness, honesty and the reliability of their contribution to some of the interview questions. On many occasions during the fieldwork the researcher was confronted by the

aftermath of the whole regional political situation on the public sphere in Amman. For example, while conducting the second field trip in September 2012, the researcher went everyday for a whole week to Rainbow Street to conduct interviews and observations. Between 20-30 minutes on average were needed for each of the 5-6 interviews with the users of the street. On one incidence, after finishing an interview with a participant, two policemen questioned the researcher about the frequent visits to Wakalat Street, what was discussed with the different people and why notes were taken. The researcher explained to them about the research topic and the need to collect data from different public spaces in Amman. The policemen were then convinced but they had been suspicious that the researcher was involved in some kind of political act or collecting information for political purposes or for journalism.

Another manifestation of the influence of the Arab Spring was the participants' willingness and openness to contribute to this research. Some participants apologized to take part in this research while others accepted to be interviewed at the beginning but refused once they knew that the interview will be recorded. In many cases in which some accepted to make a recorded interview, the answers of some questions were not related to the point but touched on the political situation instead. It seemed as if they were either being careful in case the interview turned out to be related to politics and they wanted to be on the safe side and express their satisfaction with the regime, or their attitude, on the other hand, might indicate the political situation dominated the discourse and codes of everyday life in the domain of current public spheres.

Researcher: "What do you think about the changes made to this plaza? "

Answer of a 65 year old woman from Iraq:

"I say…. This country is greatly blessed as long as King Abdullah is there and in a good health. May Allah protect him and his siblings. I love this king and wish him a long life. He is protecting and hosting us. This country is much better than many other countries. Electricity, food, work, salaries, security, all is available in this country. Here security is god's gift to this country. I stay until 3:00 in the morning without any fear that I could be robbed or killed. The policemen are my children. I love the king and his wife Queen Rania. We are staying here with the protection of god and the king. I pray every day for the king, that god prolong his life and win and gain victory against his enemies" (Al Husseini Mosque Plaza, 65 year old female,, 3.11. 2012, translated from Arabic).

After such similar incidences the researcher considered having a casual talk with the participant before starting the actual interview and to start by explaining explicitly that the reason for recording the interview is for documenting the participants' contributions that could not be fully documented by writing direct notes and eventually that the name, occupation and the introduction would not be recorded. This

helped a lot in wining more participants to accept to be interviewed and subsequently to feel safe and comfortable to elaborate on their answers and express themselves openly.

8 CONCEPTUALIZATION OF PUBLIC SPACES IN AMMAN: PRODUCED AND REPRODUCED PUBLIC SPACES

This chapter aims to draw a proper conceptualization of the public spacs in Amman by analyzing the practices of the different stakeholders involved in the space production process. To do so, the social practices of the users are investigated to conceptualize the perceived space. Additionally, the practices of the municipality and the planners who lay behind the conceived spaces, moderate the negotiation between the locals' needs and analyze development approaches. Finally, at the end of this chapter this research tries to conceptualize the lived space that encompasses the dynamics and interactions of the two former spaces.

8.1 Everyday Practices in the Public Spaces in Amman

For the purposes of being systematic in the analysis, as this research analyzes nine public spaces, the researcher categorized the public spaces into five typologies: (1) park pattern public space, (2) street pattern public space, (3) plaza pattern public space, (4) closed public space (shopping malls), and (5) the informal public space (Airport Road).

8.1.1 Walking

Walking is perhaps the most frequent activity exhibited by pedestrians and users and one of the most socially accepted behaviors in most of the selected public spaces in this research. Walking is a common practice of people of both genders and different age groups in most of the analyzed public spaces. Among all the selected public spaces, both Wakalat and Rainbow Streets are the most encouraging public spaces for walking. People walk there in diverse groups encompassing all aspects of age, gender and location of residence. Most of the pedestrians do not live nearby but come from different driving destinations in the city. The peak time for walking is between 7:30-9:30 pm. Rainbow and Wakalat Street are good examples of interesting places for pedestrians in Amman as they are liner and encourage walking for a long distance and they are serviced with street furniture and offer a wide variety of activities and recreational entertainment. These two public spaces are characterized with their linearity with shops and restaurants distributed along both sides of these streets. The drawback of Rainbow Street is that it is congested most of the week days and especially at the weekends and official holidays. This limits the walkability and pedestrianisation of the street. Wakalat Street, on the contrary, offers a safe pedestrian environment as it is only for pedestrians and vehicle access is not allowed. In the case of King Faisal Street and Al Husseini Mosque Plaza in the downtown, the two public spaces are located in a mixed-use area and not in neighborhoods, so walking there is often connected to shopping and livelihood activities. However, the

walking activity there, even for shopping purposes, deteriorated in the last couple of decades as Amman expanded and new centers emerged in other areas in Amman. The highest walking activity in King Faisal Street and Al Husseini Mosque Plaza is observed to be in the afternoon time by young people coming from different parts of Amman for recreational purposes.

> The commercial center used to be in the downtown area, but when new shopping and commercial centers opened in the neighborhoods, the public life and commercial activity deteriorated in the downtown area. As a father of a big family, I don't go as before to the downtown area for buying my family's supplies. Instead, I go to the markets close to where I live (King Faisal Street, 52 year old male, 23.10.2012, translated from Arabic).

Despite the fact that walking is one of the most practiced activities in the public spaces in Amman, there are some limitations preventing some users from going to public spaces in Amman just for walking purposes especially female groups. In addition to the physical layout and design aspects that might not encourage some users to walk in public spaces in Amman, the culture is a barrier for some not to feel comfortable or safe to walk in some public spaces in Amman like in the case of Abu Darwish Plaza and Al Husseini Mosque Plaza, or even all other selected public spaces during the evening time (see section 8.3).

> As a girl it's not possible for me if I want to just walk on a regular street or to sit on one of the benches on the sidewalk. This is not only because of the dilapidated conditions of most streets for walking, but also because of the general perception that it is socially inappropriate to go to any public street for walking. Everyone will start to look at me as if I am doing something wrong, but here in Wakalat Street (in Rainbow Street as well) I can sit and it's normal (23 year old female, Wakalat Street , 20.9.2011, translated from Arabic).

In the case of the Housing Bank Park and the National Gallery of Fine Arts Park, walking is noticed to be one of the most preferred activities of the users of these two spaces. This is due to the availability of seating benches and different playgrounds where people could move between different activities. In the case of the sides of the Airport Road, no walking activity was observed. People go there for specific activities (section 8.2).

Table 9 Walkability level in all of the selected public spaces

Typology	Public space	Walkability	Time of day	Purpose
Street pattern public space	Wakalat Street	High	6:00am-10:30 pm	walking more than shopping
	Rainbow Street	High	7:00 am-9:30 pm	Recreational purposes
	King Faisal Street	High	8:00 am -10:00 pm	For shopping (tourists for walking)
			7:00am - 9:00 pm	Young people for shopping and recreational purposes
Mosque plaza pattern public space	Al Husseini Mosque Plaza	Low	7:00am -9:00 pm	Vending activities
	Abu Darwish Mosque Plaza	Low	-	Shopping purposes
Park pattern public space	Housing Bank Park	Medium	10:00am -3:00 pm	Moving between different park activities
	National Gallery of Fine Arts Park	Medium	6:00am -8:00 pm	Moving between different park areas
Informal public space	Sides of Airport Road	No walking	-	People go there for grilling and seating
Closed public space	Taj Mall	Medium	Within the opening hours	Shopping and socializing purposes

In addition to observing the frequency and activities related to walking, the researcher did some interviews with some of the older residents of some of the selected public spaces especially in the downtown area in King Faisal Street, Al Husseini Plaza and Rainbow Street to explore the temporal depth of walking activity and to know whether it is increasing with the emergence of new typologies of other spaces or deteriorating as many other aspects of the public culture in Amman. After some interviews, the researcher noticed that the intensity and preponderance of information come from the shopkeepers who have been living and working in some of the selected public spaces for decades and have witnessed the physical and social transformation of the place. These people had a diversity of stories about the social structure of these areas and about the spatial and social transformation that has happened through the years, especially in the case of the downtown area that has a distinctive history.

I think Amman had a strong sense of public spaces. My family has been living in Amman since it was a small village. My father has been here since the late 20s and my mother since the 30s. When they arrived, Amman did not have more than 10,000 inhabitants. They say that there was a very active public life in Amman, very active, The area of Jabal Amman was a famous walking area for Amman,. Half of the people used to go and walk there. There were occasional parks just during Eid times for the children to play in. Later on, during the 50s another typology of public spaces appeared like parks. I think a break occurred in the 70s when Amman grew enormously. I think this period is the period of the disappearance of public spaces. If you go back to the area before that date, Amman had a very active public culture. It was not an intentional part (public culture); it was part of the everyday life of the residents (Expert interview, CSPE, 23.10. 2012, translated from Arabic).

The interviews with some of the older residents and shopkeepers of Rainbow Street and downtown said that a few decades ago, walking used to be a very common culture among the majority of residents of the surrounding neighborhoods. It used to be a daily activity of the residents. Small grocery shops (Dukkaneh/ Baqalla) were a destination on a daily basis for groceries and households supplies. They were easily accessible by foot and located within walking distance from every house in the neighborhood. However, as modernity arrived and Amman became more urbanized and globalized the small grocery shops lost their historical value and social role for encouraging walking and socializing in their neighborhoods. The introduction of the big franchised supermarkets such as Carrefour, Spinney's and Safeway has replaced these small shops. These traditional stores became less attractive for many of the residents even though they were located within residents' walking distance. Another issue that negatively affected walkability and thus led to the deterioration of the public space at the country level was the introduction of the car which has dramatically cut down the walkability experience. People became dependent on cars to drive to faraway large stores. Using cars for reaching even near-by distances became an attractive alternative for most residents in Amman. The daily visit was cut down to once a week or every two weeks to a local store or the big grocery stores.

8.1.2   Sitting and Standing

According to the analysis, the park-pattern public space is the most convenient space for sitting and standing activities. The National Gallery of Fine Arts Park and the Housing Bank Park has the highest sitting culture. Both parks are provided with adequate sitting elements. However, the researcher noticed that this attitude has changed and there is an emerging public tendency to use the furnished streets for sitting and standing purposes. Wakalat and Rainbow Streets have the best quality, among all other selected spaces, for inviting residents for sitting and standing activities. In terms of quality, both streets have an encouraging atmosphere for sitting and standing and accessible for people to sit due to the availability of a number of benches and sitting areas which can be seen, so users do not feel bothered by anyone. Wakalat Street has a more inviting culture than Rainbow Street due to the absence of vehicles inside the street.

The different data collection methods indicated as well that in all of the selected public spaces there is a lack of physical elements for sitting facilities which has made standing the only alternative in many of these spaces. The second sitting opportunity for people is often in coffee shops and cafes and people preferred the ones overlooking the street which combines the attractions of socializing, sitting outdoors with fresh air, seeing others and eating. In the case of Wakalat Street which is the most inviting space for walking activity, the original street was deigned to include plenty of benches, but due to the complaints

from the shop owners of non-customers loitering around, the GAM removed the benches. However, this has not deterred people from sitting on curbs and on steps (figure 8.1). The same action of removing the benches and sitting elements was repeated in Rainbow Street to prevent the unpleasant male appropriation of some areas and therefore preventing other groups especially females from accessing these areas.

> We faced the same problem in Wakalat Street. Wakalat Street was supposed to be like Solitaire in Beirut but it didn't work due to the local community's socially unacceptable behaviour. We needed to remove the benches in order to prevent a gender issue and the young males gathering in order to prevent harassments (Expert interview, GAM, 23.10.2012, translated from Arabic).

In the case of **plaza pattern public spaces,** sitting and standing in the Al Husseini Mosque Plaza is connected to begging and vending activities. However, on Fridays especially in summer time the mosque plaza is used as an extension to the mosque for praying and after the Dohor Pray sitting in groups close to the entrance where this area is shaded and enclosed by the façade of the mosque (figure 8.3). Despite the lack of benches and sitting facilities, men sit on the plaza floor in groups and converse. Standing there is very common as well. The Al Husseini Mosque Plaza has the highest ratio of people standing to sitting and has the least seats. However, the view of men gathered together sitting and standing is not pleasant and prevents many females from passing close by (figure 8.2). Between all the selected spaces the Al Husseini Mosque Plaza is the worst public place for sitting. This public space was issued the charterer of a public space for making a livelihood**.**

Figure 8.1 People sitting and standing at the entrances of the shops

Inappropriate use of the entrance area of the mosque

Appropriation of the shaded front area of the mosque plaza for sitting, standing and vending activities

Figure 8.2 Spatiality of livelihood at Al Husseini Mosque Plaza

Figure 8.3 Quality of sitting activity at Al Husseini Mosque Plaza

In general, sitting in the public spaces located in the downtown and East Amman is characterized by being male dominated and appropriated space. This phenomenon was confirmed through the researcher's observation in the preliminary field visits and through the analysis that was done in the Abu Darwish Mosque Plaza that shares the same character as the Al Husseini Mosque Plaza of being appropriated by a male presence and practices. The rehabilitation of the two plazas (Al Husseini Mosque Plaza and Abu Darwish Mosque Plaza) added some new design elements; nevertheless, it has not changed the social practices or the powers underpinning the negotiations and appropriation of these two spaces. While the renovation of the Al Husseini Mosque has not changed much in the practices, the design development of the Abu Darwish Plaza has negatively affected the use of the plaza (see chapter 6.3.5).

The observation of both sides of the Airport Road showed that this space is used mainly for sitting and standing. No walking or socializing activities were found there (see section 8.2). The indoor public space pattern is preferred in general among many people especially by pupils and young people aged between 12 and 22 years old more than the open one. Shopping malls are preferred due to the availability and close proximity of a diversity of recreational facilities, shops and other services. In addition to that, the management and the security encourages many females to consider shopping malls as a better option for going out, especially since shopping malls in Jordan do not allow males access individually or collectively during weekends to guarantee that females won't be harassed by males coming to the mall just for that purpose.

Table 10 Characteristics of sitting, standing and talking activities in all of the selected public spaces

Typology	Public space	Sitting, standing and talking	Time of the day	Purpose
Street pattern public space	Wakalat Street	Very High	4:00-10:30 pm	Sitting is connected to shopping activity; Active and passive socializing
	Rainbow Street	High	7:00-9:30 pm	Active and passive socializing
	King Faisal Street	Very low	8:00am -8:00 pm	Begging and vending activities
Mosque plaza pattern public space	Al Husseini Mosque Plaza	Low sitting but high standing especially before and after the Friday Dohor Pray	8:00am -8:00 pm	Begging and vending activities
	Abu Darwish Mosque Plaza	Medium, sitting higher than standing		Passive and active socializing appropriated by male groups
Park pattern public space	Housing Bank Park	Very high sitting activity		Diversity of purposes
	National Gallery of Fine Arts Park	High sitting activity	6:00-8:00 pm	Diversity of purposes
Informal public space	Sides of Airport Road	High on seasonal basis	4:00-8:00 pm	Socializing and picnicking
Closed public space	Taj Mall	High within the opening hours	Within the opening hours	Shopping activity; passive and active socializing

8.1.3 Vending and Street Trading

The "informal sector" generally indicates all economic activities that, at least in part, operate outside the national and the local legislative or regulation context. Informal activities could be debatable between legal and illegal practices and allocated in a gray blurred area (Brown, 2006). The products of this kind of economic activity may be legal but the process through which they are prepared may not be fully legal, for example where businesses do not pay taxes or are not registered (Chen et al., 2002). However, at the epistemological level of urban studies, some observers feel that the sector is simply too varied or heterogeneous to be meaningful as a concept (Peattie, 1987). At the urban planning level, informality could be perceived from a different perspective as people's contribution to their built environment which reflects the way they interact with their surroundings dynamically and therefore the public space is constructed through every day practices of these practices with its spontaneity, difference and disorder (Hanan, 2012).

Informality characterizes and dominates many public spaces especially in developing countries due to cultural, political and, most importantly, high unemployment resulting from the economic situation. In Jordan the unemployment rate is noticeably increasing. For example, by the third quarter of 2013 the

unemployment reached 14% compared to 13% at the same time in 2012 (DOS, 2014) while a World Bank study issued in 2011 informed that the informal workforce[29] (including agriculture) accounts between 20 to 25% in Jordan and the IMF in its last report, Regional Economic Outlook, Middle East and Central Asia, informal activities stood at 26% which include: vending, garbage and recycled material collectors, and home-based work.

Spatially, informality is observed to be in different locations in Amman. The downtown area is highly contested and characterized by informality that typifies and controls most of the practices of many areas in the downtown. It was revealed from the field work that vending is a very common activity and considered as an everyday activity taking place within the street-pattern and plaza-pattern public spaces in Amman. The downtown area, especially in King Faisal Street and the Al Husseini Mosque Plaza which are fertile environments for vending with all its forms, has kiosks and mobile and fixed vending structures.

In Rainbow Street there are no kiosks or vending structures as the sidewalks are too narrow to host such activities. Cart venders sometimes come to the street during the summer time or special occasions, but they are almost immediately driven off by the police while in Wakalat Street there is a vending culture in an organized way. The vendors of Wakalat Street work with official licenses and are highly subjected to the GAM rules and regulations of vending. In contrast to Wakalat and Rainbow Streets, the public spaces in the downtown (Al Husseini Mosque Plaza and Faisal Street) and in East Amman (Darwish Mosque Plaza) are often perceived as a hub of vending and selling activates. However, vending there is very random and spatially unorganized and many of the vendors have no vending license.

In the case of both the National Gallery of Fine Arts Museum Park and the Housing Bank Park, vending activities were not recorded inside these parks. However, outside the Housing Bank Park one coffee and sandwich cart was noticed.

In addition to the above described vending situation in each of the selected spaces, observations and interviews identified some characteristics of vending activities in the downtown area and East Amman:

- Street trading and vending are very common in Amman downtown and culturally perceived as accepted practices. They are not merely found within the selected public spaces in this research,

---

[29] The official international definition of the informal sector – adopted by the 15th International Conference of Labor Statisticians in 1993 – leaves it to the discretion of individual countries to decide what size of unregistered units to include in the informal sector and whether to include the agricultural sector and domestic workers in the informal sector.

but they also take place at other sites on a regular basis where some parts of these public spaces are fully occupied for these informal trades.

- Vending carts offer predominantly souvenirs like T-shirts, Dead Sea products and mosaic paints, as well as clothes, household utilities, vegetables and fruit, and in rare cases food products. Figure 9.3 illustrates the crowded conditions generated by these informal activities that are without a meaningful spatial formation on the sidewalk along Faisal Street and in the Al Husseini Mosque Plaza.

Figure 8.4 The crowd generated by informal activities along Faisal Street

- The majority of the street traders and sellers in the downtown area are young men. However, there is a substantial number of middle aged women and children involved in selling and vending activities in these places.

We are few women who sell here in this street. The men here are not friendly and steal from our "Basta". They are carrying knives and sometimes they take from my Basta more that what they pay for. And of course I can't struggle or fight with them" (Al Husseini Mosque Plaza, female, 65 years, 3.11. 2012, translated from arabic)

- The venders and small-scale traders perceive Faisal Street and Al Husseini Mosque Plaza as a livelihood space and add their own intervention to the original spatial order to accommodate their informal activities. The pedestrian areas of Al Husseini Mosque Plaza and the sidewalks of Faisal Street are appropriated for their needs.

- For vendors and shopkeepers, the surrounding physical environment slightly influences their vending and selling actives. This is a necessary activity that takes place under almost all conditions apart from the exterior physical conditions.

The rehabilitation didn't bring anything new for us, the number of our customers didn't increase or our income. The modifications that the Greater Amman Municipality did to the street didn't add much to it. The quality and the number of people coming here are still the same and for us venders it made no

difference. Perhaps this is good for tourists but for us it's the same (King Faisal Street, 33 year old male, 26.10. 2012, translated from Arabic).

- The most favored vending locations that attract visitors to their businesses are the front areas of successful well-known shops. These locations are in the way of people's flow and movement. Moreover, mobile carts are placed in the spots close to the highest activity rate and close to highly crowded street junctions.

- Most street venders work independently and have vending as their main livelihood,

- Many of the traders have worked in this informal field for many years (some have never had any other kind of work). However, some peddle in the afternoon after they finish their regular work in the public sector.

- The majority of the younger venders are educated. In some cases, they have a university education level.

- Many of the interviewed venders were complaining about the economic situation in the county and referred to their taking up vending as a main job due to the inflation, lack of job opportunities and inadequate wages in the public sector.

- In the Al Husseini Mosque Plaza and Faisal Street, vending and small-scale street trading activities usually take place in the morning until the afternoon and on weekends – on Fridays and Saturdays – when business increases extensively. During the weekdays most of the visitors are from the surrounding neighborhoods but on the weekends most visitors are locals from further districts in Amman and international tourists who go for shopping and leisure activities. Local young groups are likely to go to cafes to smoke water pipes, meet friends and eat food in the afternoon on weekdays for leisure whereas tourist visitors are likely to stroll along the street in the afternoon after visiting some other touristic destinations in Amman.

- The vending carts are mainly located on the pedestrian sidewalks next to the entrance gate or entrance way of the formal shops and distanced from other vending and trading units to allow people to pass through.

Figure 8.5 Random vending in Faisal Street

Figure 8.6 Vending in Al Husseini Mosque Plaza

> There is management, there are police units ...but, don't forget we have the Arab Spring now! The police have no power in the street. They don't dare to argue with the people there ....If you noticed, recently, the sidewalks are totally occupied by vendors, full occupation! We can't impose penalties due to the current political situation, not just in Jordan, but also in the whole region. We have orders from higher levels not to get in confrontations with vendors at the current time (Expert interview, GAM, 23.10.2012, translated from Arabic).

8.2 Inappropriate Practices to Traditional Norms in Public Spaces in Amman

8.2.1 Weekend Cruising (Driving)

Cruising has become a popular social activity in most of Amman's streets. Both young males and females cruise around in their cars especially on the weekends or when there are special events such as Eid Al Fiter or Eid Al Adha[30], the publication of the results from the final high school exam (Tawjihi) or the day of an important football match. Cruising in Amman's streets is characterized by an impulsive, reckless and often aimless course where each route has its own culture of cruising according to the area where young people cruise. In the downtown area it is different than in Rainbow Street, the Sweifieh district or Abdoun circle. Cruising by young males is mostly characterized by bothering people with their horns and loud music. In addition to that, females are often harassed while walking in the streets which is common in Amman because of the lack of sidewalks or poor sidewalks which are unsuitable to use (figure 8.7). In fact, many accidents in Amman are linked to this kind of practice. Cruising is becoming a dangerous phenomenon in other ways because it can involve stealing the bags of females walking on those streets where they drive around. Also, many accidents have been reported involving young males while cruising around. This kind of cruising is happening in some neighborhood that are characterized as socially diverse

---

[30] Eid Al Adha is the major festival celebrated by Muslims worldwide. Eid Al Fiter is the second and latest religious festival after Eid Al Adha. It marks the end of Ramadan, the Islamic holy month of fasting.

and encompass many foreigners and migrants in which the social relations between residents are not strong and therefore security is not high and the existence of suspicious strangers are not easily noticed, recognized and reported. This kind of phenomenon is not usual in the main public spaces as many people frequent the spaces and movement is slow due to the heavy traffic of the space.

(A)   (B)   (C)

Figure 8.7 Quality and maintenance of the sidewalks provided in most areas in Amman; (A) non-paved and Poorly maintained sidewalks; (B) no defined area for sidewalks; (3) narrow sidewalks with more than half of the area taken over by plantings unsuitable street trees

In some of the selected public spaces cruising is caused by several reasons. In the case of the public spaces located in the downtown area and Rainbow Street cruising is caused due to the traffic jams there and the people cruise trying to find new routes for their destinations; people also drive searching for parks, cruise in hopes of finding empty parking spaces on the side of the street or cruise just for cruising itself and for observing pedestrians and impressing girls walking on the street.

Cruising was highly recorded in Rainbow Street where cars have direct contact with pedestrians as the street and sidewalks are narrow. Females are to a large extent targeted and annoyed by these males' behaviors. In this kind of behavior young males feel protected in their cars and can drive away after they harass other people. They come on purpose to the walking street where it is guaranteed that there are girls around and they start to harass the females that come to enjoy the public space.

8.2.2   Street Harassment and Ghettoization (Female Point of View)

In all three public spaces with only slight variations the women feel harassed and informally ghettoized almost everywhere. This is not a phenomenon that has been noticed just in public spaces in Amman, but it could also be found in the working place as well. In the area of this research, harassment takes many forms in public spaces in Amman. The most common form is that of a standing man/men harassing girls

walking with verbal and nonverbal behaviors such as obscene noises, gestures, whistles, winks and locally known street phrases which are sexual in nature and mostly evaluating the women's physical appearances. The most common reaction from women in Jordan is to ignore what has been said and in rare cases to retort and continue walking. Also, harassment is taking another form with car cruising where males are harassing girls with loud music and face gestures from inside the car. This kind of harassment happens more in public spaces where car access is allowed and males feel protected inside their car.

> Yes, we hear this kind of talk almost every day! It's getting normal now; actually it's not normal to walk close to sitting or standing guys and not hear their annoying and meaningless phrases. When I encounter such practices I just ignore them and keep walking (Rainbow Street, 22 year old female, 23.10. 2011, translated from Arabic).

The observations and interviews of female users of the selected public spaces revealed that the overall attitude of women is to ignore and avoid these groups of male users. They further expressed that it doesn't matter where they go because they always feel bothered by the harassment and this phenomenon is becoming a normal part of going out. It's a phenomenon that is witnessed, not just only in the public space but also in every-day places (on the streets of the neighborhood, working spaces, shopping malls and even at the universities).

> Some people here are slightly closed minded and introverted, actually, not slightly but very. When they see a woman or a lady wearing a bit of a short dress, they perceive it as if it's not normal and they start to stare at the woman and harass her. This is what is not nice about this country; they should be more civilized in dealing with women, more civilized in looking at other people. They should be more open (Wakalat Street, 30 year old female from Lebanon, 23.10. 2011, translated from Arabic).

Additionally, the different analysis methods have defined some characteristics of harassment within the public spaces in Amman. (1) Young females are always the victims of harassment and the males are the harassers. (2) Generally, all females with their variety of appearance are subject to street harassment. However, the young females that do not cover their hair (wear hijab) and wear tight or short clothes are more likely to be harassed than the covered females. (3) The harassers often come from conservative backgrounds and are culturally convinced that females are weak, physically and mentally, and that they are not capable of fighting back. (4) Due to socio-economic reasons, female harassment is more likely to happen in the public spaces located in East Amman rather than the ones in West Amman (see chapter 9.2).

> The other issue is, unfortunately, that we are having not just economical variations but social ones as well, socio-economics. All of these issues are connected with the gender separation. A lot of guys were raised and knew just their mothers and sisters from the female gender, with the thoughts that they should protect their mothers and sisters, so they have this defensive attitude against public spaces where both genders mix. This group, unfortunately, deals with females as a weaker class which is, by the way, dangerous. This

problem has deeper social roots, but it appears greatly in the public spaces because these guys consider that they can talk or bother any women alone without a guy protecting her or supporting her in the public space (Expert interview, CSPE, 23.10. 2012, translated from Arabic).

8.2.3 Littering and Vandalizing

Littering and vandalizing are found in most of the selected spaces with different levels of damage to public property. Both the Housing Bank Park and the National Gallery of Fine Arts Park are the most maintained and clean spaces due to the private involvement in the management of these spaces. Additionally, both public spaces are fenced and accessed from certain points and the users are not allowed to enter these spaces after the closing hour. In the case of the Housing Bank Park, there is an employed guard to supervise the park and prevent any problems. Wakalat and Rainbow Streets have some vandalized parts; however, the existence of the supervision units provided from the GAM have helped a lot in preventing more vandalism and damage to these properties. The public spaces located in the downtown area are the spaces that suffer the most from the socially unacceptable behavior of the users. The Al Husseini Mosque Plaza and King Faisal Street are two of the recent rehabilitation public space projects; however they are the most badly used spaces and the worst in terms of maintenance and the level of cleanliness. Faisal Street, though it is the latest renovation project, it is severely lacking proper management. Most interviewees there expressed their dissatisfaction with the cleanliness of the street. Many of the sidewalks and curbstones are damaged as well as the chains between bollards which are broken in order to illegally use the sidewalk for parking purposes (figure 8.8). What once were street tree basins (sidewalk cut outs) has now become a place where people throw their garbage. Many of the signs in Faisal Street are covered with spray painted graffiti.

Figure 8.8 Littering and vandalism in Faisal Street

8.3   Emerging Western Adopted Practices

In addition to the major practices in the public space that have been mentioned in section 8.1, the observation revealed some emerging western practices taking place in the recently produced public spaces in Amman like music playing and dog walking. Music playing like guitar, piano and other instruments has become a popular activity in some public spaces in Amman like in Wakalat and Rainbow Streets. However, in the different spaces the mentality towards these practices differs. In Wakalat Street guitar playing is controlled by the street guards and the shopkeepers. Sometimes guitar players are allowed to play their music next to the shops, other times they are prevented by the security units or by the shopkeepers. In Rainbow Street guitar players have more freedom and they are more welcomed to play their music. Actually, they might be asked from the café and restaurant owners to play their music inside the cafes. On the other hand, dog walking is not always socially accepted and some users are panicked or irritated while walking close to dogs. In addition to that, dog walkers do not often clean up their dogs waste when they urinate or defecate on the street. Therefore, some users, residents and shopkeepers express their dissatisfaction with this practice.

8.4   Public Spaces According to the Time of Day

Spending many hours at different times of the day in all selected public space (chapter 7.4.1) has showed some common use and users' patterns in these spaces. The different data collection techniques, particularly the observations and the interviews, have showed that the time of day plays an important role in defining the users' patterns. In general young people from both genders constitute the biggest group of users who commonly just walk in and sit in the analyzed public spaces. Additionally, the analysis showed low preferences of females to attend the selected public spaces in the late evening and therefore indicating that young women avoid going to the city public spaces because it is perceived to be unsafe. Following is the researcher's observation of the users' patterns and practices in the selected public spaces according to the time of the day.

8:00 am – 3:00 pm

No users below 14 years old were found at this time of day at any of the selected spaces. This group is mostly absent in all of the selected case study public spaces accept for Taj Mall where children's playgrounds are available. Furthermore, King Faisal Street and Al Husseini Mosque Plaza are the most active spaces for pedestrians (above 55 years old) within these early hours of the day. After these times this age group avoids the crowdedness that arises later in the day. However, the majority of these people come from the surrounding neighborhoods. In Wakalat and Rainbow Streets very few pedestrians were

observed during these times. Most people found there during the morning time are the shopkeepers or employees working nearby. On the sides of the Airport Road, no people were found. This special case of public space has particular active hours in the afternoon (see section 8.1.1). In Abu Darwish Mosque Plaza few people go to the plaza at this time of the day. Some visitors of Al Bashir Hospital nearby go there for some rest. On Fridays more pedestrians are noticed to attend this plaza especially before and after the Dohor pray. Illegal vendors and small-scale street traders are found only on Friday at this plaza.

4:00 –9:00 pm

This time represents the rush hours of all of the selected public spaces. Males and females of all age groups are found around these times. Rainbow Street has the highest number of pedestrians between these times due to the variety of cafes and restaurants in that street. Wakalat Street has a good quality of public life around that time due to the availability of seating elements and the absence of vehicles inside the street. In King Faisal Street and Al Husseini Mosque Plaza tourists and people from all over Amman come mainly for shopping and walking activities during these times. The Abu Darwish Mosque Plaza has the least number of visitors and pedestrians during these times. It is important to mention here that the plaza had an active pedestrian life before the rehabilitation and before closing the street passing the plaza and adding its area to the plaza. Most of the residents and the people working there complain that the plaza has been turned to be for a specific group of users and many people who used to go frequently to this plaza stopped going there because of the poor reputation of the newly developed plaza. Maps (8.1 – 8.4) show the chronological development of the plaza.

> Since the beginning of the rehabilitation project, the pedestrian movement has clearly decreased. This plaza has turned to be a hub for bad habits from unemployed and badly behaved male groups (Al Zo'ran). This plaza has already gained its reputation to be a bad place and therefore people who want to stay away from troubles and bad reputation don't come to this plaza anymore (Abu Darwish Mosque Plaza, 50 year old male, shopkeeper working there for 25 years, 15.9. 2013, translated from Arabic).

In addition to closing the street which resulted in cutting the vehicle and pedestrian movement that performed as a social control over the activities taking place in this plaza, the sudden absence of the economic activity in the plaza (retail and grocery shops) that used to be there before the development has resulted in changing the attitude towards this public space. Despite the provision of commercial shops and public facilities within the renovation of the plaza, the high rental costs of the new shops that the GAM imposed has forced many of the shopkeepers at that plaza to leave the area and search for another affordable commercial area. The decision of leaving the plaza was influenced anyway by the design intervention from the GAM of closing the street that passes through the plaza which used to attract many people to buy supplies from these accessible stores.

All shop keepers and traders have left this plaza including myself. My photocopying shop used to bring me a relatively very good income. I used to have three assistants at this shop, but now I can't afford paying them their monthly salary. All shop owners left this area except for me and the glasses shop (optics shop). For the other one, his business wasn't dramatically influenced with the changes the GAM did since Al Bashir Hospital is an ophthalmology hospital that specializes in diseases affecting eyes (Abu Darwish Mosque Plaza, 50 year old male, shopkeeper working there for 25 years, 15.9. 2013, translated from Arabic).

Map 8.1 Abu Darwish Mosque Plaza in 2007
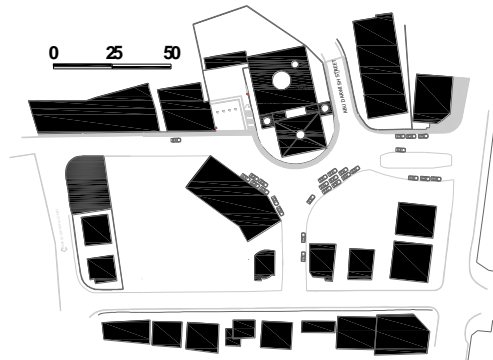
Map 8.2 Abu Darwish Mosque Plaza in 2008
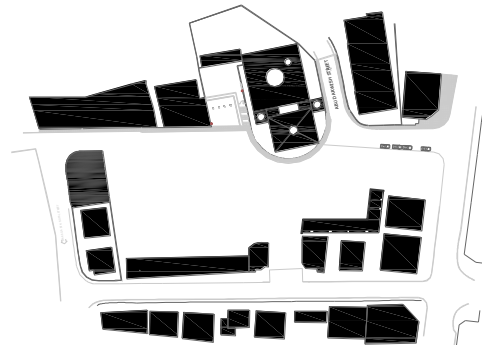
Map 8.3 Abu Darwish Mosque Plaza in 2009
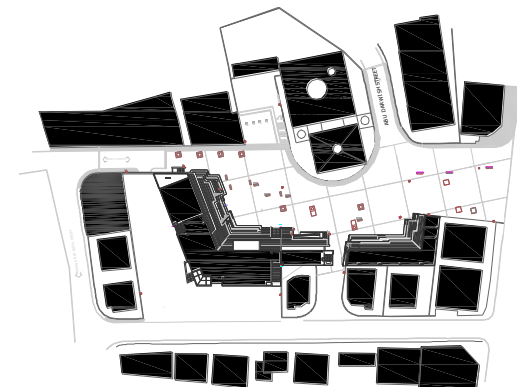
Map 8.4 Abu Darwish Mosque Plaza in 2010 until now
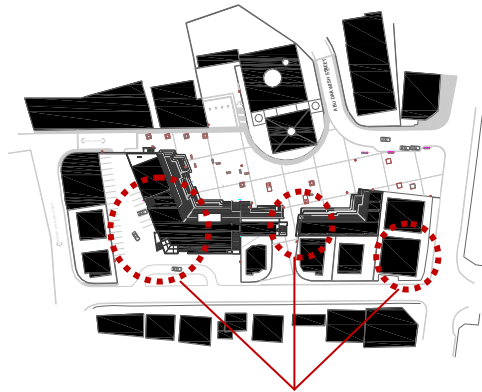
Isolated parking space behind buildings and the spaces
between buildings are poorly used by certain groups

10 pm - The Evening Situation

No appearance for children in all selected public spaces in the evening time was observed. Young males (15-35 years) are the most dominant groups attending all selected public spaces. On King Faisal Street, Al Husseini Mosque Plaza and Abu Darwish Plaza, males are noticeably dominating pedestrian groups after 10:00 pm.

8.5   Management and Maintenance of the Public Spaces

In this section the management of all selected public spaces is discussed and evaluated in terms of four dimensions (Matthew at el., 2008): (1) the regulation of uses with its both formal and social forms, (2) the level of maintenance of the physical elements and public properties of the public spaces, (3) the new investment into and ongoing resources of the public spaces that participate in regulating their uses and maintaining the public spaces, and (4) the coordination between different actors and interventions in the public spaces.

The direct data collection methods like the gathered documents and the interviews with planners, private investors and the architects involved in the development of some of the selected public spaces highlighted that the management of these spaces is undertaken either by the Municipality (in most cases) or by the private sector. However, the other qualitative data collection techniques like observations and users' interviews suggested that the management or the operation of management is a complex set of practices that go beyond the fact that it is managed by a single or even multiple actors which are formally declared to be in charge. The analysis indicated that the management of each of the selected case studies differs in terms of the involved actors and the way it is delivered and operated.

In the case of the **Al Husseini Mosque Plaza** and **King Faisal Street**, the management is undertaken by the public sphere represented by the GAM which initiated these projects from the conceptual drawings until the management phase and therefore it is in charge of the management and the maintenance of the two spaces. However, despite the fact that the rehabilitation of these two projects are recently development projects, the public properties are suffering from a low level of management, security and maintenance. In the downtown area, the social participation in the management process is absent due to the nature of the social structure and the use of these spaces. The downtown area encompasses a huge variety of different ethnic and national backgrounds. The use of the space is dominated by the practices of the groups that represent the majority of users appropriating these areas. The vendors, beggars and street traders control the use of the two spaces. However, they were from the beginning of the project not informed and involved and therefore not interested in the development delivered to these spaces and do not feel responsible in maintaining these developments (see section 8.1.3 and 8.2.3). The development process was not based on the local community needs and participation in the development process. Therefore, the permanent users of these spaces are not empowered and do not share the responsibility of sustaining these spaces. They believe that the development was done to enhance the physical layout of the space for tourists, not for the locals. However, it should be kept in mind that this negative attitude and mistrust of the public authority have deeper dimensions related to socio-economic issues.

> This street and plaza have a historical value and they are interesting for tourists. All the development that the Greater Amman Municipality did was for touristic purposes and to make the street and the plaza look nicer. We as vendors (bastat owners) are not involved in this and didn't benefit from this development. They started with this project but didn't continue to maintain and ensure the security in these spaces. In the Al Husseini Mosque Plaza a lot of mentally disordered people come and sit there the whole day (Al Husseini Mosque Plaza, 55 year old male, 15.10. 2012, vendor, translated from Arabic).

> Once they changed the transportation routes and the buses had to go in another area other than Faisal Street, we noticed that people stopped coming to the downtown area since it was not on their way anymore, they tend instead to go to the malls. After that, the shop owners complained to the GAM and asked to bring the situation back to its former situation. They accepted our demands and the street came alive again as it was before (Faisal Street, 55 year old female, 22. 9. 2011, shop owner, translated from Arabic).

On the other hand, the attitudes of the shopkeepers were neither supportive nor destructive; their attitude was more or less passive because for them what matters is their business. The different interviews and discussions held with the various groups of users of the selected public spaces showed that for the shopkeepers the enhancement of the public space is not essential for them. They already have their customers and what they care about is what happens inside their shops and how much money they earned at the end of the day. The character of those two public spaces is spaces for livelihoods which means that they are already convenient for them to have the basic necessary facilities to benefit from. They find it

good what has been done to these spaces. However, their small shops are not affected negatively or positively from this development.

> The improvement in Faisal Street has not increased the number of customers coming to my shop but it has made it more comfortable for the passers in this area. There was one day they closed the street and the transportation had to go from another area. We noticed that people stopped coming to the downtown and tended to go to malls at that time (Faisal Street, 50 years old male, 15.10. 2012, shop owner, translated from Arabic).

> This is called 'Souq Mango'. I remember Faisal Street because I have been working here for a long time, for 40 years... Honestly, it was not as beautiful as it is now. It was very old buildings and just ordinary street but I think it has recently been developed... now it's different. The Street is more beautiful, the architecture is simpler and the commercial stores are getting more. Also, increasing the number of streets around this street (King Faisal Street) instead of a single street has made it better, as the street was only a plaza with a few old buildings around. There were not many cars as now and only one bus for the whole route....One should wait for the same bus to drive back home and of course come back to the store with the same bus. It was very small…during the past two years, a lot of development on the street took place. They improved the drainage system and street pavement. They widened the street and they improved it over the years (King Faisal Street, 60 year old female, 15.10. 2012, shop owner, translated from Arabic).

In the case of the **Housing Bank Park**, according to the contract between the GAM and the Housing Bank, the bank should be in charge of the security and maintenance of the park. The park is managed through the bank's regulations. The park is opened during the bank's opening hours. As the local community was not involved in the planning process of that park, they are not taking any part of the management of the space. It is important to mention here that there is a conflict and ongoing negotiation between the GAM and the bank's administration as who is in charge of the management (chapter 10.2.2). On the one hand, the GAM claims that this is the bank's responsibility according to the contract. On the other hand, the bank's administration claims to be partially in charge, but some of the management activities are not within their responsibilities.

> The bank is responsible just for the management of the park (security, agriculture, cleaning) but not for the maintenance of the park! It's under the GAM's responsibility until the end of the contract. After 8 years of the contract, until October 2015 (Project Manager of the Housing Bank Park, Housing Bank, 22. 10. 2012, translated from Arabic).

In the case of the **National Gallery of Fine Arts Park,** the management of the park was originally supposed to be shared by the different stakeholders. However, due to the poor management quality and conflicts of interests between the different actors (chapter 10.3.2), it was then decided that the National Gallery of Fine Arts would be in charge of managing the park. On the other hand, the local community of the surrounding neighborhood gives attention to the park's use and social control over the type of visitors attending the park.

Just as in the case of King Faisal Street and the Al Husseini Mosque Plaza, the management of **Wakalat** and **Rainbow** Streets is undertaken by the GAM. However, the management of those two spaces is more successful than that of the downtown area due to the type of practices at these areas and the participation of the local community in managing the space. In both Wakalat and Rainbow Streets, these spaces are managed through the regulations of use with both its forms, formally by regulations and security units that prevent conflicts of uses between different groups and informally through the collective social practices that permit socially inappropriate practices.

In the case of the **Abu Darwish Mosque Plaza,** the management of the space is seen to be absent in all dimensions. At the regulation level, the formal regulating dimension is absent; use and conflict between uses are not regulated, it is merely regulated through the specific culture of the appropriating social group there (see chapter 8.7.1). Furthermore, the new investment brought to this space (commercial stores, cultural center, library, etc.) and the ongoing resources are not used and not properly introduced and integrated with the local community (section 8.4). Due to the GAM's relatively high rental prices for such a traditional area, all of the developed shops are not rented yet. Additionally, many users of this plaza have no idea what the attached public buildings are for. As a result, it could be concluded that the coordination of the different direct and indirect actors' interventions in this public space lacks a functional mechanism to ensure that all actors' practices and interests go in the same direction.

In the case of **Taj Mall,** the management of the mall is fully undertaken by the private sector since this closed public space is completely owned and operated by the private investor. The management of this space includes the formal regulations of the practices allowed inside this space, accessibility is limited to the opening hours of the mall and there are security units at the exit points and inside the mall.

The last case study of the **Airport Road** is not included in this part of the analysis since it is an informal public space. The subsequent section (8.6) analyses this space comprehensively.

Table 11 Actors participating in managing the case study public spaces

Public space	Management actor	Informal management actor	Tools
Wakalat Street	GAM	Shopkeepers	Security units
Rainbow Street	GAM	Shopkeepers	Security units
King Faisal Street	GAM	Venders and beggars	Cultural norms Police units
Abu Darwish Mosque Plaza	GAM	Shopkeepers , Venders and beggars	Police units periodically controlling the plaza
Housing Bank Park	The Housing Bank Park	-	Security units Opening hours Rules and instructions

			inside the park
Park of National Gallery of Fine Arts	The National Gallery of Fine Arts	Residents of the neighborhood	Security units Opening hours Rules and instructions inside the park
Airport Road	No management	-	
Taj Mall	Private investor	-	Security units and check points Opening hours Rules and instructions inside the mall

Table 12 Dimensions of the management process in selected spaces

Public space	Formal and social regulation	Maintenance	Recourses	Coordination between actors
Wakalat Street	Formal and social regulation	Medium	Private sector	Low
Rainbow Street	Formal and social regulation	Medium	Private sector Local community	Low
King Faisal Street	social regulation	Poor		Low
Abu Darwish Mosque Plaza	social regulation	Poor	Private sector	Low
Park of Housing Bank	Formal and social regulation	High	Private sector	Medium
Park of National Gallery of Fine Arts	Formal and social regulation	High	Private sector National Gallery of Fine Arts	Medium
Airport Road		Natural setting		-
Taj Mall	Formal and social regulation	High	Private sector	-

8.6 Scarcity of Public Space and Emerging Informal Spaces

In this section a new typology of public spaces is explored. This typology of public spaces is generated by the people's own choice in privately owned but vacant land spaces. In Amman there are already many spaces that are officially defined and introduced as spaces for the public use. However, these spaces are always crowded and have already been perceived and stereotyped according either to their use or to the groups appropriating them. As a result, people's spatial needs for their activities have motivated them to seek and generate new social spaces that are not necessarily defined at the formal level as spaces for public use (Lefebvre, 1991 [1974]).

Before bringing the phenomenon of emerged informal public spaces in comparison, it's important to first cover the baseline of the spatial needs of inhabitants in order to reveal the basic motivation for generating

new spaces in the city. A widely adopted city-sustainability related indicator of green open space per capita/dweller has been suggested by the World Health Organization (WHO) and adopted by the publication of the United Nations Food and Agricultural Organization (FAO). It recommends an international minimum of 9 m^2 open spaces per city dweller and 15 m^2 per person as a recommended average (World Health Organization (WHO), 2012). To insure structural diversity, the area of open space should optimally be developed as a network of diverse open space typologies including three main components of urban forests, green spaces (domestic private gardens, neighborhood parks, urban forests, etc.), open public space corridors (sidewalks, roadsides, urban green strips, etc.), and a network structure (streets, roads and corridors connecting the other components of the public space) (Cook, 2002; Thompson, 2002). However, the offered open space per capita remains controversial in different cities around the world. For example, some developed countries have higher standards of green open space like 20 m^2 in Brussels with 27 m^2 per capita and 20 m^2 in Vilnius (the capital of Lithuania) (Sukopp et al., 1995; Wang, 2009) while in other cities the share of green space per capita is lower than the standard value as in Tokyo it is only 5.34 m^2. On the other hand, in Aarhus, for example, the second largest city in Denmark, the priority in planning the city was given to environmental and life quality issues. The green structure plan that was prepared as part of the planning reform of the 1970s suggests that every city dweller should have access within a maximum distance of 500m to green open space of at least 6,000 m^2 (Carmona et al., 2003).

Figure 8.9 View of Amman from the citadel, 2014

In Jordan, as in many of the Middle Eastern countries, the share of green public spaces per capita is low. The dramatic population growth and the construction boom has given Amman the reputation of being a congested city and put it behind many other cities in the world in respect to the provision of open green space per capita. The city public spaces are congested and traffic jams characterize the daily life of people's traveling experience inside the city. The official statistics of the GAM reports that 6m^2 of open

space is provided per capita. Eventually, Amman faces a serious problem regarding the amount and the quality of the provided public spaces.

Considering the fact that Amman is centralized congested and lacking adequate open and green spaces indicates one of the factors underpinning the emergence of the informal spaces in different parts of the city especially at the periphery of the city where theses spaces are not explored and congested yet. One of these majors produced spaces is the sides of the Airport Road.

> The spaces in Amman are limited, we have just the malls and parks and we have just one big park which is Al Hussein Park. There is additionally the private clubs which have a high cost which makes it not affordable for the majority of the people. By the way, we could not consider them as recreational areas. These places lack public facilities such as libraries and theaters. In most cases, the public spaces we have are open spaces with a lot of trees, not more (Faisal Street, 45 year old female, 12.10. 2012, translated from Arabic).

Figure 8.10 Different activities taking place at the sides of the Airport Road

In exploring this special type of public space observations and interviews were the most appropriate methods for exploring the users' perceptions of these spaces. In this research, the sides of the Airport

Road were explicitly analyzed to explore the characteristics of this type of emerged public sphere in Amman. Following are some of the characteristics of the Airport Road as an informal public space:

- All lands used for public activities along the Airport Road are informal public spaces and have private ownerships.
- No social interaction between different groups on these spaces occurs. Most users go there in groups of minimum two persons.
- It is mostly populated in the time between April and September at a certain time of the day between 2:00 and 7:00 pm.
- For families, they go there mostly during the Eid time especially on Eid Al Adha. The days following the first day of Eid Al Adha are busy along the Airport Road.

> I prefer to spend the Eid vacation at home. I do some family visits in the first two days. I delay going out with my family after the first two days of Eid because all public spaces are crowded at these days. It's getting almost as a tradition in my family to go for grilling at the Airport Road every Adha holiday. The happiness of this vacation is not complete without attending any of this unconventional spaces (Airport Road, 48 year old male, 18.10. 2012, translated from Arabic.

- Besides Eid holidays, the spring season is the busiest during the year with families spending their free time at the sides of the Airport Road.
- It is mainly appropriated by family groups or male groups; however, none of the observations recorded a female existence in both forms of a group or individuals.
- Most of the people going to the Airport Road are frequent visitors to other kinds of such informal public spaces such as: Yajouz Road or Abu Nusser Talleh (Abu Nusser view).
- Low to middle income group families go the most frequently to the Airport Road for recreational purposes.
- Greenery is one of the main factors for attracting different groups to the sides of the Airport Road; green shaded areas which are buffered from other areas are preferred among the different groups.
- The side roads are accessible from all points and can easily be described for others due to the existence of stationery landmarks along the road. Therefore, the Airport Road is one among other popular side roads. Other popular roads for family gatherings and barbequing are: Jajouz Road, Amman Ring Road, Abu Nussier Road and Jordan Highway "Share' al Ordon".

> Amman has a lot of recreational areas, restaurants and cafes. After a cold winter, we miss the sun and the greenery and since Amman lacks green spaces, we drive to the sides of the Airport Road which has trees, shaded areas and grass. The Airport Road is one of the best in Amman because it's not far from the city: at

the same time, it's far from the city's over-crowdedness and noise and has clean fresh air (Airport Road, 35 year old male, 18.10. 2012, translated from Arabic).

In summary, this kind of informal public space is generated due to people's spatial needs for social activities which are influenced by three major factors: (1) the massive urban sprawl of Amman that has made the city look like a massive concrete block, missing green surfaces and natural sittings, (2) a stagnating economic situation and the high living costs which prevent people from going to other gentrified spaces where they need to pay, either as an entrance fee[31] or as a membership for using the facilities inside these multi-functional spaces, and (3) the lack of diversity of offered public spaces, in which most public spaces in Amman have similar character with redeveloped and money consumption-oriented spaces.

> The spaces in Amman are limited, we have just the malls and parks and we have just one big park which is Al Hussein Park. There is additionally the private clubs which has a high cost which makes it not affordable for the majority of the people. By the way we could not consider then as recreational areas. These places lack to public facilities as libraries, cinemas and theaters. In most cases, the public spaces we have are open spaces with a lot of trees no more (King Faisal street, 45 years old Female, 23.10. 2012, translated from Arabic).

> Most of us here are middle income; recreation is not our first priority. As a mother, if I want to go out with my children, this will be on the account of other priorities like food. Additionally, if I want to take them to good quality spaces, this will cost a lot of money. As my daughter mentioned, the entrance fees for the Orthodox Club, for example, is 10 JD per entry and 1,000 JD memberships per year. This is in comparison to the average income per capita in Jordan which is relatively very high (King Faisal Street, 35 year old female, 22.9. 2011, translated from Arabic).

8.7 Issues Influencing the Use of Public Spaces

In this section some issues that influence the perception of public space and consequently the attitude towards theses spaces and their uses are addressed. The culture in Amman is tackled from a gender segregation point of view and the influences behind certain appropriations of public space in Amman are revealed. From the broader view of gender segregation enforced by the results of the analysis, more emphasis is given to women's low participation in the public life due to socio-cultural factors. Consequently, the appropriated women's spaces are addressed, as well as the issue of social stratification and division.

---

[31] Amman has a lot of semi public spaces where one should have a membership or pay an entrance fee. These spaces are very exclusive and not affordable for the low-middle income social classes. Dunes Club, Al Jawad Club and Action Target Shooting Club are some of the typical examples of these spaces. They are multi-functional public spaces with cafes, wedding venues and other sports activities.

8.7.1 Gendered Spaces - Socioeconomic Related Issues to Appropriation of Space

In Amman there are marked distinctions witnessed in the public spaces. These distinctions are translated as opposites such as public and private, conservative and liberal groups, male and female, work and leisure. These distinctions structure the social groups within the public realm in Amman. In investigating these distinctions that are witnessed in the selected public spaces, another level of the analysis has been done. In investigating the negotiation and appropriation of space, this part of the analysis focuses on analyzing a wide range of practices that modify, reshape, adopt, adjust or alter the space to serve the interest of a particular social group and, consequently, are transformed towards being dominated spaces. Appropriation of the space includes open negotiations of social practices and adds to the social and spatial development of the space while domination causes a rigid status of the space which makes it inflexible for socio-spatial interactions (see chapter 4.3.1).

Users were conceived as a set of practices that participate in shaping the production of the space. On the other hand, public space is analyzed as it is modified and appropriated according to the users tradition-inherited practices or as it is conceived by the architects within the social and cultural framework. Thus, the studied public spaces are defined to be a set of social models that are adjusted, appropriated and dominated according either to the needs and socio-cultural practices of the users or to the visions of the planners of contextual sites.

To ensure the reliability of the findings of this part of the analysis, the researcher relied on multiple research techniques. Findings from direct observations, participants' observations and interviews were triangulated with some governmental census and population studies and statistics. This aimed to better understand the distinctions and appropriations explored by the direct sources of evidence.

The interviews and observations pointed out that a female presence in West Amman public spaces is more active and dominant than in East Amman. This could be partially related to the socio-economical situation in West Amman. The active population in West Amman has slightly more females than East Amman due to several reasons: emigration of many well educated young men to other countries, particularly to the gulf countries (more than 600,000 Jordanians work abroad), and the active presence of foreign female domestic workers (mostly from the Far East, Sir Lanka, Indonesian and the Philippines) (Ababsa, 2011). Thus, public spaces in West Amman tend to be more mixed and balanced in terms of sex ratio and use of the spaces. On the other hand, East Amman's active population includes more men because of the presence of foreign male workers (mostly from Egypt and Syria) working in building construction and manufacturing sector (map 8.1). Collective housing and public housing are also more developed in the eastern part of the city (Ababsa, 2011).

This fact explains the results of the observations which showed that the female presence is stronger in the public spaces located in West Amman (Wakalat and Rainbow Streets, Housing Bank Park, the National Gallery of Fine Arts Park and Taj Mall) more than the ones in the downtown area and East Amman.
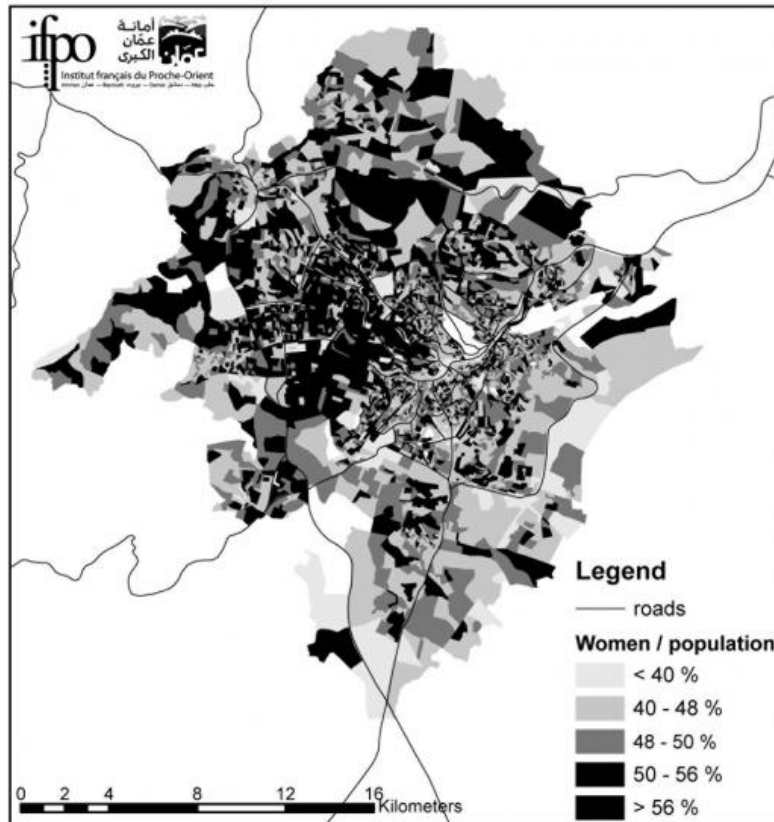
Figure 8.11Sex ratio in West and East Amman in 2004
Source: Ababsa, 2011

Despite the fact that there is no adequate empirical research that confirms the claim that Amman is divided into west and east parts, along with recent empirical research that proves this claim not to be precise and emphasizes that a divide exists between a certain sector and the rest of the city (Abu Thiab, 2012), the analysis of this research suggests that there is a clear distinction in the quality of the produced spaces in East and West Amman in terms of socio-economic indicators and consequently this adds another line of divide between the two parts. The findings of the observations and interviews suggest that the socio-economic codes expressed and shared are clearly different in the produced and reproduced public spaces in the two parts of the city.

In addition to the demographic distribution factor, the socio-economic situation plays a strong role in shaping the culture of using the public space in both East and West Amman. The analysis and coding

process of the interviews and the observations suggest that the male presence in the public spaces located in East Amman shows more tendencies to appropriate and dominate the space than in West Amman. The females that attend public spaces in East Amman are more likely to be harassed than in public spaces located in West Amman. The harassment practice, for example, could be referred to socio-economic factors. In East Amman the gender separation, with both its forms formal or cultural, is more than in East Amman in such places as secondary and high schools, some working places, cafes, etc. This gender segregation is translated spatially to conflicts and space appropriating practices when confronting females in the public space.

The interviews with the female users of the selected public spaces located in West Amman as in the case of Wakalat Street, Rainbow Streets and Taj Mall show that females prefer to go to the public spaces located in West Amman due to their better management in terms of security and the balanced presence of both genders.

> I don't like to go to East Amman, or to any public space in East Amman. East of Amman is not modernized and well developed. When we go there, all the people keep staring at us and observing what we are doing (Taj Mall, 16 year old male, 15.11. 2012, translated from Arabic).

> …..It depends, sometimes public spaces are comfortable, and sometimes they're not. We don't like to go to East Amman. When we go there, we need to have a guy accompanying us. We might go there because we need to go there for a specific reason but definitely not for attending a public space or meeting friends there (Taj Mall, group discussion of young males and females,15.11. 2012, translated from Arabic).

On the other hand, the attitude of the male users varies in public spaces in West and East Amman due to socio-economic reasons. East Amman is characterized by high population density, high percentage of young population below 15 years old (more than 38%) and less elderly population group, active masculine population, less economically active population, high incidence of poverty and high unemployment rate (14%). While West Amman, including North-western and South-western Amman, is characterized by low population density, high percentages of elderly people, lower unemployment rate (9%), more economically active people, better education level and more developed infrastructure. Therefore, the whole cultural atmosphere in West Amman is more liberal than in East Amman (Ababsa, 2011).

> We studied in the Orthodox School in West Amman and it is a mixed school. Therefore, we had no problem in dealing with other girls in public spaces since we are used to being with girls in one space (Taj Mall, 22 year old male, 1.11. 2012, translated from Arabic).

> In our school, Universal School, it's normal in the school to talk to girls and to socialize and get to know new girl school colleagues, so we don't have a problem with harassing girls in public spaces like other guys

from East Amman. They go to public spaces to talk to girls because they don't have other spaces for that purpose (Rainbow Street, 22 year old male, 22.9. 2011, translated from Arabic).

Furthermore, from the analysis it could be generalized that the public spaces in the downtown area and in East Amman are male dominated spaces while the intensity of the male presence in the West Amman public spaces is less. However, it was interesting to notice that after stores closed in the public spaces in West Amman, and when these spaces are less busy, less active and less lightened, the ratio of young male users increases and transforms to be completely dominated by men in the late evening and during the night time (see chapter 8.3).

Table 13 Users and age grouping distribution among the selected public spaces

Public space	Age group	Dominant users	Character of the space
Wakalat Street	Young men and women	Equally mixed	Shopping and entertainment
Rainbow Street	Young men and women	Equally mixed	Entertainment
King Faisal Street	All age groups including elderly people	Male	Shopping Livelihood
Abu Darwish Mosque Plaza	Young males and teenagers, unemployed young men	Male	Hanging around
Housing Bank Park	All age groups including children	Mixed	Recreational
Park of National Gallery of Fine Arts	All age groups	Mixed	Recreational
Airport Road	All age groups	Mixed during the day and male dominant in the evening	Family grilling trips during the day and dating in the evening
Taj Mall	All age groups	Mixed	Shopping and meeting friends

8.7.2   Women's Low Participation in Public Life due to Socio-cultural Factors

Based on the analysis of everyday activities in the selected spaces in chapter 8 and on the gendered spaces analysis in the former section, this part focuses on the spatial behaviors and mobility patterns of the female groups that are generated in correspondence to the socio-economic dimension.

The distinctive phenomenon between males and females in public space has other deeper cultural, religious and ideological dimensions in addition to the socio-economic one. The Jordanian nationality law is also discriminatory in many aspects regarding women's rights. At the very basic rights level, the citizenship laws allow Jordanian men to automatically pass their nationality to their children and foreign wives while they deny the same right to women. This official legal practice makes women automatically second-class citizens in Jordan and emphasizes on the claim that Jordanian society and the nationality law

is "masculine-based" (Emanuel, 2012). Accordingly, masculinity is not found merely through the culture but also through the Jordanian law. This legal act is found in other implications such as the passport law, the family register book and the personal status law. This is justified due to several reasons. Mainly, Jordan has the highest per capita refugees in the world (Emanuel, 2012; Chatelard, 2010; Human Right First, 2007) with more than 2 million registered refugees (UNRWA, 2014; UNHCR, 2014). Granting nationality and other rights to foreigners married to Jordanian women could deplete the national resources as this represents 31% of Jordan's 6.1 million inhabitants (DOS, 2014). Due to these given facts, the number of women affected directly with these discriminatory nationality laws is more than 65,000 Jordanian women and 500,000 children (Emanuel, 2012; see also 7aqqi: my mother is Jordanian, www.7aqqi.com). These discriminatory laws automatically take Jordanian women's children's right to be eligible for employment, right of education and right of public healthcare, thus, depriving Jordanian women of their "right to the city".

Nevertheless, in the last decades Jordan has made visible achievements regarding women's other rights and empowerment in other sectors. In the last few decades, women are increasingly entering the workspace, education and politics. By law, they have obtained a number of rights including quota of seats for the parliament, provisions related to divorces initiated by the wife, male polygamy and rising the legal age of marriage (Al Attiyat et al, 2005). Despite the fact that the women are gaining gradually more rights through the law, traditionally they are still confronting some culture-related challenges which are again multi-dimensional and have various roots. Thus, women in Jordan, as elsewhere in the Arab Middle East, have low participation in public activities as well as on the labor force due to social and cultural factors. The overall perception of women's roles in the society is related enormously to religious cultural values. The "conservative" nature of Islam, the strong family bonds, the cultural perception of women as mainly wives and mothers, the segregation of women and men to avoid social problems, cultural restrictions on women's mobility, and the stigma attached to husbands or families whose wives, sisters or daughters work late outside their home or work in a mixed working environment have perpetuated the conservative image through many generations (Mujahid, 1985; Khuri-Tubbeh, 1995; Shakhatreh, 1995). Despite the fact that the fertility rate in Jordan is declining,[32] it is still considered high by international standards (table 13). Although rates fell steadily between 1983 and 2002, Jordanian women still have an average of 3.8 children comparing with 3.7 in 2002. Marriage at an early age is still clear evidence of the primacy of the reproductive roles for Jordanian women. A report prepared by the Department of Statistics, the Ministry

---

[32] According to the 1990 Jordan Demographic and Health Survey (DHS), the total fertility rate for three years from 1990 was 5.6 children per woman. The pace of decline, as recorded by the subsequent surveys, was 21% between the 1990 and 1997 JDHS, and 16% between the 1997 and 2002 JDHS. Since then, fertility seems to have stalled, being recorded at 3.7 children per woman by the 2002 JDHS, 3.6 by the 2007 JDHS and 3.8 by the 2009 JDHS.

of Health, and DHS IRD/Macro International indicates that in Jordan, half of the women are married by age 22.4. Only 16 percent are married by age 18. The median age at first marriage ranges from 21.7 in Zarqa to 23.6 in Karak. Women with higher education get married almost five years later than those with no education. Only 4% of women in Jordan have not married by the end of their reproductive years. (DOS, 2009, p. 14). Furthermore, wages for Jordanian women economy-wise are lower than for men and occupations remain highly segregated by gender and age (Kawar, 2000).

Table 14 Total Fertility Rates (TFRs) by Place of Residence and Level of Education
Source: USAID, Jordan Demographic and Health Survey (DHS), 2011

Background characteristics	JDHS 1990	JDHS 1997	JDHS 2002	JDHS 2007	JDHS 2009
Place of residence					
Urban	5.1	4.2	3.5	3.6	3.8
Rural	6.8	5.0	4.2	3.7	4.0
North	6.3	4.8	3.9	3.8	4.0
Central	5.0	4.1	3.5	3.5	3.8
South	6.6	4.8	4.0	3.6	4.1
Level of education					
No education	6.9	4.6	3.6	2.6	4.1
Elementary	6.0	4.5	3.7	3.9	4.1
Preparatory	–	–	4.4	4.5	4.7
Secondary	5.4	4.5	3.9	3.9	4.1
Higher	4.1	3.7	3.1	3.2	3.5
Total	5.6	4.4	3.7	3.6	3.8

During the analysis, gender discrimination from the traditional scope of thinking was addressed mostly by the younger generation of women who do not feel comfortable about attending the public spaces unless within certain conditions (with a male chaperon, within daylight times). Apparently, the new generation of women are more empowered and suffer less from the cultural constrains than the older generation of women who accept and adopt the inherited cultural traditions.

> We don't know a lot of public spaces….this is due to the people's culture here, as well as to the customs and traditions. They are not used to the open spaces yet. We are still until today traditional conservative societies with a particular privacy; to talk, discuss with others and feel comfortable you need a closed space. We still don't have the open public space where we can sit and enjoy the panoramic scenery overall (King Faisal Street, 45 year old female, 12.10.2012, translated from Arabic).

The field work and survey showed that women in Amman do not in all cases prefer to go to public spaces, namely to open public spaces. The interviews showed that most of the females prefer closed public spaces to open ones due to their better management and security. Shopping malls are suitable choices for females to spend their free time and meet friends

….I don't know….I prefer malls over streets and other public spaces......I like to go to the shopping malls to meet my friends there. It's closed and safe. There is security there in case any accident happens. The quality of people there I think is better (Taj Mall, 16 year old female, 3.11. 2012, translated from Arabic).

On the other hand, the older generation of women (above 45) prefer private spaces over public spaces and therefore appropriate some parts of their private residence for that purpose; balconies, front or backyard gardens and kitchens are preferred by many interviewed women.

I don't know if women have a public space. The women in general…….they find their space in the garden and in the kitchen, in the bed, where is her public space who controls it who define it for her!........For me I prefer to sit in the kitchen and invite my women friends and sit there together; it's better than going outside and pay a lot of money (King Faisal Street, 40 year old female, 12.10. 2012, translated from Arabic).

What I don't like about public spaces in Amman is that they are so crowded and a lot of single guys are there and want to talk to girls (Taj Mall, 17 year old female, 1.11. 2012, translated from Arabic).

In addition to the privacy factor, some females prefer to meet their other female friends inside their home due to cultural and religious factors. For many families, it's shameful if the daughter or the sister go out and meet her friends at a coffee shop or outside on Wakalat or Rainbow Street, for example. Furthermore, some young girls prefer the malls over open public space due to the fact that the mall has a mixed use character and is perceived to be safer than the other typologies of the public space. For some girls it is more convenient for them to tell their families (parents or brothers) that they are going to the mall for shopping rather than to say that they are going downtown or to other public open spaces. For some families public spaces are still not culturally accepted as a meeting place.

Ethics and traditions are the most important thing to us. To say I am free to do what I want is not acceptable to my family. The freedom of a girl should be within the ethics and morals that her father raised her with, not from what she has learned from her friends. The freedom of a girl should be within the boundaries of her home. If my daughter wants to smoke shisha, she could and I would bring it to her but not outside in public. The freedom of a girl is in her house, not outside (King Faisal Street, 60 year old male, 13.10.2012, translated from Arabic).

9 TRIANGULATED FINDINGS WITH THE SPATIAL LAYOUT PUBLIC SPACES IN AMMAN

In this chapter the spatiality of the selected public spaces in relation to the users behaviors are investigated by measuring the level of the connectivity and integration of these spaces with their surrounding environment. This will finally led to answering the fourth research question of how the physical and the social structure of the selected public spaces articulate. In doing so, a syntactic analysis of two analytical tools was implemented in order to investigate the connectivity and integration of the selected public spaces. The analysis of the integration measured how easy it is for people to reach a certain street. On the other hand, the integration value of a street tells how many times a person has to turn into another segment/street to reach all other streets in the network. The streets with the lower value are better integrated than streets with higher integration value. Finally, the outcomes of this analytical part are triangulated with the other qualitative methods and subsequently translated to urban-design related findings and recommendations for planning practitioners. In addition to answering the research question, it is expected from this part to inform the urban planners at the GAM about the constraints and opportunities of selected public urban areas with regard to the street integration and connectivity.

9.1 Application of Space Syntax Theory (SST)

In the last four decades, many researchers in the field of spatial planning have developed theories and tools for Spatial Data Analysis (SDA) to better understand the real world environment and therefore to better predict the possible outcomes of future urban design projects. Many computer based programs have been developed for SDA purposes such as GIS and Computer Aided Design (CAD) that are capable of creating, manipulating, analyzing and visualizing geographic information. However, many of these sophisticated programs such as GIS function in a technical quantitative way and lack integration and compatibility with quantitative analysis methods for simulating the built environment urban planning purposes (Openshaw, 1996; Goodchild, 2000). Since the 1980s, space syntax theory has been developed to provide essential experimental development of human behavior-spatial morphological research, particularly for evaluating the connectivity and the integration of cities, pedestrian modeling, traffic control, site development strategies and explaining and predicting human behavior from a spatial configuration point of view.

Space Syntax Theory (SST) is an important part of this research because it deals with behavioral derived patterns from the physical configuration of the surrounding environment. Applying the techniques of SST has the benefit of permitting the physical environment of the selected open spaces in this research to be

considered as an independent variable so that seven of the selected case studies [33] can analyze the movement and the spatial habits of the users. At the technical level this will be achieved through stimulating the reality of the architectural built environment.

The basic principle for operating SST is that the human movement in the urban and architectural spaces has a linear nature and therefore the easiest way of modeling the movement of the users is to draw axial lines to show the starting and ending point of the movement (Hillier and Hanson, 1984). The basis of such drawing is the visibility and the direction of the view of the passenger. Another basic fact is that people physically perceive streets through linear views, so curves are represented in SS as several axial lines (figure 9.1). The result of such modeling is the axial maps that give an understanding of what a moving person sees. The technicality of this theory needs more explanation than the previous research methods. This will be presented in the following sections. It should be mentioned that SS has various applications at different scales beginning from the analysis of the architectural level of a house unit to the analysis of the morphology of metropolitan cities. However, the literature in the subsequent sections focuses on SS on an urban space scale.

(A)   (B)   (C)
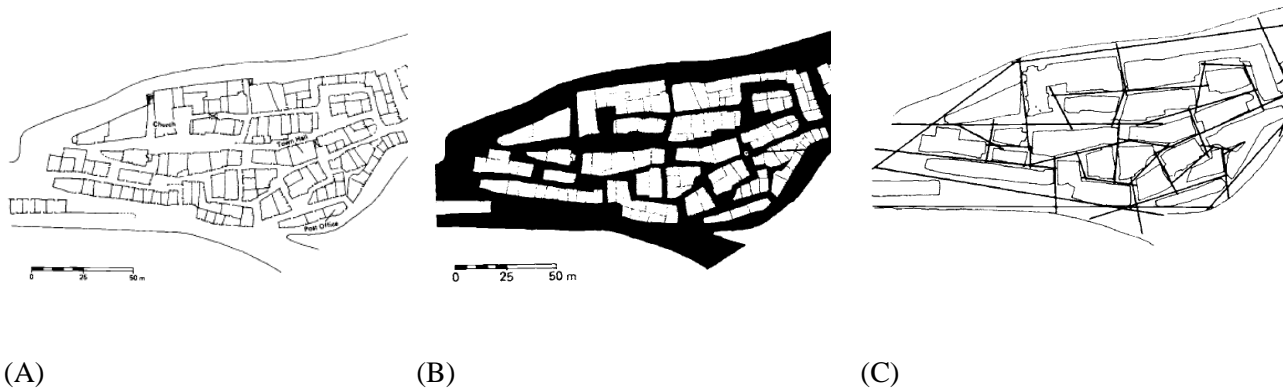
Figure 9.1 An example of a small town in the south of France illustrates the abstraction of space into a linear nature:
(A) Site plan; (B) Convex map, the structure of the open space; (C) Axial map
Source: (Hillier, 1987)

9.2 The Operational Fundamentals of Space Syntax

In investigating the spatiality of the selected public spaces, the analysis is undertaken by means of Space Syntax (SS) measures and indicators. Each of these indicators has theoretical fundamentals and most of them have physical and social meanings. A huge area of the recent research on Space Syntax has been carried out on measuring these indicators and comparing the real physical measures with the outcome of

---

[33] Taj Mall and the sides of the Airport road are not included in SS analysis

the Space Syntax analysis. The most significant measures of the Space Syntax applied in this research are as follows.

Connectivity: One of the fundamental Space Syntax measures that are used in this study is connectivity which refers to the number of immediate neighboring streets that are directly connected to a specific street. Thus, the more the street is connected by a lot of alleys or other streets, the higher the connectivity value is and the more people are encouraged to move to these spaces by foot or bicycle. In such places there are more routes for the people to choose from to reach their destinations. Connectivity as an indicator of urban form has been studied and several researchers have found out how connectivity eases the pedestrian and bike flows. In Space Syntax literature, connectivity represents a static local measure since it is observable at the space level.

Depth, mean depth: Depth between two spaces is defined as the number of changes in direction that a person does to reach another point, or as in reality, from one street to another passing through different spaces. Depth is calculated in two different forms: the "total depth" and the "mean depth". Total depth is the depth of a line from the starting line; the least depth is achieved when a space is directly connected to a root space and the highest depth is recorded when all spaces are arranged in a linier sequence away from the original space (Mustafa, 2010). The mean depth indicates how deep or shallow a space is from every other space. The spaces that have many turns from the main route have high depth. Normally people need a longer time in traveling through deep spaces. The edge spaces have higher depths and are away from the everyday life in the city. In summary, the logic of measuring depth in SS supports the claim that the spaces that are not visible to people are less busy and have low traffic, spatially they are not central.
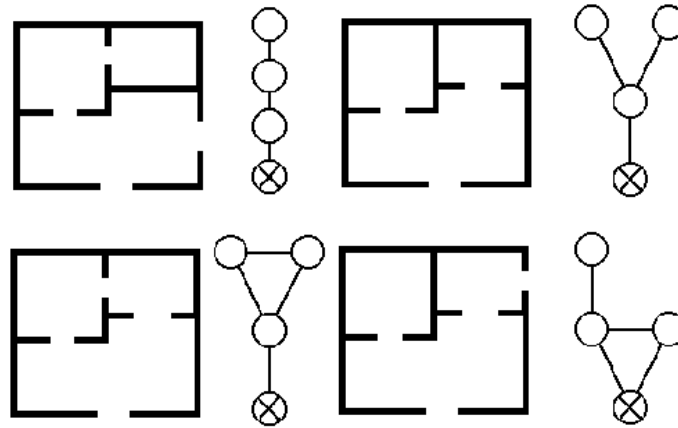
Figure 9.2 Simplified graph at the architectural level showing different typologies of depth depending on the variations in the placement of doorways, the rooms directly opened to the main room have the minimum depth. The liner sequence of spaces (at upper left) has the maximum depth.

Source: ANT 417S, 2014

Integration and accessibility of public space: Calculated based on the mean depth, integration is the linear depth of a line from every other line of the system. It reflects the mean depth of each line of the system from the other lines or spaces, so places have high depth value are less integrated. Integration reflects the accessibility of a space and indicates movement in the urban spaces. It is especially referred to as the indicator of pedestrian mobility. As the more accessible the space is, the more people are allowed to participate, the more open, the more inclusive it is, and consequently, the more public it is (Benn and Gaus, 1983; Madanipour, 2010; Ercan, 2010). Streets with high integration are normally presented in red and have the most intersections in the system (figure 9.3, figure 9.4).

9.3   UCL Depthmap Software

Depthmap is spatial network analysis software developed at the University College London (UCL) to analyze the performance visibility, integration and connectivity of a given system. Depthmap analysis requires having an axial map of the investigated system. The axial map is a presentation of a set of lines that reflect the continuous structure of an open space. The UCL Depthmap software is used to analyze the selected public spaces in terms of connectivity and integration. This is operated through the visibility analysis of the urban system of the selected public spaces. Depthmap software takes input in the form of a plan of the system and is able to construct a map of visually integrated locations within it.

Figure 9.4 The color hierarchy that is used to show the value of the Space Syntax

The colors read like a temperature scale, the warm colors on the top show high values and the cold colors in the bottom indicate low values

Figure 9.3 Illustration of integration in the spatial configuration of London
Source: Hillier, 2005

Figure 9.5 Patterns of "spatial integration" in the center of Berlin, with the highest levels of integration in red, orange and then yellow, and lower levels of integration in green, blue and then dark blue. Spatial integration measures the degree to which an urban street is connected into the overall street network
Source: Rose and Schwander, 2011

9.4   Analysis of the Selected Public Spaces through Space Syntax

The Space Syntax Theory (SST) and related applications are employed in this research to analyze spatial configuration of the selected public spaces to investigate the patterns of integration that measure the degree to which they are connected to the overall urban network. Following are the objectives to be achieved by using SS:

1. To investigate SS indicators of integration (global and local), connectivity, mean depth and total depth, but the one that most mentioned is integration, which shows the ability of the urban form to encourage people to have mobility. The mobility can be on foot or by car. However, as mentioned before the emphasis in this research will be on the pedestrian mobility.

2. To compare the mobility properties of the selected public spaces.

9.4.1 Generating Axial Maps for the Selected Public Spaces

The Depthmap software was used in this research to produce the analytical drawings of the different selected spaces. The produced axial maps are drawing maps that are used to represent the open space as a continuous system with the surrounding structure. The idea of a "fewest line" axial map was first introduced in Hillier and Hanson's book *Social Logic of Space* as some minimal set of the abstracted fewest and longest lines that cover some set of the "fattest convex spaces" in terms of their area perimeter ratio (Hillier and Hanson, 1984, P. 17). In the *Social Logic of Space*, the basic idea of the axial maps was presented as a method for abstracting the spatial drawings and for reducing the complex continuous spatial network of cities into a set of meaningful lines that could be subjected to analysis. At that time, no particular social meaning was attributed to the axial map in Hillier and Hanson's work, rather it was suggested as a technique for rendering the complexity of the urban fabric in a simplified fewest lines map (Desyllas and Duxbury, 2001).

According to Hillier (1998), urban street network could be defined as "a system of lines linking some set of origins and destinations, and to the extent that movement can occur from all origins to all destinations, then movement along the lines making up the network will be substantially determined by extrinsic measures of those lines".

The presented axial maps in this section were produced through several stages and by using different spatial analysis computer programs. The first step in this process was to have a digital map of the urban morphology of street networks of the selected public spaces. In this research, the sources of these basic maps varied between exporting them from GIS and receiving them as AutoCAD files from the GAM. In some cases, when the digital copy of the map was not available or available but in an older version of the site and not updated with the recent spatial development, it was realized through redrawing them directly from aerial photos from Google Earth. The second step was a technical one and that was to prepare the hand-drawn "fewest lines" in Dxf format to represent the street network as a system of single lines. Until this date, no algorithm has been developed yet to generate this type of fewest lines map automatically. It should be mentioned in this regard that this step includes partially an interpretive drawings of the researcher to create the right geometrical connection between the public space and its surroundings (see

section 9.5 limitations of Space Syntax). The third step was to import the Dxf fewest lines map into the UCL Depthmap program. Then, the fewest lines Dxf was converted into an axial map. The new axial map already has the measures of connectivity for each line. Finally, after importing the maps to the Depthmap software, some other operations were applied to prepare the map for analysis. Depthmap software offers a wide range of analysis orders, However, in this research the analysis was limited to a few measures, (figure 9.6 and 9.7) showing a sample of the axial map of the park of Housing Bank before importing it to the Depthmap software.
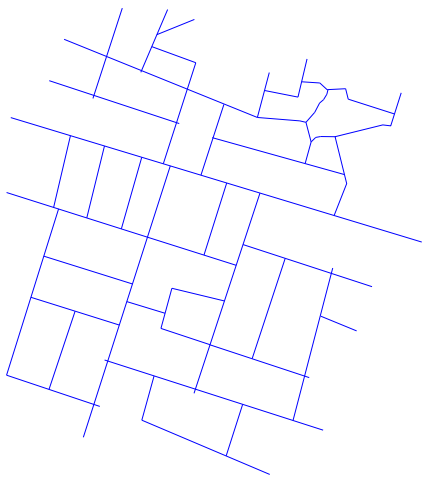
Figure 9.6 Step one: Preparing the axial center line maps of the park of Housing Bank in AutoCAD before importing it to the UCL Depthmap software
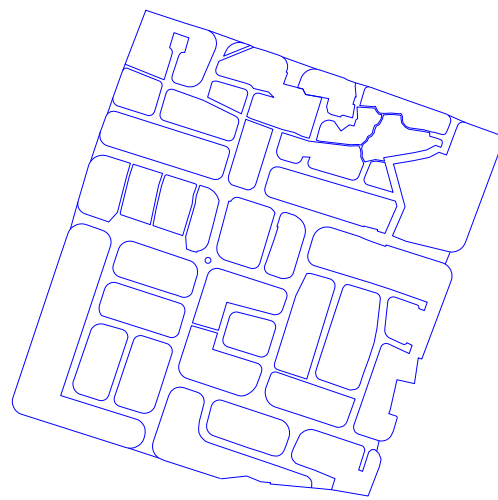
Figure 9.7 Another representation that could be operated to be axial map to calculate the connectivity of the public space in that area. Lines should represent closed boundaries
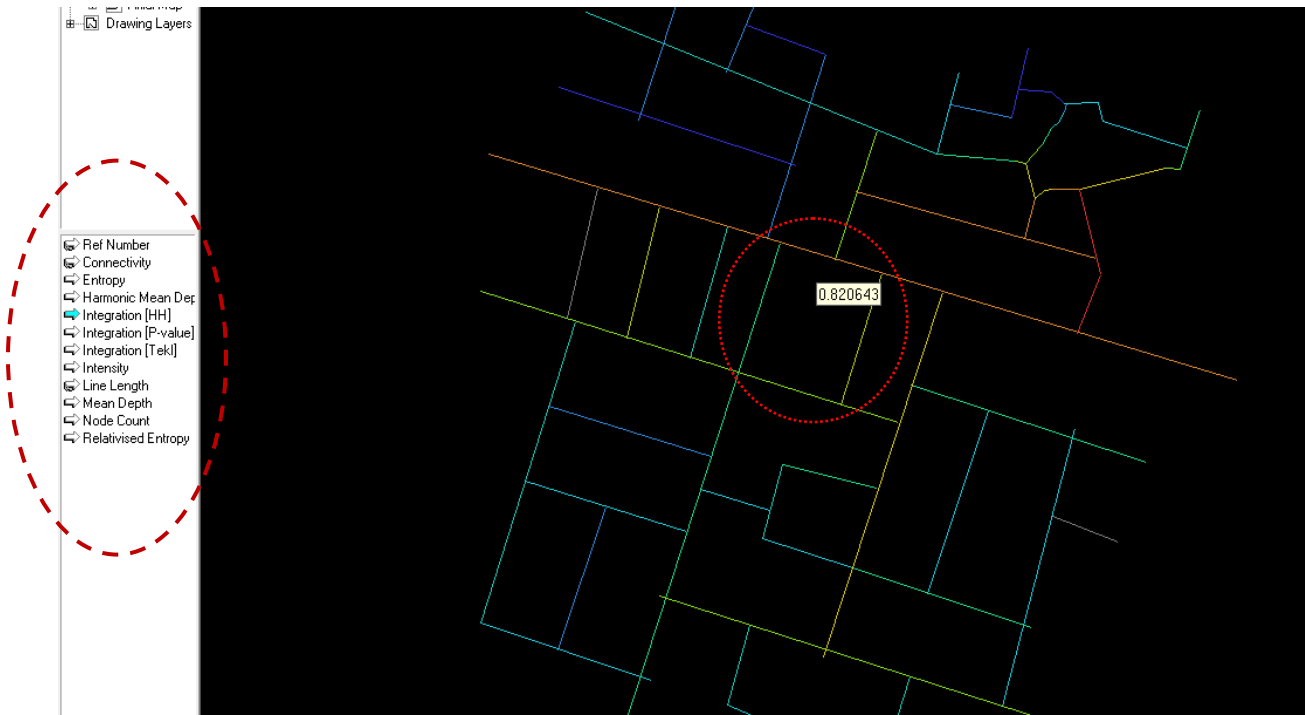
Map 9.1 SS Analysis of the Housing Bank Park in the Abdoun neighborhood

Attribute	Value
Connectivity	5
Harmonic mean depth	3.78
Integration HH	0.5
Intensity	0.402
Mean depth	6.6

The integration [HH][34] value of the road at the entrance of the **Housing Bank Park is 0.50**.

---

[34] Integration [HH] is the integration described in the *Social Logic of Space* (HH stands for Hillier and Hanson)

Map 9.2 SS analysis of Abu Darwish Mosque Plaza in Al Ashrafiyeh district in East Amman before adding the street to the plaza

Attribute	Value
Connectivity	2.5
Harmonic mean depth	3.2
Integration HH	0.6
Intensity	0.38
Mean depth	6.8

The integration value of the road at the entrance of **Abu Darwish Mosque Plaza before** the new development in 2010 is 0.50. The SS integration values show that the curved road passing through the plaza had a higher integration value than all of the surrounding streets.
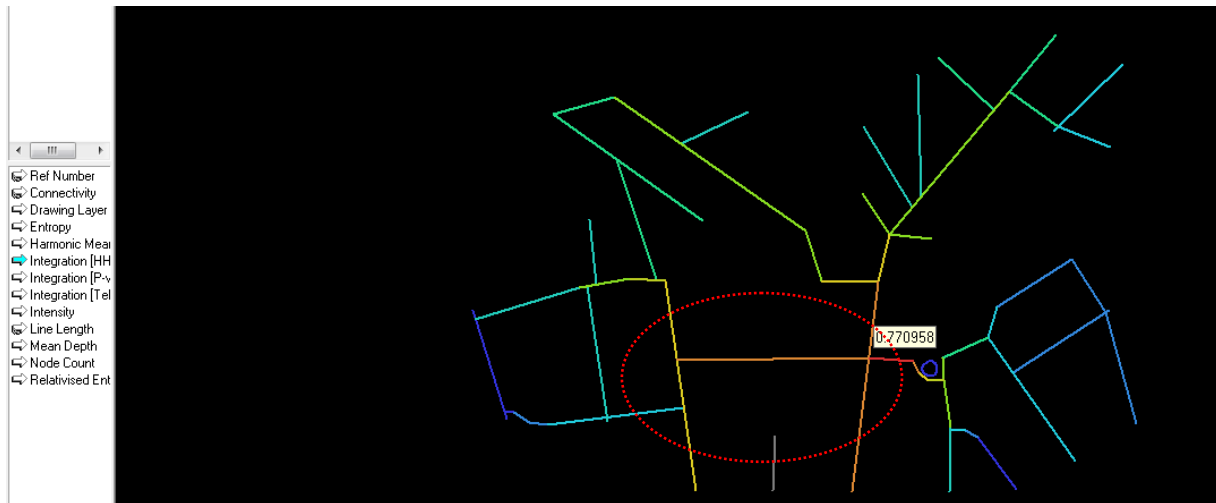
Map 9.3 SS analysis of the Abu Darwish Mosque Plaza in Al Ashrafiyeh district in East Amman. Integration value after adding the street to the plaza

Attribute	Min.
Connectivity	2.37
Harmonic mean depth	2.98
Integration HH	0.73
Intensity	0.371
Mean depth	6.8

The integration value of the road at the entrance of the **Abu Darwish Mosque Plaza after** the new development in 2010 is 0.6. Comparing the measures of the streets surrounding the plaza, the integration value for all roads surrounding the plaza has been reduced after joining adjacent street to the plaza.
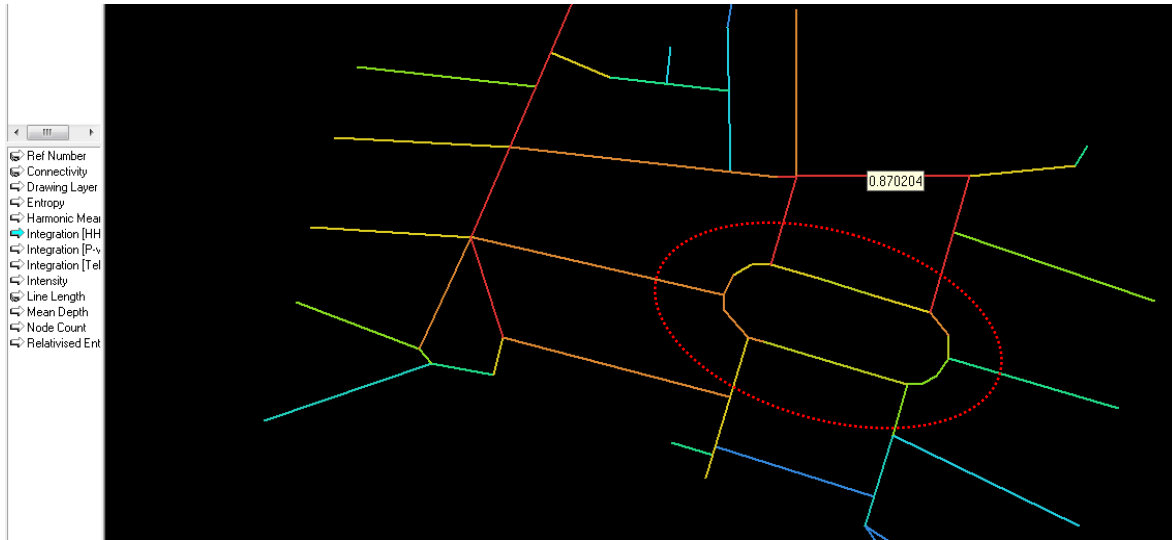
Map 9.4 SS analysis of the National Gallery for Fine Arts Park in Jabal Al Weibdeh district in Amman. Integration value of the park

Attribute	Value
Connectivity	3
Harmonic mean depth	4.9
Integration HH	0.73
Intensity	0.447
Mean depth	5.6

The integration value of the round road of **Al Weibdeh Park** is 0.73.
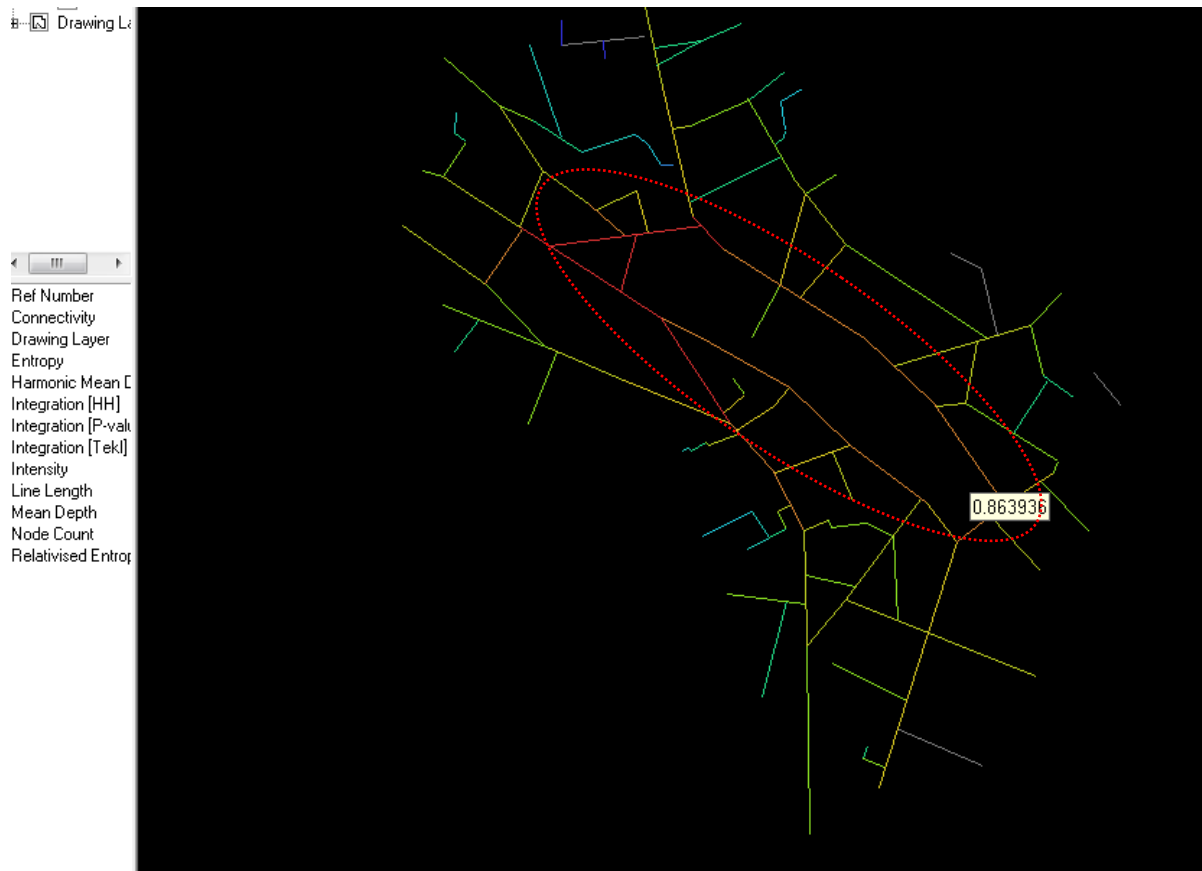
Map 9.5 SS analysis of Al Husseini Mosque Plaza and King Faisal Street. Integration value of both public spaces

Attribute	Value
Connectivity	4
Harmonic mean depth	4.32
Integration HH	0.85
Intensity	0.384
Mean depth	6.5
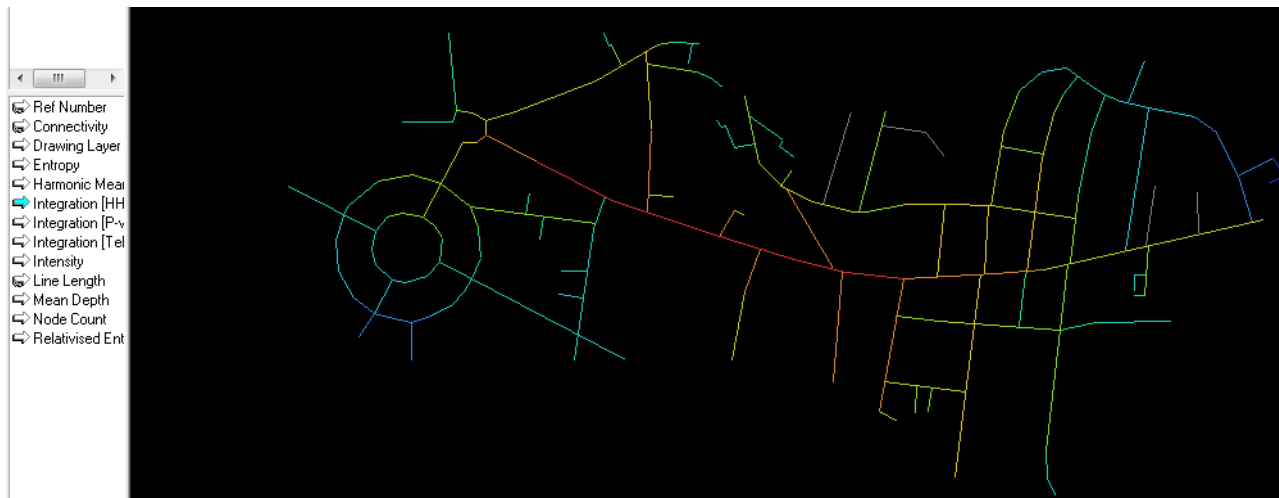
Map 9.6 SS analysis of Rainbow Street in Jabal Amman district. Integration value along the street

Attribute	Value
Connectivity	3
Harmonic mean depth	3.78
Integration HH	0.7
Mean depth	8

Map 9.7 SS analysis of Wakalat Street in Sweifieh in West Amman. Integration value of the street

Attribute	Value
Connectivity	6
Harmonic mean depth	5.6
Integration HH	1.33
Mean depth	4.8

9.4.2 Connectivity, Integration and Accessibility of the Selected Spaces

The Depthmap analysis shows that connectivity varies between the different public spaces according to their location and connection with the surrounding context (table 15).

Table 15 Syntactic analysis of the selected public spaces

Attribute	Abu Darwish Mosque Plaza/after and before the dev.		Park of the National Gallery for Fine Arts	Al Husseini Mosque Plaza and King Faisal Street	Rainbow Street	Wakalat Street	Housing Bank Park
Connectivity	2.5	2.37	3	4	3	6	5
Harmonic mean depth	3.2	2.98	4.9	4.319	3.78	5.6	3.78
Integration HH	0.6	0.54	0.73	0.85	0.7	1.33	0.5
Mean depth	6.1	6.8	5.6	6.5	8.0	4.8	6.6

At the static local level of connectivity, Wakalat Street seems to be the most connected public space within the surrounding neighborhoods (connectivity 6.00). Local connectivity implies as well that it is the most visible public space among the other selected spaces. Wakalat Street is connected directly to Zahran Street and indirectly to Abdallah Ghosheh Street, two main arterial roads in Amman. The Housing Bank Park has the second highest connectivity (5.00) and thus visibility within the surrounding neighborhoods. King Faisal Street, Al Husseini Mosque Plaza and Rainbow Street are less connected than the first two spaces. However, they still have higher connectivity that Abu Darwish Mosque Plaza which has the lowest connectivity among the analyzed public spaces (2.5). It is important to mention that Abu Darwish Mosque Plaza had a higher connectivity before the urban development was done to this plaza. Closing the street between the plaza and the cultural center to add the street to the plaza area (map 9.8) has affected not only the behavioral patterns and type of appropriation to this plaza (chapter 8) but also the connectivity and the visibility of the plaza.
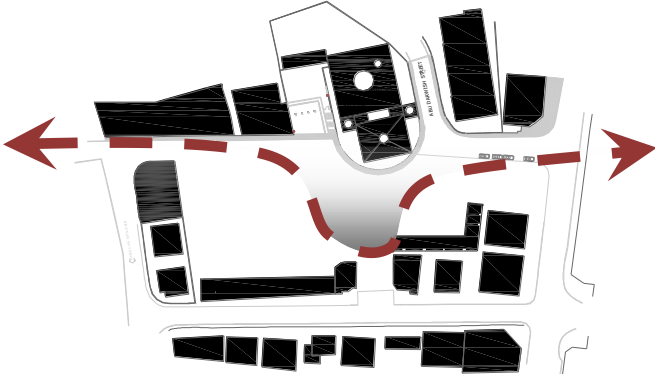
Map 9.8 Abu Darwish Mosque Plaza before the development

Map 9.9 Illustration of the high connectivity of the street passing through the plaza

For the second part of the analysis, accessibility of the selected public spaces was measured through the depth and mean depth of these spaces. The depth of a space measures the number of turns (streets or spaces) that one has to pass through in order to reach the public space. In other words the deeper the space is, the less accessible it is. Integration is based also on the liner depth of a space from other spaces in the surrounding context. This implies that integration corresponds inversely to the value of the depth of the space (section 9.2). Moreover, the depth and integration of a space is independent from its connectivity (the number of alleys and streets connected directly to that space). The results of the Depthmap analysis show that the public spaces located in West Amman, Wakalat Street and the Housing Bank Park, are less deep than the public spaces in the downtown area and East Amman. Less deep means that people are more encouraged to reach Wakalat Street and therefore more pedestrian activity. The fact that the spaces in East Amman are likely less accessible could be partially justified due to the segmented organic planning pattern that older parts of eastern Amman has. In West Amman and the new residential centers, the morphology is more geometrical and orthogonal.

However, the Depthmap integration results do not always reflect the findings of the observations and interviews, namely in terms of the part related to peoples' preferences of public spaces in Amman and therefore the accessibility. The observation showed, for example, that Rainbow Street has a stronger walking culture than Wakalat Street or the Housing Bank Park in Abdoun (see chapter 8.1.1, 8.1.2 and 8.1.3). The reasons why the two methods (qualitative observations and SS) do not match in these terms could be justified due to several issues. Firstly, the Depthmap software is a two dimensional program and does not consider the topographic differences of the analyzed urban fabric. Therefore, the program didn't take into account that the topographic landscape is different in the various selected spaces. For example, in the case of Wakalat Street, the street represents almost the lowest point in that area and therefore the

line on the map that might seem straight, short and directly connected to Wakalat Street, is actually a very steep street and many pedestrians prefer using other longer but more gently slope roads for walking to reach their destination. As for the case of the Housing Bank Park, physical-wise the park is located in a more exposed and visible area. However, this park has been produced through a public private partnership (PPP) between the GAM and the Housing Bank and the opening hours of the park are determined by the Housing Bank. Additionally, the park is fenced and accessibility is only allowed from certain gates. Consequently, the accessibility to the park is not subject to the park's physical characteristics as analyzed in Depthmap. Once again the Depthmap software discards these intangible aspects. Map 9.8 shows how the park is not fenced on maps, and it reads as if it is accessible from all sides. Figure 9.10 shows a man eating a sandwich on the sidewalk of the street outside the park due to the accessibility restrictions that prevents users from entering the park within bank working hours. This example demonstrates how the spatial transformations brought by the involvement of private actor in the production of public spaces in Amman have the service-based approach of creating spaces of consumption for the interest of the investors and have the consequences of creating social exclusion.

Figure 9.8 Fences surrounding the Housing Bank Park

Figure 9.9 Exclusion of people during the closing hours of the park

In the case of Wakalat Street and the downtown area, these two public spaces are located within a mixed land use in which the new development didn't relatively create social conflicts and traffic congestion, but in the case of Rainbow Street the case is different. When the GAM initiated some urban heritage conservation and public space projects in different area in Amman (chapter 2.6.4), the regeneration they did in Rainbow Street in Jabal Amman cut the neighborhood and gave more weight to creating more retail and mixed-use activities and consequently transformed the quiet neighborhood street into a car dominated space. The old organization of the urban and social textures was corrupted with the imposed new activities. This trend of reviving old traditional Amman moved the commercial and entertainment

activities from some central locations like Abdoun, Sweifieh, Shmeisani and recently Mecca Street to the centers of some neighborhoods like Jabal Amman and Weibdeh, where the Park of the Gallery of the National Museum of Fine Arts is located. Thus, a mass of human movement was transferred from all over Amman to narrow neighborhood's streets. Many local people were not able to walk through their own neighborhood anymore because the new imposed activities in their streets were built between their living places. Shops, bakeries, butcheries, shisha cafes, restaurants, retail shops, and bars gradually took over and the neighborhood centers lost importance to the streets.

9.5 Limitations of Space Syntax and Axial Map

SS has been widely used and it has already been proven by scientific research and real life practice that the axial map instrument is a powerful tool for Spatial Planning Analysis (SPA). The success and validity of this methodology has been acknowledged through the application of SS in many projects such as the London pedestrian route map (encouraging walking in London), London Olympic Park (2009), Jeddah Strategic Planning Framework (2005-2006) and low carbon master plan of the extension of Beijing's CBD (2009). However, application of SS appears to have some inconsistencies and limitations which make its validity controversial. The following aspects present some of the shortcomings of Space Syntax methodology. These shortcomings are based on the empirical findings of this research combined with the general criticism on this methodology.

1. Application of SST is based on an enormous theoretical basis and uses redundant and ambiguous terms. Moreover. The difference between some of these terms is slight (for example, the depth and integration have almost the same meaning in SS). This results in making it difficult for both researchers and practitioners to grasp it and easily work with its software (This has been personally experienced by the researcher).

2. Discarding some major considerations such as linking grid configurations, the land use patterns and most importantly the space's third dimension in which the distance between two points is measured horizontally. Without considering the vertical dimension is hard to accept due to the important impact of the topological representation and properties of the built environment.

3. SS and its applications are not enough to measure the social behavior as it is based on metric calculations and has nothing to reveal about pedestrian's different choices which are influenced by the topographical relations or by other unrelated reasons (Hillier, 2004).

4. In solidarity with Ratti's critic of SS ignorance of a city's third dimension, many urban planners and architects deny the findings based on the analysis of SS because it is two dimensional and incapable of including the visual quality of the space. The outer appearance of the surrounding

environment is not considered including the street quality, surface colors, textures and patterns. Ratti supports this argument and states that design details and elements such as bus stops and taller buildings encourage movement (Ratti, 2004).

5   Axial maps in SS are not able to tell about the culture and the society norms and therefore ignore other factors besides the visual appearance of the space in affecting the pedestrian choice of movement (Lawrence, 1990).

6   At the technical level, preparation of the base maps might require some interpretative drawings that are technically created in order to abstract an open space network into convex spaces. This abstraction of preparing the convex map requires the drafter's personal interpretation to link these spaces with axial lines. Therefore, some errors result from this interpretative drawing process which raises the issue of the reliability of the interpretive data (Desyllas and Duxbury, 2001).

Consequently, some researchers are conservative when using this technique knowing that their maps are not comparable with everyone else's as their results were influenced by their own methodology in drawing the map. Therefore, the fewest line axial maps cannot provide researchers with reliable and comparable results in terms of basic scientific methodology. Until this date, there is no research based on tested standard control procedures for differences in drawing styles to ensure the comparability and reliability of maps

10 CO-PRODUCED PUBLIC SPACES IN AMMAN

Despite the fact that the privatization of communal and public amenities is not newly adopted in Jordan, the private sector was not involved in the supply process of the public space in Amman until very recent times. This chapter will shed light on the newly co-produced and reproduced public spaces in Amman through the partnership of a multiplicity of actors[35]. This will be investigated through analyzing two case studies, the Housing Bank Park and the National Gallery of Fine Arts Park. The analysis in this research aims to reveal the different stakeholders participating in the production process of these spaces and the mechanism in which the partnership is realized. Eventually, this chapter analyses critically the characteristics of the projects produced under such a process and the challenges of this kind of co-production of space at the theoretical and real life practice level.

10.1 Emerging Culture of Public Private Partnership (PPP) of Co-Producing Public Space in Amman

The discourse on public space in Amman often implies that all publically accessible spaces are likewise publically owned and regulated. On the other hand, the word private stands for private control over a certain property and limited accessibility to that property. The modern production of public space in Amman corresponds contradictorily to this theoretically logical discourse. In Amman, the production of the public space, just like many other public services and amenities, became subject to privatization and neo-liberal ideology. As a result, this trend of permitting private involvement has resulted in co-producing spaces that are public and private at the same time.

For understanding the powers and codes underpinning production of these spaces and their corresponding performance, this research made some analysis of two of the selected case studies[36]: the park of the National Museum of Fine Arts (known as Al Weibdeh Park) which involves five different stakeholders (chapter 6.5.4) and the Housing Bank Park that is considered to be the GAM's first PPP experience in the field of creating public spaces in Amman (chapter 6.5.8). The analysis integrates observations of the activities and the user groups of these public spaces and interviews with the different stakeholders to conceptualize these spaces involving different interests and to reveal the complexity of public-private interdependencies through answering the following proposed questions: who the owner of the public space of this kind of production (land ownership) is, what the interest/interests of each actor is, who

---

[35] Taj Mall was eliminated from this part of the analysis since it is a fully private space and does not involve different actors and public engagement.

[36] All other case studies are publically owned by Greater Amman Municipality

designs the space, who regulates the accessibility and the use of that space who is responsible for the management and maintenance of this space and how many actors are involved in each.

The analysis of this part of co-produced spaces is based on investigating the planning processes of the realization of these two public spaces. This was achieved through interviewing a wide range of architects, planners and private investors, observations of use and behavioral patterns and interviews with some of the users of these two public spaces. The interviews with the officials included individual and group discussions with four representatives from the Greater Amman Municipality (GAM) to understand their vision behind the involvement of the private sector in the production of new public space projects and four interviews with stakeholders from the private sector to understand their perception of their role in this dual production process and their shared responsibility with the GAM in the production of public space. Additionally, ten users of the two public spaces were interviewed to investigate their perception of semi-public spaces (in the theoretical perceptional sense). In addition to understanding the individual role of each actor, this part aims to investigate the consequences of this kind of co-produced space.

Figure 10.1 Site plan of the National Gallery of Fine Arts Park
Source: CSBE, 2014

Figure 10.2 Site plan of the Housing Bank Park

Source: GAM, 2013

10.2 PPP Co-Produced Space - The Case of Housing Bank Park

10.2.1 Who is Involved in the PPP of the Housing Bank Park

The Greater Amman Municipality (GAM), the Housing Bank, and the local community are the main three actors involved in the production, management and maintenance of the park. However, another layer of indirect actors are involved, such as an architectural and landscape design firm, lawyer and barrister firms, electro-mechanic suppliers and accounting firms. These actors participated as well in realizing this project.

The Greater Amman Municipality, along with its related departments, is the main actor that owns the land and is responsible for making the decisions regarding that project. In this partnership, the main motivation for the GAM is rather straightforward and that is to provide the Housing Bank with the land as an incentive to avoid, in return, the running costs of 6,200,000 million for the design and the construction of one of the public space projects in one of the most expensive and attractive areas in Amman and eventually to benefit the local community (Al Qaisi, personal communication, 2012; Qatanani, personal communication, 2012).

We, at the Greater Amman Municipality, do not have the financial and the know-how capacity to execute all projects and this is why we steer implementation to the private sector. This will enforce the partnership with the private sector (and this is by the way his majesty King Abdulla vision) and enhance the quality of the implemented public projects (Head of Studies and Design Department, GAM, 23.10.2012, translated from Arabic).

In addition to the tangible direct benefits gained by the GAM through this partnership, the implementation of the PPP transfers knowledge and know-how from the investor's operating staff to the GAM after the concession period. In the GAM's previous experiences with the private sector, the skilled people from the private sector have already trained the GAM employees at these projects during the legal operating time. The result was that the GAM gained the knowhow and the professional experience from the private sector and was also able to run and operate these projects after the contract with the private sector ends. Thus, this process follows the principle Build-Operate-Transfer (BOT)

Figure 10.3 Private Partnership (PPP) model of co-producing the Housing Bank Park

On the other hand, the motivation of the private sector entering this partnership was basically to extend its coverage to reach other new destinations. However, they share similar objectives with the municipality. They also want to benefit the local community by developing a new public facility attracting people to their space. This indicates actually that there is a commercial purpose behind the desired attraction. Considering the commercial motivations, common sense assumes that they must have negotiated to maintain the managerial right of the park to protect their branch and to promote their brand through the services provided in their privately owned but publically accessible space. This, however, was actually the original agreement before the Housing Bank cleared its responsibility in managing and maintaining

the park after building their own part (bank branch) and after the park was officially opened (Qatanani, personal communication, 2012).

The third key actor in this project is the local community which was absent from the whole process of the production of this space. The GAM's ideology suggests that the local community is not interested in the process in which these spaces are produced but rather the final output and the physical product of the partnership.

> I think the local community is not much involved in how the service was delivered to them. They receive the service and they don't care if GAM incorporates a private sector or not. Eventually, they care about the quality of the service they receive and if it involves monetary obligations. So what could bother the public are the fees that they might need to pay for that service (Head of Studies and Design Department, GAM, 23.10.2012, translated from Arabic).

This argument reveals the urgent need of serious research and further investigation into the community location in the debate of PPPs.

Key Remarks

In addition to the analyzed mechanism of the PPP between the GAM and the Housing Bank, the investigated motivations behind this partnership and roles of the main three actors in this co-produced space were investigated, and the subsequent remarks are:

- The Greater Amman Municipality (GAM) and the private objectives often do not differ very much. Both seek to benefit the local community. However, the private sector has self-promoting motivations in addition to the declared ones.
- The GAM believes that the involvement of the private sector enhances the quality of the services/infrastructure provided by the GAM to the local community and the role of the private sector in this operation is supplemental rather than comparative. Thus, the GAM is welcoming this new model of operating projects.
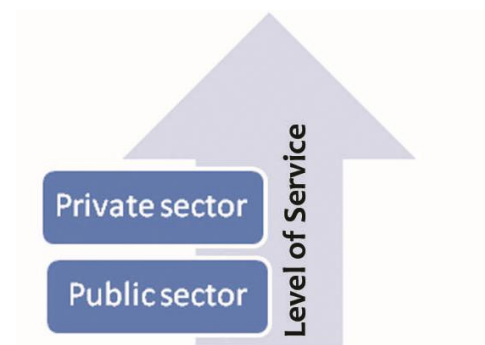
Figure 10.4 The Public and Private sector in relation to the level of service

PPPs help the public sector to enhance the quality of its projects, and this enables the exchange of the knowledge between the two sectors. The private sector is more exposed to the new updates and

development than the public sector (Head of Studies and Design Department, GAM, 23.10.2012, translated from Arabic).

Some organizations (municipalities) believe that they could carry out and execute all public projects within their financial and administrative capacities without any external involvement. Other institutions believe that they could create services for the local community's certain capacities. On the other hand, they could optimize the level of services by certain operations/partnerships with the private sector. Thus, the main goal of the PPP is to serve the local community by optimizing the level of the provided service (Expert interview, group discussion, GAM, 17. 10. 2012, translated from Arabic).

- The management of public facilities through private enterprises often results in high quality co-produced spaces due to the modern methods and advanced technicality adopted by the private sector that competes with other enterprises at the international market level and wishes to maintain high standards.

- The residents of the Abdoun neighborhood, where the park is located, believe that the management and the security addressed by the private sector will enhance the overall security of the neighborhood that is characterized by being relatively unsecured due to the existence of a lot of strangers.

- The local community is the biggest beneficiary from the PPP. The municipality saves money, management and human resources and provides more service-oriented projects with good quality to the local community. While the private sector saves the land cost in one of the most expensive areas in Amman and receive incentives, and at the same time realizing new public service for the local community.

Local
community

-Winning new
public spaces

Housing Bank

- A new branch for
the bank

-Saving land costs

- Incentives

-Commercial

Municipality

-Optimizing level of service

-Reducing costs

-Saving management

-Benefiting the local
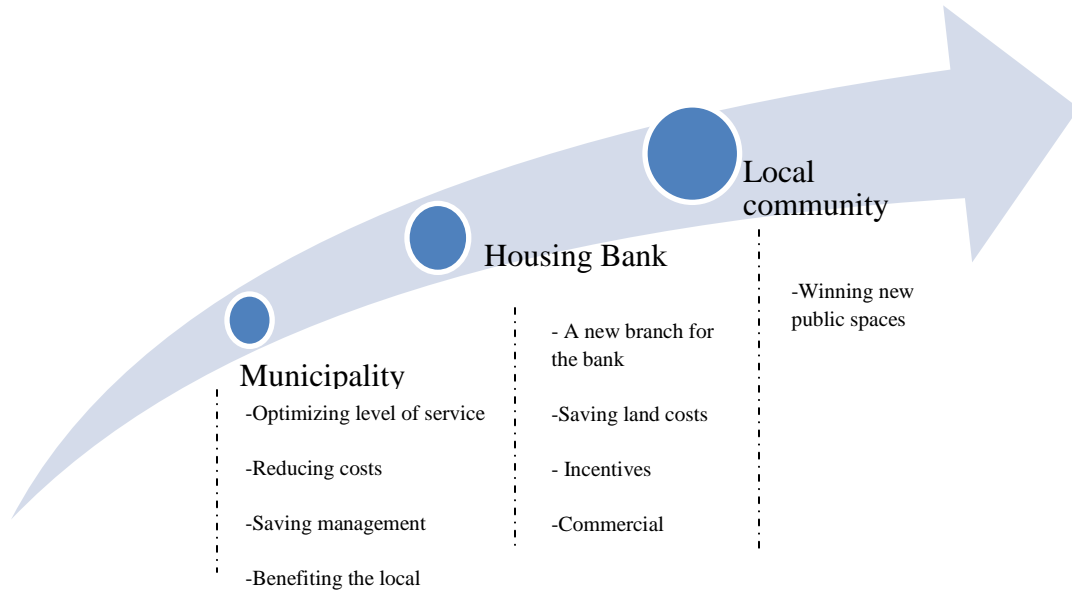
Figure 10.5 Benefits achieved by the three main stakeholders involved in the PPP

10.2.2 Mechanism of Realizing the PPP of the Housing Bank Park

In the Greater Amman Municipality (GAM), policy and legislations are the two used mechanism to enact new public spaces through PPPs. The current vision and policy adopted by the GAM supports the visions of his majesty King Abdulla to encourage and strengthen the bonds and cooperation between the public and the private sector (see chapter 2.5). Agreements and contracts are the main instruments for realizing such partnerships. However, the legislations in which the agreements refer to are adopted from the law of the Ministry of Municipalities. This is due to the fact that a PPP is a new policy adopted by the GAM and no by-law is formulated yet to act as a template for all projects that involve private partnerships (Qatanani, personal communication, 2012). Until this moment, all projects that have involved private partnerships have different templates that are tolerated to meet the interests of either the GAM or, in some cases, the private investors. There is no one standard template standing for the PPP.

> Public private partnership is a new planning culture for GAM and we are not practicing it as one of the conventional standard strategies that GAM has followed for a long time. In GAM, we, until now, don't have a specific law for PPP and until this moment we are using the laws followed by the Ministry of Municipalities (Head of Studies and Design Department, GAM, 23.10.2012, translated from Arabic).

10.2.3 Challenges of PPP - The Housing Bank Park

There were several challenges for the PPP at the Housing Bank Park outlined as follows:

- The participation of the neighborhood's residents was absent in the planning and development process. In the case of the Housing Bank Park, the residents of the neighborhoods were completely excluded from the planning process despite the fact that this park represents the first experience of creating public space by a private investor.
- The same roles of the different stakeholders overlap in such a way that it's not clear who is responsible for what. In the case of the Housing Bank Park, both actors the GAM and the Housing Bank have ongoing negotiations of who should be in charge of the management and maintenance of the park. The GAM claims that, according to the partnership agreement, the Housing Bank should be responsible for the management of the park and the Housing Bank claims that they already completed the agreed upon parts (construction of the park) and that construction costs have already exceeded what was agreed upon. Therefore, they have not been in charge of the management of the park since the opening date.
- The private sector complains about the municipal's stubbornness and ignorance of daily problems (maintenance in particular). Nevertheless, the municipality claims that the maintenance is not the GAM's responsibility from the completion of the park until the transfer date. Private actors of the Housing Bank conceive themselves as the creators of public space, but tend to leave the maintenance to the municipality.

The Bank is responsible just for the management of the park (security, agriculture, cleaning) but not for the maintenance of the park! It's under GAM responsibility until the end of the contract. After 8 years of the contract, until October 2015 (Project Manager of the Housing Bank Park, Housing Bank, 22. 10. 2012, translated from Arabic).

- The private sector complains about the patronizing attitude of the GAM; however, at the action and decision making level, the GAM does not realize that their role is decreasing to be not more than a moderator and technical supervisor.
- Some professional qualified private actors perceive the municipality as inefficient, bureaucratic, demanding, inflexible, technically unqualified, and ungrateful. Therefore, they do not apply for the tenders the municipality offers in the market for the public projects.
- With the private involvement in the development and creation of a lot of urban sites in Amman, the municipality gave away major decision making powers to the private actor. Therefore, it has weakened and marginalized their role and power towards public ends.
- The procurement process of PPPs needs to be more transparent in all of its phases towards equal opportunities for winning bids and participating in the operation and production of the proposed projects. In the institutional set-up of the PPPs in Amman, the groups who are empowered and have the privilege to involve other actors are transnational investors who bring in their allied

planners and technicians. These groups, in return, bring also their allied clients, accounting and technical firms. Therefore, producing new spaces are according to the visions of a certain group of peoples.

Phase I	Needs assessments and identification of new projects	
Phase II	Preparation and conception	- Preparation of conceptual drawings
Phase III	Tender and award	- Putting projects to tenders - Actors meetings - Reviewing bidders - Selecting sub-contractors
Phase IV	Implementation and management	- Defining operational model - Follow-up
Phase V	Exploitation	Monitoring implementation
Phase VI	Transfer and handover operations	Proof of transfer mechanism

- - - - - - - - - -   Phases that lack transparency in the operation and implementation of PPPs

Figure 10.6 Procurement process phases of PPPs

- The development brought by the private sector is not well integrated nor does it correspond to the demands of the local community. The Housing Bank Park attracts more people from other destinations than from the surrounding neighborhood "Abdoun". In the interviews, residents of Abdoun expressed that they are not interested in having a park in Abdoun.

Our impression from the research project about public spaces in Amman was that there was no thinking of these spaces as spaces for the people. The focus was spatial and formal (producing the space in isolation of their surroundings and design requirements). Generally GAM integrates well-known professional architects for that purpose, while the people perceive these initiatives as if they are destroying the surrounding space, especially the owners of the shops at a given public space….. There are no visions and thoughts from GAM on the future of the space (Expert interview, CSBE, 23.10. 2012, translated from Arabic).

With implementing a PPP, the 3 main involved stakeholders are winning: the local community (public) receives the optimal level of services, the GAM saves management, budget, and resources for other projects and the private sector provides service to the local community and in return promotes their brand

and pays less taxes and fees (Expert interview, Group discussion, GAM, 17. 10. 2012, translated from Arabic).

Figure 10.7 The sign of the park information at the main gate of the Housing Bank Park, Abdoun

10.3 Rehabilitation of the Park of the National Gallery of Fine Arts

In analyzing the second case study resembling the PPP, the focus is given to the coordination and creation of constructive negotiation between different actors in the production process. Although the park of the National Gallery of Fine Arts is much older than the Housing Bank Park both spaces share similarities in terms of urban structure and in being produced through a partnership of multiple actors including the private one.

In early 2002, the non-profit research institution "The Center for the Study of the Built Environment (CSBE)[37]" in association with the National Gallery of Fine Arts[38] and in cooperation with the Greater Amman Municipality (GAM) proposed a project for the rehabilitation and development of the park. One of the major tasks was to secure commitments for supporting the project from donors in cooperation with the Greater Amman Municipality (the owner of the park). The CSBE was able to initiate construction work of the park in the spring of 2004, and the work was completed about a year later in May 2005. The rehabilitated park includes open-air sculpture displays, children playgrounds, a performance/exhibition space, a restaurant of an area of 1600 square meters, and model thematic educational gardens demonstrating water conservation landscape practices. The Water Conserving Landscape project was supported by the Water Efficiency and Public Information for Action (WEPIA) program, which was carried out in association with the Ministry of Water and Irrigation, and supported by The United States Agency for International Development (USAID) (Al Asad and Zureikat, 2005).

10.3.1 Actors and Interests Involved in the Rehabilitation of the Park of the National Gallery of Fine Arts

The complexity of the renovation of this park is embedded in the multiplicity of the actors and stakeholders involved in the rehabilitation process. The main stakeholders in this project are: (1) the Greater Amman Municipality (GAM), (2) the National Gallery of Fine Arts, (3) the owner of the restaurant inside the park (Canvas), (4) the local community and the users of the park, (5) the CSBE, the design and coordination team between different actors, and finally (6) the indirect actors of the sub-contractors and other involved agencies like the USAID, the Water Efficiency and Public Information for action (WEPIA) program, Ministry of Water and Irrigation and the Ministry of Planning and International Cooperation who supported the construction work of the park.

The first actor in this partnership is the GAM who, just like in the case of the Housing Bank Park, sought to renovate the park and enhance the quality of another public space in Amman with less costs and managerial efforts.

---

[37] The Center for the Study of the Built Environment (CSBE) is a non-profit, private interdisciplinary research center that aims at addressing the challenges in the built environment in Jordan and the surrounding courtiers. CSBE include environmental studies, urban design and planning, conservation, architecture, landscape architecture, and construction technologies, (www.csbe.org).

[38] The Royal Society of Fine Arts is a cultural, non-governmental, non-profit organization, founded in Amman in 1979. It is governed by a board of trustees and has an independent administrative, financial, and legal status. Its goal is to encourage cultural diversity, disseminate artistic knowledge, and promote contemporary art from the Islamic and developing worlds. In 1980, the Royal Society of Fine Arts founded the Jordan National Gallery of Fine Arts. The museum has the largest collection of artworks by contemporary artists from the developing world anywhere.

The second actor is the National Gallery of Fine Arts that is located opposite the park in one of the oldest buildings in that area. It is strongly connected to the park and the park took its name from the museum (Al Asad and Zureikat, 2005). The museum played an important role in the rehabilitation of the park. However, they had other interests besides renovating the park and benefiting the local community. The museum had the vision to use some parts of the park for sculpturing purposes but due to contentious negotiations with the CSBE, they realized that this might cause a lot of noise and dust in the surrounding neighborhood. This illustrates that despite the essential role that the museum played in renovating the park, there has been contradicting conflicts between different stakeholders.

The third actor is the restaurant inside the park which adds another complexity to this process. At the beginning of this project, it was challenging to find an investor who was interested in opening a restaurant inside the park. For most investors, it was risky to open the only restaurant in a residential area where people have no other choices and consequently this might make them prefer to go to other destinations in Amman where a variety of cafes and recreational facilities are located next to each other. However, after getting over the first challenge and finding an investor who had an interest in opening a restaurant there, the owner of the restaurant asked to made some design changes in the park. These changes included cutting some area of the park to be as terrace for the restaurant and separating the entrance of the restaurant from the entrance of the park and therefore separating the users of the park from the customers of the restaurant.

The neighborhood residents' attitude, as main stakeholders, was passive and neither with nor against the rehabilitation project. They considered themselves uninformed and therefore they were negative at the time they did participate.

The last conflict of interest occurred after the rehabilitation was completed and the park was about to be officially reopened. The mayor of the GAM was convinced that the park shouldn't be fenced but opened 24 hours a day for the residents and various users of the park while the CSBE believed from their experience, observations and research on public spaces in Amman that opening the park for 24 hours might have a negative impact on the park especially because of immoral practices and unwanted social groups who prefer to come at late hours to the park for socially inacceptable practices like drinking alcohol or dating. Eventually, all actors agreed on fencing the park and making it accessible only from certain gated points.

10.3.2   Challenges of PPP - the National Gallery of Fine Arts Park

There were several challenges for the PPP at the National Gallery of Fine Arts Park outlined as follows:

1. Conflict of interests between the different stakeholders.
2. The passive and negative attitude of the residents of the neighborhood when involved in the planning process. The participation of the local community was not integrated with the planning process since the beginning of the project, thus their attitude was passive and negative and they assumed bad intentions from the other actors.
3. Individual interests and profit-oriented practices from the private sector involved in public projects. In the case of the National Gallery of Fine Arts Park, the restaurant owner used the terrace overlooking the park as a wedding venue and for private parties during the summer time. Many of the local residents are not satisfied with this practice and complain that the neighborhood is not supposed to have such private parties.
4. The private sector does not often adhere to the items of the agreement of the partnership, especially in the parts relating to opening hours, the offered services and sharing the same access to their private property with the users of the park. This attitude is not only held by the private actor in the case of the National Gallery of the Fine Arts Park but also in the Housing Bank Park. In both cases the private actor made a separate entrance for their private part which was against the agreement they had with the GAM and therefore separated their property and divided the public space into different spatial and social entities.
5. In public related projects, the door is always open for emerging stakeholders and therefore the coordination between the different interests turns out to be a challenging task especially when those different actors have different interests and might not be tolerant to compromise. For example, in the case of the National Gallery of Fine Arts Park, an additional stakeholder emerged that is the official association of the neighborhood (Jabal Al Weibdeh association) who believed that they should have the right to win the tender of investing in the restaurant for much less rental price rather than other competitors since they have the privilege of being the residents of the neighborhood and stand for its rights. It's important to note in this regard that the profit of the restaurant goes to the National Gallery of Fine Arts who invested the most in the renovation of the park and is in charge of the management and maintenance of the park.
6. The same roles of the different stakeholders overlap in a way that it's not clear who is responsible for what. In the case of the National Gallery of Fine Arts Park the investors separated the restaurant building from the rest of the park by using a different access and asked not to be involved in the management and the maintenance of the park. In other words, the private investor is not an active

stakeholder anymore and acted like a renter who is obligated to pay the yearly rent and no more. On the other hand, the administration of the National Gallery of Fine Arts Museum does not have the adequate financial and management capacity to be the only actor in charge of the management and maintenance tasks.

11 THEORETICAL BASED FINDINGS: IMPULSES FOR DEVELOPING SUSTAINABLE PUBLIC SPACES IN AMMAN

This research explores critically the production of public space in Amman, focusing on the emerging public spaces that are produced, reproduced and co-produced through socio-economic and political modes of the last 3-4 decades. Methodologically, the qualitative and quantitative research methods that are based on a diversity of codes provided by Lefebvre and Hillier and Hanson's theoretical conceptions, and operated by Grounded Theory (GT) have provided a flexible empirical framework which allowed a qualitative iterative process throughout this research. Based on the finding of the analysis in chapter 8, 9 and 10, this chapter summarizes the main findings of the research and reconnects them with the main objectives, questions and theoretical constructs in chapter 3 and 4.

In chapter 2 the researcher outlined possible relations between the political and socio-economical modes and the production of space in Amman in terms of how each of these modes contributes to the Lefebvre spatial triad of perceived, conceived and the lived space in explaining how space is produced there. According to the research objectives and questions, the discussion in this part will be steered to conceptualize the produced public space in Amman. Finally, this chapter suggests potential areas for further investigations.

11.1 Key Findings and Conclusions

Two space understandings, spatial and social, and their interrelations have been developed in this research in reference to two critically investigated space theories: the Production of Space for Lefebvre and Space Syntax Theory for Hillier and Hanson. The empirical and theoretical findings of this chapter are thematically organized according to the four research questions. The first set of findings (section 11.1.1) relate to the first and the second research questions that aim to identify the current global political and socio-economic modes of space production and their impact on the quality of the produced spaces in Amman. It addresses as well the powers and codes that influence the negotiation, appropriation and domination of these produced spaces. In the second part (section 11.1.2), the findings relating to the spatiality of the produced public spaces in Amman in terms of their spatial performance and articulation with the social aspects of the society are summarized. In the third set of findings and conclusions (section 11.1.3), a comprehensive social and spatial conceptualization of public spaces in Amman is presented. Section (11.1.3) and then followed by urban-design recommendations (section 11.2) which are believed to be relevant to optimizing the role of public space towards social, economic and environmental prosperity in Amman. The fourth part of the findings that relate to the fifth research question is discussed in section (11.3).

11.1.1 Modes of Production of Public Space in Amman

In chapter 2 and the analysis of chapters 8, 9 and 10, the different sources of evidence revealed a diversity of modes underpinning the production, re-production and co-production of public space in Amman. In chapter 2 the recent trends of capitalism and privatization were revealed to be the dominant modes of production at the macro level. The application of these trends resulted in massive urban transformation that manifested through enormous foreign investment on mega projects in Amman (chapter 2.5), spatial transformations that added to the socio-economic and spatial divide between East and West Amman (chapter 2.6.1) and increased involvement of the private sector in the supply of public space in Amman (chapter 2.5 and chapter 10). Therefore, the conceived and perceived spaces were highly subjected to these global driving forces. At the meso and micro level of everyday life in Amman, a complexity of codes and powers dominate the negotiation of the production, reproduction, appropriation and domination of public spaces in Amman.

The global phenomenon of privatization and capitalism has been achieved through the involvement of the private sector in the co-production of many public spaces in Amman. Thus, produced spaces and development projects of the private sector in Amman since the 1980s have a service-based postmodern character which has transferred the city spaces from social spaces where people achieve a state of freedom from the abstract space of quantifiable activities (Lefebvre, 1991 [1974]) into a space of consumption serving the politics of the global market that is conceived as a medium for promoting retail and circulating capital. "There is politics of space because space is political" (Elden, 2007).

Furthermore, the association of the provision of globalized public space and high-value commercial consumption spaces leads finally to gentrification in which one social group or activity is replaced by another after the development (Madanipour, 2010). Gentrification is revealed to be a common consequence of the spatial transformations brought by the production of most public spaces in Amman. However, it should be acknowledged that despite the promoted gentrification with its different faces of social exclusion, spatial transformation, social stratification, and so on, the urban development brought by the private sector in Amman has, on the other hand, turned the old traditional looking abandoned neighborhood spaces and declining parts of the downtown of Amman into well-maintained, vibrant, safer, more organized and collector spaces. The architectural interventions in these projects have indeed contributed to the improvement of the social and physical accessibility to these traditional spaces that are physically characterized with an instinctive identity. This was evident in the case of the development of the downtown area, Rainbow Street and Abu Darwish Mosque Plaza. Additionally, the analysis showed that the enhancement of the downtown area in Amman has added to a great extent, through the provision

and development of the public space there, to the city image and the aesthetic quality of its center and surrounding areas and therefore strengthened the city identity and unique atmosphere.
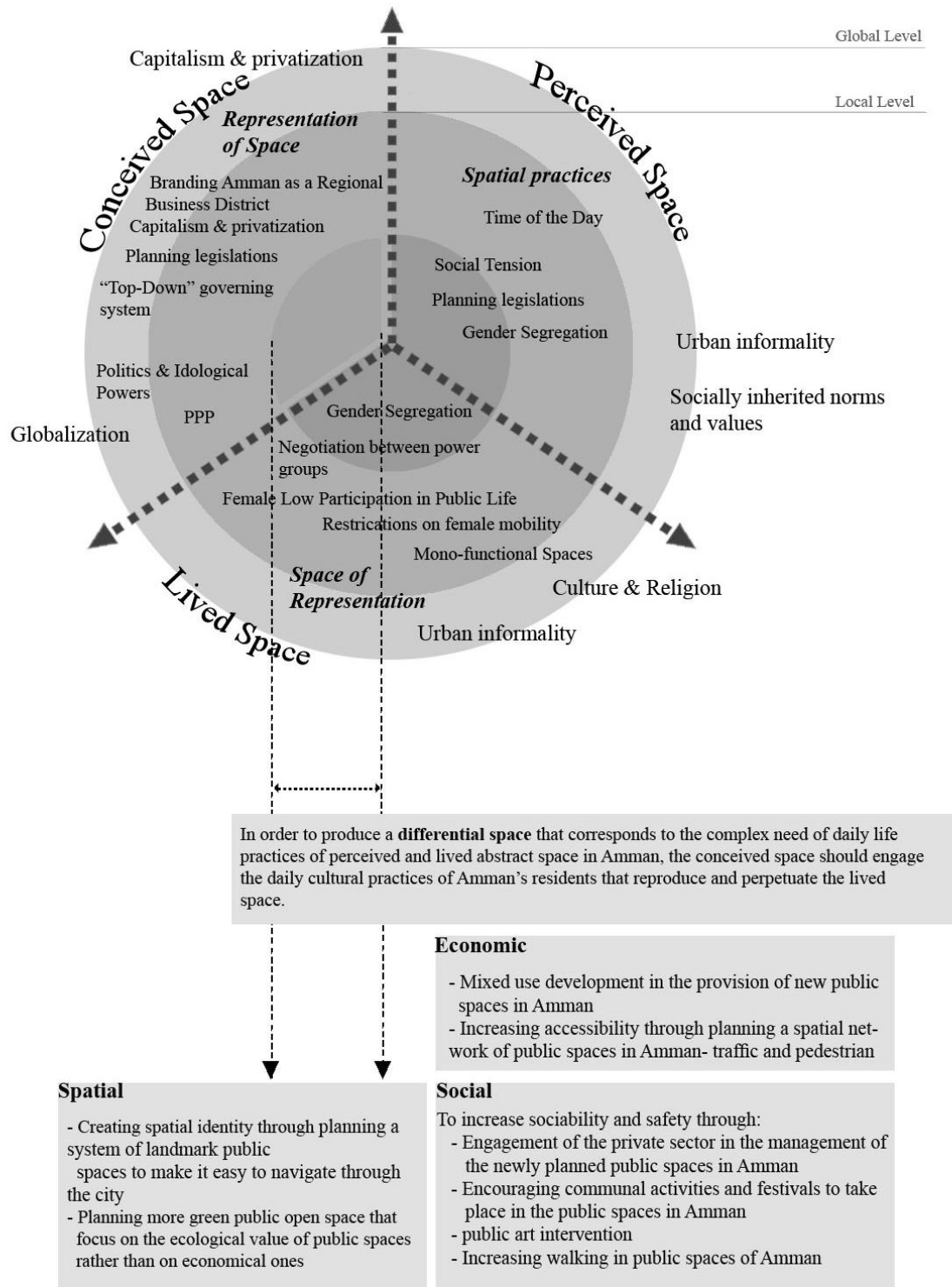

Figure 11.1 Resulted global and local modes of production of the social space in Amman

At the spatial practice level, it was found out in the analysis, especially from the analysis of the National Gallery of Fine Arts and the Housing Bank Park (chapter 10) that the involvement of the private sector in the production and management of public space influences the perception and the users of these spaces. It might result as well in shaping some behavioral patterns within these partially privately owned but publicly used spaces, especially that the private involvement in the production of space is recently introduced to the urban planning culture in Jordan and many operational and organizational issues are still not clear yet (chapter 10.2.3 and 10.3.2). Thus, the limits of control of the private actor over the public spaces have not been well defined in the context of Amman yet. At the everyday-life practice level, the behaviors of users towards these spaces were not influenced by the fact that these spaces are partially privatized.

The concept of realizing privately-owned but publically used spaces is a new experience not only in Amman but in Jordan as a whole and in the Middle East. Although the theoretical literature addressed in this research supports the claim that the involvement of any private actor implies physical and social limitation to access public space, the empirical analysis suggests that in the case of Amman public spaces, this is not necessarily the case (see chapter 10.2). The involvement of the private sector in the production of new spaces did not result in limiting public accessibility to these produced spaces. Thus, social exclusion is not related in all cases to the involvement of the private sector. On the other hand, it's important to mention that despite the fact that the private sector has a profit related interest, it has enhanced the quality of the public spaces and created usable spaces in Amman.

At the planning and governance level in the production of public space in Amman, there is a clear ambiguity in the roles of both the private and the public sectors. This ambiguity made it one of the main challenges that the planners, architects and designers should consider while designing the spaces of the contemporary Amman. The management of the public space is one of the key issues that should be addressed in the policy agenda of the production of space in Amman. The provision of public space brought by the private sector is oriented toward functionality in urban design schemes. They are answerable to their stakeholders rather than the urban community as a whole to ensure returns on their investments. While the public sector, represented by the GAM, has obviously different interests. Thus, a professional coordination policy is urgently required to ensure the communication and constructive negotiation between both actors. Furthermore, in both case studies in which the private sector is involved in the production and management of the space, it was found out that after the implementation phase, the issue of the maintenance of these spaces was problematic between both actors and therefore public spaces have received less attention from both public and private realms (chapter 10.2.3 and 10.3.2). Therefore, it

has suffered from accelerating decline. This phenomenon calls for a comprehensive policy and action plan for operating such co-productions to ensure the quality and durability of these produced spaces.

11.1.1 Conceptualization of the Produced Public Space in Amman

Conceptualization of public space in Amman is achieved through different layers in this research. In addition to the analysis of chapters 2 and 10 in investigating the global modes of production, another layer of conceptualization of public spaces in Amman was achieved through investigating the everyday life practices in the selected public spaces (chapter 8). Finally, the last layer of analysis was achieved through investigating some socio-economic issues like culture, gender segregation and women's position and weight of participation in the public life in Amman (chapter 8.7). The last layer of analysis revealed to be very relevant to the negotiation and appropriation of public space in Amman.

The empirical fieldwork (chapter 8, 9 and 10) showed an active and diverse role of the public space in Amman. Analysis of chapter (8) illustrates that public space in Amman plays an important role in the city's social life and provides an important arena for a diversity of everyday life practices and activities. Furthermore, the public sphere in Amman has multiple roles in encouraging social interaction and allowing economic, recreational and domestic activities. In addition, it provides an arena where religious, social, cultural and political beliefs can be expressed and seen. The research has further disclosed that Amman has highly complex and contested patterns of public, abstract, dominated, appropriated and differential spaces that have a historical value in which an accretion of subsequent spatial practices and various official representations of urban development and urban regeneration has taken place since the production of these spaces. However, the exponential population growth in Amman has resulted in a scarcity of public spaces and consequently adds more pressure on the existing public space for the multiplicity of activities and social dynamics. Therefore, the spatiality of existing public spaces in Amman carries with its folds conflicting attitudes and interests. Thus, public space in Amman is a contested sphere between diversity of localities.

Furthermore, the deterioration of public space culture in Amman is revealed to be multi-dimensional. In addition to gentrification brought by globalization (chapter 2.5 and chapter 11) and urbanization (chapter 2), the deterioration of public space could be related to the fact that the narrative of Amman's modernity tears the public spheres apart into small abstracted spaces of different characters. Public space has not only multiplied and expanded but has also became more impersonal, formal, and abstracted and has lost many layers of its significance to be purely functional and symbolic. The priority is given to the development of spaces of other sectors like education, sports, work, commercial, transport, etc. The collective public space lost its unity and fragmented into smaller entities which perform individually with

no harmony. Thus, modernity has indeed facilitated the provision of more public space; however, it has unfortunately failed to create its conceived inclusive city of the shared differentiated spaces and infrastructure. It has instead participated in enlarging the gap between theses spaces and eventually caused social and spatial segregation and fragmentation.
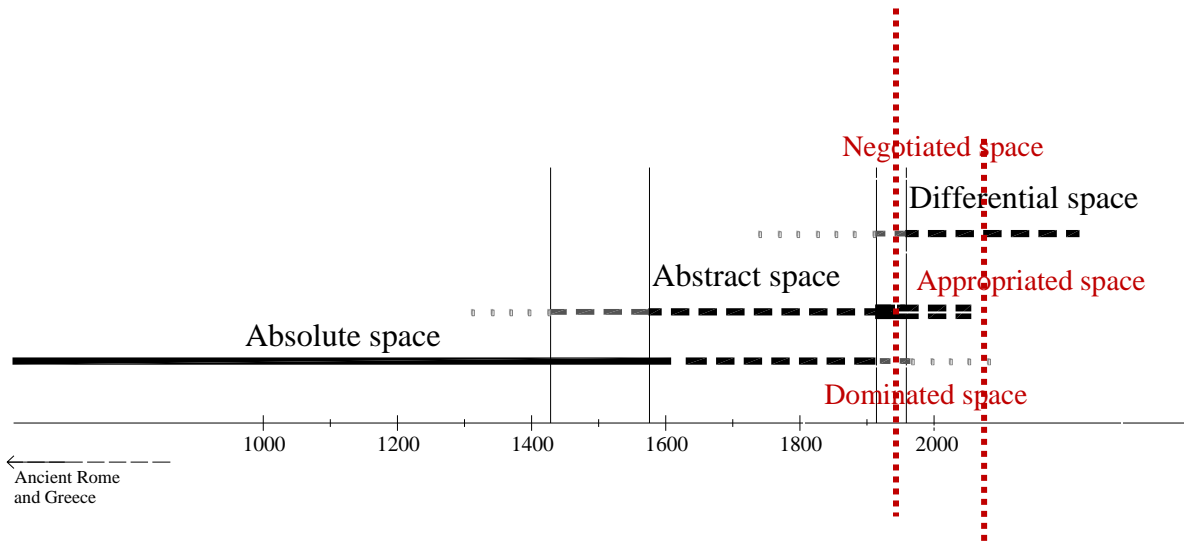

Figure 11.2 Allocating public spaces in Amman within Lefebvre's chronological diagram of space in history
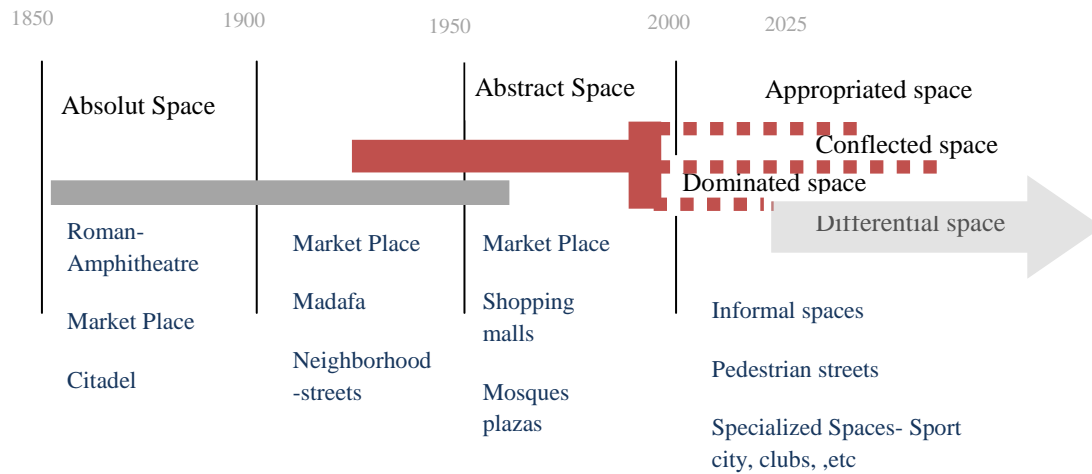

Figure 11.3 Evolution of the public space in modern Amman

As global investments and Gulf surplus contentiously flow in Amman, a new sudden unbalanced commercial development has added to the social and spatial injustice in the city through the character of its produced consumption spaces. In addition to the development side that it has indeed brought, it has brought gentrification with its different manifests and changed the small scale, low-rise and indigenous character of the city into the image of a typical global business district (chapter 2.5, 2.6 and 2.7). This will indeed, at some point, transform Amman to be another pale version of a global city like in the neighboring cities of Dubai, Abu Dhabi, Beirut or Doha whose recent and rapid growth has made it more international but gradually lacking a real identity.

However, despite the fact that the literature review has highlighted a decreasing "publicness" of the abstracted globalized emerging public spaces, namely in the ones introduced through the involvement of the private sector, and that the analysis has confirmed the global character attached to these produced spaces, this research found that the new regeneration projects of the private sector, especially in the city center area in Amman have enhanced the publicness qualities of the city spaces.

All Typologies of Public Spaces Share Similarities in Amman

The contentiously changing qualities of all case studies of this research share common similarities which are also believed to be shared with the other emerging public spaces in Amman and perhaps with other public spaces in different parts of the world. These similarities are seen in: (1) The increasing involvement of the private sector in the provision, management and control of these spaces, (2) newly co-produced urban forms reflect private interest rather than social need, (3) despite their physical accessibility, there is an increasing restriction on the social accessibility of these public spaces and other control measures in order to improve the image of these newly designed spaces, and (4) there is a tendency in the development to promote gentrification.

However, there are differences between the traditional cases as in Al Husseini Mosque Plaza and King Faisal Street and the contemporary cases of Wakalat and Rainbow Street reflecting the different paradoxical experiences within the city of Amman.

People Are Not Equal in Public Spaces

As Amman has grown faster and larger, the social structure of the city has dramatically changed towards heterogeneity across most of the city parts and thus the polarization took another spatial dimension tearing Amman into two cities of East and West Amman that are characterized with visible socio-spatial disparities (chapter 2.6). Furthermore, this spatial structural change in the society of Amman in the last 3 decades supported by the ascendency of the market-based paradigm has resulted in a social shift that has

major implications on spatiality of Amman, urban design, planning and development especially on the provision of the public infrastructure of public and open space. With the domination of the market-based paradigms, the privatization has encouraged social stratification and social division. Each social strata resulted by this divide has different sets of characteristics, interests and powers. Thus, social tension is created between different groups, the ordinary and elite, natives and immigrants, different immigrant groups, males and females. All of these social inequalities became manifest in shaping the character and use of public open space. The lived space in Amman is consequently divided by social gender relations, producing gender appropriated space or gender-based spatiality (chapter 8.7). Considering these findings, it's not always the case that the hierarchy of public space is subject to its publicness of private, semi-private and public (Newman, 1972). The feeling of inclusion of public space in Amman is defined as well by another complexity of powers of the different social groups and relations.

11.1.2 Spatiality of Produced Public Spaces in Amman

In chapter 9, the spatiality of the selected public spaces was analyzed through Space Syntax Theory to measure the level of connectivity and integration of these spaces with their surrounding environment. Findings of this chapter in triangulation with the other qualitative analysis led to answering the fourth research question of how the physical and the social structure of the selected public spaces articulate with each other. This section summarizes the main findings and conclusions in this regard.

Typically, the physical layout and infrastructure has a direct impact on the social content of any public space (Gehl, 2011). However, just as in the case of the hierarchy of the public space that is revealed to be defined by the power of different social groups rather than the publicness of these spaces, the physical design plays a minimal role in forming the behavioral patterns taking place in the public spaces in Amman. The influence of the culture and norms are controlling the social relations and use of the space in Amman. Furthermore, findings indicate that people's preference of public spaces is characterized by simplicity over these with complexity of design. This was evident in the case of the Airport Road where people seek a natural setting at the periphery of the city away from the city's crowdedness and high costs of going out (see chapter 8.6).

At the larger urban design scale level, the traffic issue is a major problem in the recently planned public spaces in Amman. In fact, the planning of road networks and transportation are major challenges in Amman's current planning at the city level. The neighborhood roads in Amman are highly dense and are witnessing the phenomenon of being gradually turned into highways in terms of their traffic volume, driving practices and low level of service (LOS) for pedestrians (Tawil, M., at el., 2014). This transformation of the arterial neighborhood roads confirms the abstracted state of the post-modern

produced space (Lefebvre, 1991 [1974]). Hence, most of the recently produced spaces in Amman are abstract and mono-functional and carry conflicts with its folds.

In most of the recently developed public space in Amman, the traffic issue is not solved or considered as an essential part of the urban design of these spaces. The development of the public spaces in Amman either adds to the traffic congestion of the developed area as in the case of King Faisal Street and Wakalat Street, or creates a traffic problem around these "distention spaces" (Al Asad, 2011) as in the case of Rainbow and Wakalat Street. In addition to the vehicular traffic issue, there is a lack of adequate parking lots in almost all public spaces in Amman. Some of the vandalizing and bad practices that were analyzed in chapter (8.2) reflect the impact of the absence of the consideration of traffic solutions in the provision of public spaces in Amman. The illegal parking on streets' sidewalks, damaged bollards on the sidewalks that protect the area for parking and the traffic congestion created by drivers circling the same area searching for a parking space are clear evidences of the impact of the parking problem in the produced public spaces in Amman.

Spatial Sustainability: Physical Connectedness is a Key Element Towards Social, Economic and Environmental Prosperity in Amman

From the spatial analysis of the selected public spaces through Space Syntax in chapter 9, it's evident that the connectivity and integration of the public space plays an important role in creating spatially sustainable city. The physical connectivity of a unique city like Amman could have a direct impact on its social, economic and environmental prosperity. Each of these dimensions is strongly influenced by the physical design of the places and its accessibility and integration with the surroundings parts.

Based on the broad overlook of the practices in public spaces in Amman and the issues influencing the use of the appropriation of public space (chapter 8), associated with the triangulated findings with the syntactic analysis of the selected public space (chapter 9), it is found that Amman, at the micro level, has a rich variety of public space typologies. However, it lacks at the global level a systematic physical network that guarantees a spatial sustainability that is fulfilling both traffic and pedestrian demands. Planning of sustainable Amman should focus on creating geometric and configurational ordering of spaces. This will in return have a positive impact on the economic, social and environmental prosperity of the city.

At the domestic economic productivity level, the better connected the city spaces, the higher levels of retail income. The findings of the analysis of chapter 8 showed that in the case of King Faisal Street the total retail activity is successful due to the physical connectivity of this street to a network of other

commercial streets. This was also evident in Wakalat and Rainbow Street. However, Wakalat Street has a better infrastructure for encouraging economic activities and pedestrian accessibility. In both Rainbow Street and King Faisal Street the sidewalks are extremely narrow, and vehicular and pedestrian movement is mixed and therefore pedestrians need always to navigate through vehicular traffic. In addition to being inconvenient and unsafe for both pedestrians and drivers, this results in increasing the traffic congestion. Eventually this limits the accessibility to retail shops since it takes a long time to navigate the street to reach the shops on the other side. In conclusion, the similar linear designs that these two spaces have in common with Wakalat Street failed to create the same economic prosperity due to the traffic issue. This draws the conclusion that the local productivity is directly related to the strength of the local-to-global movement network (Hillier, 2009). Additionally, to have a lot of connections within a public space is not enough. These connections should be planned to form better networks that encourage access. These networks should be accessible not only for car traffic but also for pedestrians. It is fundamental as well to separate the vehicular movement from the pedestrian movement as much as possible. Good physical connectivity will result, in addition to the economic prosperity, in increasing the property value of these integrated neighborhoods.

Social cohesion: In addition to the economic prosperity of well connected public spaces, the better connected the spaces, the more these spaces are socially coherent and interactive. Connected spaces offer better chances for people to see each other and to meet in the city. The analysis of chapter 8 indicates that the levels of pedestrian movement in East Amman in general and in the down town in particular are higher than in West Amman. The connected public spaces in this research are located in the city center and residential areas. The presence of other people is a social good with economic benefits (Hillier, 2009).

Pedestrian network: In addition to the domestic economic prosperity that could be achieved through creating a network of public spaces, a strong culture of public life in Amman could be strengthened through a larger pedestrian network that offers people good walking routes. When the possibilities for walking are good and the street environment is lively and friendly, people will make use of their city to a much larger extent and this will contribute to a lively, safe, economically successful and coherent city with distinctive identity. All shopping malls in Amman are unfortunately not serviced with pedestrian streets inviting people into the larger pedestrian network and bringing life to other areas of the city. Improvement of the connections in the city and the development of a pedestrian network with good quality pedestrian routes is a key element in creating a snowball effect. The different routes will be more attractive, the number of pedestrians will increase and the situation for businesses will improve.

Finally, a systematic spatial order of public spaces in Amman could strongly contribute to the establishment of a unique identity. Amman is an easy city to navigate due to its hilly unique spatiality and its natural setting rather than through a street naming organizational order. Despite the efforts that the GAM made in naming Amman's streets and the placement of street signs throughout the city, the people still move around the city and orient themselves through knowing where one goes and using various visual clues (e.g., a particular mosque or landmark) to go from one area to another and eventually to one's destination. Creating a systematic order of public spaces will give Amman a more distinctive spatial identity.

Personal and property safety: Better designed streets are safer and less prone to crime. This means the richer the public space with a variety of facilities and furniture, the more social the space is with more participants in street-life. Better designed streets have less anti-social behavior. The safer public spaces in this research are located in the city center and residential areas within neighborhoods. They include more everyday activity that deters anti-social behavior.

11.2 Recommendations for Urban Development

The following recommendations for urban planning are based on the previous discussion of the findings and conclusions on the production of space in Amman. This section summarizes the findings related to the fifth research question that seeks to find possible guidelines for planning institutions and organizations to insure sustainable performance of public spaces in Amman as an arena of everyday life practices for all social classes. The analysis of this research suggests a number of guidelines for the planning process whether it is top-down/centralized or bottom up/decentralized planning approaches.

1. **Engaging the local community in the urban development and planning process**

 In all cases of the recently developed public spaces in Amman (Housing Bank Park, Rainbow Street, Abu Darwish Mosque Plaza) the community was not informed or empowered about the planning process. This has resulted in a clear resistance from the local community against the practices of both private and public sectors. Resistance against these practices was passively expressed through vandalizing the public properties and through other bad practices. At the formal level, the public resistance is unfortunately absent and only those who belong to the elite groups are able to express their rejection and dissatisfaction and can exert pressure on decision makers and power sources. This draws the conclusion that the bond and trust between the Jordanian community and the government is broken. This is due to corruption, nepotism and cronyism. Absence of public participation is an issue that is found not only at the urban

planning level but also at the political and national development level. Most Jordanians are not informed about their right of participation in the urban development. Consequently, their attitude is either negative or passive towards the development provided by the government. Thus, public participation in the urban governance is required by explaining to the local community new planning visions and the planning process in order to receive their feedback on what they consider the top priority of the municipal action agenda to be. This will result in ensuring transparency in the planning process of the municipal administration, and perhaps most importantly in achieving a sense of civic responsibility towards public properties. This will subsequently contribute to the longevity and institutional sustainability. Public participation could be achieved through community forums and workshops. Promoting these events is very essential to guarantee the maximum participation. Advertising such events could be done through popular media (print media, radio and television) or banners on the main roads. Facebook is often used to promote such events as well.

2. **To steer the dialogue and empowerments towards the young generation in Jordan to achieve cultural and urban transformation**

In Amman, most users of public spaces are young people. Over 50% of the Jordanian population is under the age of 25. This demographic polarity towards youth provides the opportunity to steer the dialogue to the young educated people of Amman society to achieve a massive positive cultural transformation within a short period of time. The dialogue with this age group should focus on building citizenship and a sense of a civic responsibility. This includes giving the youth a platform to voice their needs, visions and concerns to the power sources. This should be within the planning culture that takes place in every implemented project.

3. **Recognition of the multiplicity of actors and their potential power in the planning of public space**

In the course of planning public spaces in Amman, the production of these social spaces should be multidimensional and consider different stakeholders. All actors and agencies should be engaged in the planning process. Furthermore, planning should be a dynamic process of ongoing interactions between different actors. This will contribute to producing more inclusive and accessible spaces that are opposite to the ones that are derived from technical and benefit-oriented concerns that act as an exclusive mono-functional and ridged space that serves narrow interests.

4. **Creating more inclusive public spaces that celebrate the cultural diversity of Amman to achieve a more democratic transparent society and to contribute to social justice and bridging the gap between differentiated groups**

As discussed in the literature of chapter 2 and confirmed through the analysis of chapter 8 and chapter 9, Amman suffers from a socio-economic polarization and thus there is an increasing tendency from the local authorities to enhance the quality of the public space as a key instrument in economic and urban revitalization (chapter 2.6.4). In a city of enormous population and social diversity like Amman, political, economical and spatial physical solutions are not sufficient to address the social problems in the city. The establishment of political and social spheres of democracy and transparency in the public spaces should be at the heart of urban planning to ensure the social functionality of the city. Provision of more public spaces might not remove the socio-economic divide and tension between the rich and the poor, male and female and between different national and ethnic groups, but it provides opportunities for expressing and sharing experiences within a highly polarized society like Amman.

5. **The management of the public spaces shouldn't be undertaken only by the municipal planning system but also shared between a diversity of actors and agencies**

The analysis in chapter 8 and chapter 10 showed that most of the recently produced public spaces in Amman suffer from low maintenance and bad practices towards sustaining theses spaces. However, in the cases of the National Gallery of Fine Arts Museum Park and the Housing Bank Park the management of these public spaces has better performance due to the shared management responsibilities between different actors. To ensure a more durable and functional public space, the management and conservation of this space shouldn't be undertaken only by the formal planning system especially when it has an ineffective planning administration.

11.3 Further Areas for Research

Three highlights need to be presented regarding further investigations and research in theorizing the modern public spaces.

This research has taken one simple step to cover the relation between the local and global structure of street networks, in terms of their ability to contribute to environmental, economic and social sustainability. Considering the findings of this research, it is believed that further research should also engage intensive analysis of the transportation network and the hierarchy of the streets in the city and their relation to the production of space. The mentioned two topics could be a major focus for a further intensified research effort.

Further research should also focus on the concept of differential space that is produced by the users without any formal planning interventions. This research analyses the sides of the Airport Road as an example of these spaces. However, further research should be engaged in Lefebvre spatial triad in

mapping, locating and exploring these spaces and their emergence. In the case of the Airport Road, the spatial practices have produced a hybrid differential space in which a diversity of social classes feels comfortable being there. Differential spaces could be a new target for planning development that is not purely economic and commercial in its essence. The concluded key question that needs to be investigated in this regard is if differential space is a desired outcome of the production of space through planning and regeneration interventions, then should its creation process remain informal or should it be delivered and produced through planning interventions?

Furthermore, public space is a multi-dimensional term that includes a diversity of concepts. With globalization and communication technology, public space approaches the virtual dimension. The World Wide Web (WWW) serves as a public international platform both as exposed users and as anonymous voters. Therefore, there is a need to cover the social spaces that are used to comprise a physical space and the people within it, but with the technological intervention, a group of people around the world are physically presented in a virtual space.

BIBLIOGRAPHY

Ababsa, M. (2007). Amman, de pierre et de paix. Collection Villes en mouvement. Paris: Autrement.

Ababsa, M. (2010). The Evolution of Upgrading Policies in Amman. Paper Presented at the Second International Conference on Sustainable Architecture and Urban Development, CSAAR, MPWH, University of Dundee, Scotland.

Ababsa, M. (2011). Social Disparities and Public Policies in Amman. In M. Ababsa & R. Daher (Eds.), Les cahiers de l'IFPO: Vol. 6. Cities, urban practices and nation building in Jordan [Villes, pratiques urbaines et construction nationale en Jordanie] (pp. 205–231). Beyrouth: Presses de l'ifpo.

Abu Dayyeh, N. (2004). Persisting Vision: Plans for a Modern Arab Capital: Amman, 1955-2002. Planning Perspectives, 19(1), 79–110.

Abu Khalil, A. (2007, August). East and West Amman and the West of West Amman: Shifting Patterns of Wealth and Poverty in the Capital Amman (translated from Arabic title). Almastoor, pp. 4–6.

Abu Thiab, D. (2012). Mind the Gap: Mapping the Urban Divide in Amman (MSc.), Amman, Jordan.

Abu-Ghazalah, S. (2007). Skyscrapers as an Instrument for Economic Development: The Case of Amman. Development, 11(1), 81–88.

Al Abed, M., & Neimat, K. (2006, November 10). GAM to Draw up Plans for High-rise Towers. Jordan Times.

Al Asad, M. & Zureikat, L. (2005). The National Gallery of Fine Arts Park: Sculpture Garden and Water-Conserving Model Park. E-Publications & Resources Retrieved from http://www.csbe.org/e-publications-resources/articles-and-lectures-on-landscape-design/material-on-water-conserving-landscapes/.

Al Asad, M. (2008, June 5). A New Amman, for Better and for Worse. Jordan Times.

Al Asad, M. (2011). Three Public Spaces in Amman. Retrieved from http://tareeq.me/?p=1757

Al-Attiyat, I., Shutaywi, M., & Sweiss, S. (2005). Building Democracy in Jordan: Women's Political Participation, Political Party Life and Democratic Elections. Stockholm: IDEA; ANND.

Aljafari, M. (2006). The Role of Urban Parks in Humanizing the City (M.S. thesis), Jordan University.

Aljafari, M. (2010). Integrated Spatial Planning of Middle Eastern Historic City Centers and European Cities (German city): A Comparative Analysis. In C. Reicher, K. Bäumer, M. Tawil, D. Jacob, & L. Shaheen (Eds.), Embracing the Past, Enhancing the Future. Planning Spaces Through Intercultural Dialogue (pp. 110–129). [Essen]: Klartext.

Alhiary, N. (2004). Exploring the Quality of Recreational Local Parks in Amman: Patterns of Design and Patterns of Use in Selected Case Studies. MSc thesis, University of Science and Technology, Irbid, Jordan.

Al-Qawasmi, J. (1993). Evaluation of Public Urban spaces in Amman Area as Perceived Experience. Unpublished thesis, University Jordan, Amman, Jordan.

Alsawaryeh, N. (1996). Amman During Latest Rule of Ottomans: A Study of the City Economic, Social and Administrative Development: Amman, 1918-1928 (translated from Arabic title). In S. Shami & J. Hannoyer (Eds.), Amman the City and its Society (pp. 72–88). Beirut: Centre d'etudes et de recherches sur le Moyen-Orient contemporain.

Amawi, A. M. (1996). (The Transjordanian State and the Enterprising Merchants of Amman. In J. Hannoyer, & S. Shami, Amman the City and its Society (pp. 109–129). Beyrouth: Cermoc.

Amman Municipality (1987). Greater Amman Comprehensive Development Plan 1985-2005.

Anani, J. (1992, April 28). Who Are Ammanities? Ad-Dustor, p. 4.

Bakij, A. R. (1983). Amman: Yesterday and Today: W.S. Cowell, London.

Beauregard, R., & Marpillero-Colomina, A. (2011). Amman 2025: From a Master Plan to Strategic Initiative. Amman: Amman Institute (Ai).

Beauregard, R., & Marpillero-Colomina, A. (2011). More than a Master Plan: Amman 2025. Cities: The International Journal of Urban Policy and Planning, 28(1), 62–69.

Bell, J. (2005). A Guide for First-time Researchers in Education, Health and Social Science (4th ed). Maidenhead: Open University Press.

Benn, S. I., & Gaus, G. F. (1983). Public and Private in Social Life. London, New York: Croom Helm; St. Martin's Press.

Biegel, R. (1996). Urban Development and the Role of the Service and Banking Sector in a "Rentier-State". In S. Shami & J. Hannoyer (Eds.), Amman. The City and its Society (pp. 379–403). Beirut: Centre d'etudes et de recherches sur le Moyen-Orient contemporain.

Birks, M., & Mills, J. (2011). Grounded Theory: A Practical Guide. Los Angeles, Calif: SAGE.

Brown, A. (2006). Contested space: Street Trading, Public Space, and Livelihoods in Developing Cities. Rugby, UK: ITDG Publications.

Carmona, M., Magalhães, C., & Hammond, L. (2008). Public Space: The Management Dimension. London, New York: Routledge.

Carmona, M., Magalhaes, C., Blum, R., & Hopkins, J. (2003). Is the Grass Greener? Learning from International Innovations in Urban Green Space Management.

Carr, S., Francis, M., Rivlin, L. G. and Stone, A. M. (1992). Public Space. New York: Cambridge University Press.

Charmaz, K. (2000). Grounded Theory - Objectivist and Constructivist Methods. In N. K. Denzin & Y. S. Lincoln (Eds.), The SAGE handbook of qualitative research (2nd ed.). Thousand Oaks: SAGE Publications.

Charmaz, K. (2006). Constructing Grounded Theory: A practical Guide Through Qualitative Analysis. London, Thousand Oaks, Calif: SAGE Publications.

Chatelard, G. (2010, Aug. 31). Jordan: A Refugee Haven. Migration Information Source. Retrieved from http://www.migrationpolicy.org/article/jordan-refugee-haven/.

Chen, A. M., Jhabvala, R., & Lund, F. (2002). Supporting Workers in the Informal Economy: A Policy Framework: Employment Sector, International Labour Office Geneva. Retrieved from http://www.ilo.org/wcmsp5/groups/public/- ed_emp/documents/publication/wcms_122055.pdf.

Cook, A. E. (2002). Landscape Structure Indices for Assessing Urban Ecological Networks. Landscape and Urban Planning, 58, 269–280.

Corbin, J. M., & Holt, N. L. (2005). Grounded Theory. In B. Somekh & C. Lewin (Ed.), Research Methods in the Social Sciences (pp. 49–55). London: SAGE.

Cranz, G. (1982). The Politics of Park Design: A History of Urban Parks in America. Cambridge, Mass: MIT Press.

Crotty, M. (1998). The Foundations of Social Research: Meaning and Perspective in the Research Process. London: SAGE Publications.

Crotty, M. (2003). The Foundations of Social Research: Meaning and Perspective in the Research Process. London, Thousand Oaks, Calif: SAGE Publications.

Daher, R. (2008). Amman: Disguised Genealogy and Recent Urban Restructuring and Neoliberal Threats. In Y. Elsheshtawy (Ed.), The evolving Arab city. Tradition, Modernity and Urban Development (pp. 37–68). London, New York: Routledge.

Daher, R. (2010). Urban Rehabilitation in the Midst of Agencies, Actors, and Activists: Amman: The Unconventional Urban Heritage Tourism Destination. In Regional conference: Civil society and cultural heritage in the Mediterranean. Palermo. Retrieved from http://www.euromedheritage.net/euroshared/doc/Rami%20DAHER_Urban%20Heritage%20Tourism.pdf.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). The Sage Handbook of Qualitative Research (4th ed.). Thousand Oaks: SAGE.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2000). The SAGE Handbook of Qualitative Research (2nd ed.). Thousand Oaks: SAGE Publications.

Department of Statistics, DoS [Jordan] & ICF Macro (Calverton, Maryland, USA). (2010). Jordan: Population and Family Health Survey 2009. Calverton, Maryland, USA: Department of Statistics and ICF Macro.

Department of Statistics, DoS [Jordan]. (2009). Hashemite Kingdom of Jordan (2009). Jordan Population and Family Health Survey. In Report prepared by the Department of Statistics, DoS [Jordan], the Ministry of Health, and DHS IRD/Macro International.

Department of Statistics, DoS [Jordan]. (2010). Hashemite Kingdom of Jordan. Jordan in figures. Amman, Jordan.

Department of Statistics, DoS [Jordan]. (2014). Unemployment Rate during the fourth Quarter of 2013. Retrieved from http://www.dos.gov.jo/dos_home_e/main/archive/Unemp/2013/4rd_Q.pdf.

Desyllas J., Duxbury E (Ed.) (2001). Axial Maps and Visibility Graph Analysis: A Comparison of their Methodology and Use in Models of Urban Pedestrian Movement. London: University College London UCL.

Dick, B. (2005). Grounded Theory: a Thumbnail Sketch. Resource Papers in Action Research. [On line] A Brief Overview of the Process of Grounded Theory; Grounded theory is an Emergent Research Process with some Similarities to Action Research.

Drummond, L. (2000). Street Scenes: Practices of Public and Private Space in Urban Vietnam, Urban Studies, 37 (12), 2377-239.

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. The Academy of Management Review, 14(4), 532–550.

Elden, S. (2004). Understanding Henri Lefebvre: Theory and the possible. Continuum studies in philosophy. London, New York: Continuum.

Elden, S. (2007). There is a Politics of Space because Space is Political: Henri Lefebvre and the Production of Space. Radical Philosophy Review, 10(2), 101–116.

Emanuel, J. (2012). Discriminatory Nationality Laws in Jordan and Their Effect on Mixed Refugee Families. Retrieved from http://www3.nd.edu/~ndlaw/prog-human-rights/student-research-papers/NationalityLawsInJordan.pdf.

Erzberger, C., & Kelle, U. (2003). Making inferences in mixed methods: The Rules of Integration. In A. Tashakkori & C. Teddlie (Eds.), Handbook of mixed methods in social & behavioral research (pp. 457-488). Thousand Oaks, CA: Sage.

Findlay, A. (1986). Amman: Urbanization in a Charity State. Bulletin de la Societe Languedocienne de Geografie , pp. 211- 221.

Flick, U. (2007). Qualitative Sozialforschung. Eine Einführung. Reinbek: Rowohlt.

Freij, M. (2012, Apr. 30). With more Activities, Jabal Amman Seeks Bigger Turnout at Outdoor Souk. The Jordan times. Retrieved from http://jordantimes.com/with-more-activities-jabal-amman-seeks-bigger-turnout-at-outdoor-souk.

Gehl, J. & Gemzøe, L. (2004). Public Spaces, Public Life, Copenhagen (3rd ed). Copenhagen: Danish Architectural Press & the Royal Danish Academy of Fine Arts, School of Architecture Publishers.

Gehl, J. (1987), Life Between Buildings: Using Public Space (trans. By Koch,J.), New York:Van Nostrand Reinhold.

Glaser, B. G. (1978). Theoretical Sensitivity. Mill Valley, Calif: Soc. Press.

Glaser, B. G. (1992). Basics of Grounded Theory Analysis. [S.l.]: Sociology press.

Glaser, B. G., & Strauss, A. L. (1967). The Discovery of Grounded Theory. New york:Aldine.

Glaser, B. G., & Strauss, A. L. (1967). The Discovery of Grounded Theory. New york:Aldine.

Goodchild, M. F. (2000). Spatial Analysts and GIS Practitioners: The Current Status of GIS and Spatial analysis (Part 1). Journal of Geographical Systems, 2, 5–10.

Goonewardena, K, Kipfer, S., Milgrom, R., & Schmid, C. (Eds.) (2008). Space, Difference, Everyday Life: Reading Henri Lefebvre. Abingdon: Routledge.

Goulding, C. (2002). Grounded Theory: A Practical Guide for Management, Business and Market Researchers. London, Thousand Oaks, Calif: SAGE.

Goulding, C. (2002). Grounded Theory: A Practical Guide for Management, Business and Market Researchers. London, Thousand Oaks, Calif: SAGE.

Greater Amman Municipality (GAM). (2014). Wadi Amman Development Project. Retrieved from http://www.ammancity.gov.jo/en/projects/wadiamman.asp.

Greater Amman Municipality (GAM). (2008). (2008). The Amman plan metropolitan growth report.

Greene, J. C., Kreider, H., & Mayer, E. (2005). Combining Qualitative and Quantitative Methods in Social Inquiry. In B. Somekh & C. Lewin (Ed.), Research Methods in the Social Sciences (pp. 274–281). London: SAGE.

Habraken, N.J. (1998) The Structure of the Ordinary, MIT Press, Cambridge.

Hacker, J. M, & Clarke, J. I. (1960). Modern Amman: A Social Study. Durham, England: University of Durham, Dept. of Geography.

Hacker, J. M. (1960). Modern Amman: A Social Study (J. Clarke, Ed.). Durham: University of Durham.

Hacker, J. M. (1960). Modern Amman: A Social Study. Durham: University of Durham.

Ham, A., & Greenway, P. (2003). Jordan (5th ed). Footscray, Vic., Australia, Oakland, Calif: Lonely Planet.

Hamarneh, M. (1996). Amman in British Travel Accounts of the 19th Century. In S. Shami & J. Hannoyer (Eds.), Amman. The City and its Society (pp. 379–403). Beyrouth: Cermoc.

Hanan, H. (2012). Pedestrian Ways, Informalities and Urban Spectacles. Social and Behavioral Science, 36, 421-340.

Harvey, D. (2004, May 29). Space as a Key Word. Paper for Marx and Philosophy Conference, Institute of Education, London. Retrieved from http://www.inter-accions.org/sites/default/files/space-as-key-word-david-harvey.pdf.

Helfont, S. a. Helfont, T. (2012). Jordan: Between the Arab Spring and the Gulf Cooperation Council. Orbis, a Journal of World Affairs, 56(1), 82–95.

Hillier, B. (1998). Describing Emergent Structure in Strongly Configurational Systems. Requirements Engineering, Limerick.

Hillier, B. (2004). Can Streets be Made Safe?. Urban Design International, 9 (1) 31 – 45.

Hillier, B. (2005), 'The Art of Place and the Science of Space', World Architecture, 11, 185, pp. 96-102.

Hillier, B. (2009). Spatial Sustainability in Cities: Organic Patterns and Sustainable Forms. In D. Koch, L. Marcus, & J. Steen (Eds.), The 7th International Space Syntax Symposium. Stockholm: KTH.

Hillier, B., & Hanson, J. (2005). The Social Logic of Space. Cambridge University Press, Cambridge.

Human Rights First. (2007). Iraqi Refugees in Jordan. Ministry of Interior, Jordan. Retrieved from http://www.humanrightsfirst.org/wp-content/uploads/pdf/irp-jordan-syria.pdf.

Janjua, K. (2008). The Economics of Hunger. Jordan Business. Jordan.

Jones, M. (2005). Lights… Action… Grounded Theory. Developing an Understanding for the Management, I(1), 163–173.

Jones. L., & Somekh, B., (2005) Observation in B. Somekh & C. Lewin, Research methods in the social sciences, Sage Publications, London, pp. 138- 153.

Kadhim, A. M. and Rajjal, Y. (1988): 'City profile: Amman'. Cities, November 1988, 318- 325.

Kawar, M. (2000). Gender, Employment and the Life Course: The Case of Working Daughters in Amman, Jordan. In Jordan Studies Series, The Konrad Adenauer Foundation & the Community Centers Association.

Kelle, U. (2004). Integration Qualitativer und Quantitativer Methoden. In: Kuckartz, U.; Grunenberg, H.; Lauterbach, A. (Hg.): Qualitative Datenanalyse: Computergestützt. Methodische Hintergründe und Beispiele aus der Forschungspraxis. Wiesbaden: VS Verlag: 27 –41.

Kelle, U. (2007). Die Integration qualitativer und quantitativer Methoden in der empirischen Sozialforschung: Theoretische Grundlagen und methodologische Konzepte. Weltstaat und Weltstaatlichkeit.

Khuri-Tubbeh, T. (1995). Liberalization, Privatization and Women's Employment in Jordan. Prepared for the Seminar on Economic Liberalization and Women's Employment in the Middle East, Nicosia, Cyprus.

Krier, R. (1991). Urban Space (5th impr). London: Academy editions.

Lampard, R., & Pole, C. (2002). Practical Social Investigation: Qualitative and Quantitative Research Methods. Hemel Hempstead: Prentice-Hall.

Lawrence, R. J. (1990). Translating Anthropological Concepts into Architectural Practice. In S. M. Low & E. Chambers (Eds.), Housing, Culture, and Design. A Comparative Perspective. Philadelphia: University of Pennsylvania Press.

Lefebvre, H. (1991). The Production of Space: Oxford: Blackwell.

Lefebvre, H. (2009). State, Space, World: Selected Essays. Eds. Brenner, Neil, Elden, Stuart Minneapolis: University of Minnesota Press.

Lefebvre, H. (1968). Le Droit à la ville [The right to the city] (2nd ed.). Paris, France:Anthropos.

Luke, H., & Keith-Roach, E. (1934). The Handbook of Palestine and Trans-Jordan (3rd). Appendix III, London.

Lynch, K. (1960). The Image of the City. Cambridge [Mass.]: Technology Press; MIT Press; Massachusetts Institute of Technology.

Madanipour, A. (1996). Design of Urban Space: An Inquiry into a Socio-spatial Process. Chichester, New York: Wiley.

Madanipour, A. (1999). Why are the Design and Development of Public Spaces Significant for Cities? Environment and Planning B: Planning and Design, 26(6), 879–891.

Madanipour, A. (2003). Public and Private Spaces of the City. London, New York: Routledge.

Madanipour, A. (2010). Whose Public Space? International Case Studies in Urban Design and Development. Abingdon, Oxon, New York: Routledge.

Magda, M. (2003). An Investigation of the Relation of Space to Society. A discussion on A. Giddens, H. Lefebvre and Space Syntax (MSc Thesis). University College of London, Bartlett School, London.

Mahadin, K., Abu Ghanimeh, A., Al-Najjar, S., and Al-Ejel, S., (2005). People's perception and behavior patterns in Amman's public parks and plazas. Alexandria Engineering Journal, 44(2), 237-255.

Makhamreha, Z., & Almanasyeha, N. (2011). Analyzing the State and Pattern of Urban Growth and City Planning in Amman Using Satellite Images and GIS. European Journal of Social Sciences, 24(2), 225–264.

Malkawi, F. (1996). Hidden Structures: an Ethnographic Account of the Planning of Greater Amman, unpublished PhD thesis, University of Pennsylvania.

Malkawi, F. K., & Abu-Dayyeh, N. (2004). The Condition of Physical Planning in Jordan1970–1990. Institut Francaise du Proche-Orient. Etudes Contemporaines, no. 14.

Martin, P. Y. & Taylor, B. A .(1986). Grounded Theory and Organizational Research. The Journal of Applied Behavioral Science, 22(2), 141–157.

McAuley, G. (2005). Site-specific Performance: Place, Memory and the Creative Agency of the Spectator, Sydney University Arts Association, public lecture. Retrieved from http://escholarship.usyd.edu.au/journals/index.php/ART/article/viewFile/5667/6340.

Merrifield, A. (2006). Henri Lefebvre: A Critical Introduction. New York: Routledge.

Miao, P. (2001). Public Places in Asia Pacific Cities: Current Issues and Strategies. The GeoJournal library: Vol. 60. Dordrecht, Boston, MA: Kluwer Academic Publishers

Miles, M. B., & Huberman, A. M. (1994). Qualitative Data Analysis: An Expanded Sourcebook (2nd ed). Thousand Oaks: SAGE.

Muasher, M. (2011). A Decade of Struggling Reform in Jordan: The Resilience of the Rentier System. Washington Carnegie Endowment for International Peace.

Mufti, S. (1972). Heroes and Emperors in Circassian History. Beirut: Librairie du Liban.

Mujahid. (1985). Female Labour Force Participation in Jordan. In Nasr, J. A., Khoury, N. F.& Azzam, H. T. (Ed.), Women, employment and development in the Arab World. Walter de Gruyter and Co, Berlin.

Munif, A. (1994). Story of a City: Amman During the 1940s. Amman: Arab Institute for Studies and Research.

Munif, A. (1996). Story of a city: A childhood in Amman (1st ed.) (Kawar, S. trans.). London: Quartet Books Ltd.

Mustafa, F. A., Hassan, A. S., & Baper, S. Y. (2010). Using Space Syntax Analysis in Detecting Privacy: A Comparative Study of Traditional and Modern House Layouts in Erbil City, Iraq. Asian Social Science, 6(8), 157–166.

Newman, O. (1972). Defensible Space: People and Design in the Violent City. London, Architectural Press.

Oliphant, L. (1980). The Land of Gilead, With Excursion in Libanon. London.

Openshaw, S. (1996). Developing GIS-relevant Zone-based Spatial Analysis Methods. In P. Longley & M. Batty (Eds.), Spatial Analysis. Modelling in a GIS Environment (pp. 55–74). Cambridge, New York: GeoInformation International; Distributed in the Americas by J. Wiley.

Patton, M.Q. (1990). Qualitative Evaluation and Research Methods (2nd ed.). Newbury Park, CA: Sage.

Payne, G., & Payne, J. (2004). Key Concepts in Social Research. London: SAGE.

Peattie L. (1987). An Idea in Good Currency and How it Grew: The Informal Sector. World Development, 15(7), 851–860.

Pilder, A. D. (2011). Urbanization and Identity: The Building of Amman in the Twentieth Century (Unpublished Master's Thesis). Oxford: Miami University.

Pole, C. J., & Lampard R. (2002). Practical Social Investigation - Qualitative and Quantitative Methods in Social Research. Harlow, Essex: Pearson Education Limited.

Potter, R., Darmame K, Barhamb N., & Nortcliff S. (Eds.). (2007). An Introduction to the Urban Geography of Amman, Jordan: University of Reading, Department of Geography, School of Human and Environmental Sciences, Geographical paper nr. 182.

Potter, R., Darmame, K., Barhamb, N., & Nortcliff, S. (2009). Evergrowing Amman: Jordan: Urban Expansion, Social polarisation and Contemporary Urban Planning Issues. Habitat International, 33(1), 81–92.

Rajjal, Y. I. (2007). Nation-States and Sites of Discursive Practices: A Study in Amman, Jordan. Rethinking Our Design Conference. Sudan: University of Khartoum.

Ratti, C. (2004). Space Syntax: Some Inconsistencies. Environment and Planning B: Planning and Design, 31(4), 487–499.

Razzaz, O. (1993). Contested Space: Urban Settlement Around Amman. Middle East Report, 10-14.

Razzaz, O. (1996). Land Conflicts, Property Rights and Urbanization East of Amman. In J. Hannoyer, & S. Shami, Amman the City and its Society (pp. 499- 526). Beyrouth: Cermoc.

Reicher C, Baeumer K., Tawil M., Jacob D., Shaheen L.(Ed.). (2010). Embracing the Past, Enhancing the Future: Planning Spaces through Intercultural Dialogues. Amersfoort, Netherlands: Klartext Verlag, Essen.

Reicher, C., & Kemme, T. (2009). Der öffentliche Raum: Ideen - Konzepte - Projekte. Berlin: Jovis.

Richter, P., & Banerjee, N. (2011, June 19). U.S.-Saudi Rivalry Intensifies: The Quest for Greater Influence Includes a Tug of War over Jordan, Just one Example of the Contest Between the Longtime Allies Split over the Democracy Uprisings Sweeping the Region. Los Angeles Times. Retrieved from http://articles.latimes.com/2011/jun/19/world/la-fg-us-saudis-20110619

Rifai, T. (1996). Amman City Center: Typologies of Architecture and Urban Space. In J. Hannoyer, & S. Shami, Amman the City and its Society (pp. 499- 526). Beyrouth: Cermoc.

Rogan, E. L. (1996). The Making of a Capital: Amman, 1918-1928. In J. Hannoyer, & S. Shami, Amman the City and its Society (pp. 89–107). Beyrouth: Cermoc.

Rose A. & Schwander C. (2011, March). City Scans Berlin: Entwicklungsmöglichkeiten des Kulturforums, Foyer des Kulturforums Potsamer Platz, Berlib. Retrieved from http://www.alfred-herrhausen-gesellschaft.de/city-scans.html .

Sarantakos, S. (2005). Social Research. Hampshire: Palgrave Macmillan.

Schmid, C. (2005). Stadt, Raum und Gesellschaft: Henri Lefebvre und die Theorie der Produktion des Raumes. Sozialgeographische Bibliothek: Bd. 1. Stuttgart: Steiner.

Schwedler, J. (2012). The Politics of Pritests in Jordan. Foreign Policy Research Institute, Footnotes, 17(1).

Shakhatreh, H. (1995). Determinants of Female Labour-force Participation in Jordan. In V. M. (. N.F. Khoury (Ed.), N.F. Khoury, V.M. Moghadam (Eds.) . Zed Books, London, New Jersey.

Shami, S. (2007). Amman is not a City. In A. Cinar & T. Bender (Eds.), Urban Imaginaries. Locating the Modern City (pp. 208–235). Minneapolis: University of Minnesota Press.

Shields, R. (1999). Lefebvre, Love, and Struggle: Spatial dialectics. International library of sociology. London, New York: Routledge.

Silverman, D. (2004). Qualitative Research: Theory, Method and Practice (2nd ed). London, Thousand Oaks, Calif: SAGE Publications.

Silverman, D. (2004). Qualitative Research: Theory, Method and Practice (2nd ed). London, Thousand Oaks, Calif: SAGE Publications.

Stanek, L. (2011). Henri Lefebvre on Space: Architecture, Urban Research, and the Production of Theory / Lukasz Stanek. Minneapolis, MN: University of Minnesota Press.

Steityeh, Z. (2008, November 10). Vertical Limits. Jordan Business. Jordan.

Stoecker, R. (1991). Evaluating and Rethinking the Case Study. Sociological Review, 39(1), 88–112.

Strauss, A. L. (1987). Qualitative Analysis for Social Scientists. Cambridge [Cambridgeshire], New York: Cambridge University Press.

Strauss, A. L., & Corbin, J. M. (1990). Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, Calif: SAGE Publications.

Strauss, A., & Corbin, J. (1994). Grounded Theory Methodology. In N. K. Denzin & Y. S. Lincoln (Eds.), The Sage handbook of qualitative research (4th ed., pp. 273–285). Thousand Oaks: SAGE.

Sukopp, H., Numata, M., & Huber, A. (1995). Urban Ecology as the Basis of Urban Planning. The Hague, Netherlands: SPB Academic Publications.

Summer, D. (2005). The Neoliberalization of Urban Space: Transnational Investment Networks and the Circulation of Urban Images: Beirut and Amman Beirut and Amman. No 2, 1–19.

Tankel, S. (1963). The Importance of Open Space inthe Urban Pattern. In L. Wing (Ed.), Cities and Spaces: The Future Use of Urban Spaces. Baltimore Hopkins.

Tawil, M., Reicher, C., Ramadan, K. Z., & Aljafari, M. (2014). Towards More Pedestrian Friendly Streets in Jordan: The Case of Al Medina Street in Amman. Journal of Sustainable Development, 7(2), 144–158.

Thompson, C. W. (2002). Urban Open Space in the 21st Century. Landscape and Urban Planning, 60, 59–72.

UN-HABITAT. (2012). STATE OF THE WORLD'S CITIES 2012/2013: Prosperity of Cities.

UNHCR. (2014). UNHCR Country Operations Profile - Jordan. Retrieved from http://www.unhcr.org/pages/49e486566.html.

UNRWA. (2014). WHERE WE WORK. Retrieved from http://www.unrwa.org/where-we-work/jordan.

Wang, X.-J. (2009). Analysis of Problems in Urban Green Space System Planning in China. Journal of Forestry Research, 20(1), 79–82.

Weintraub, J. (1995). Varieties and Vicissitudes of Public Space. In P. Kasinitz (Ed.), Main Trends of the Modern world. Metropolis. Center and Symbol of our Times. New York: New York University Press.

Woolley, H. (2003). Urban Open Spaces. London, New York: Spon Press.

Yin, R. K. (1993). Case Study Researsh: Design and Methods (2nd ed.). London: Sage Publication.

Yin, R. K. (**199**3). Case Study Researsh: Design and Methods (2nd ed.). London: Sage Publication.

Websites

Abdali Project. (2014). Retrieved from www.abdali.jo

Amman Institute (Ai). (2014). Retrieved from http://www.slideshare.net/AmmanInstitute/amman-2025-from-master-plan-to-strategic-initiative-amman-institute, accessed in 20.4.2014

Center for the Study of the Built Environment (CSBE). (2014). Retrieved from http://www.csbe.org/, accessed in 18.3.2014

Department of Statistics. (2010). Retrieved from (Jordan)
http://www.DOS.gov.jo/sdb_pop/sdb_pop_e/ehsaat/alsokan/2010/2-4.pdf, accessed in 15.7.2013

Google Earth, accessed in 13/7/2013

U.S. Agency for International Development (USAID). (2011). Jordan Demographic and Health Survey (JDHS). Retrieved from http://www.dhsprogram.com/, accessed in 25.9.2012

APPENDICES

Appendix A: Interviews

A-1 Expert interviews

Interviewee	Institution	Affiliation
Arch. Hanya Maraqa	Amman Institute for Urban Development (Ai)	Amman Plan Program
Arch. Lara Zureikat	The Center for the Study of the Built Environment (CSBE)	Associate Director of CSBE
Arch. Nemeh Qatanani	Greater Amman Municipality (GAM)	Head of Studies and Design Department
Arch. Salwa Abu Jamous	Greater Amman Municipality (GAM)	Amman City Zoning Bylaw Project Coordinator
Arch. Siham Al Hadidi	Greater Amman Municipality (GAM)	Head of parks department
Arch. Tiresa Bsharat	Greater Amman Municipality (GAM)	Project coordinator- Housing Bank Park
Dr. Mohammad Al Asad	The Center for the Study of the Built Environment (CSBE)	founding director of CSBE
Dr. Myriam Ababsa	French Institute of the Near East (Ifpo)	Associate Researcher- Institut Français du Proche-Orient (Ifpo)
Dr. Rami Daher	TURATH: Architecture & Urban Design Consultants	Co-founder and head of TURATH: Architecture & Urban Design Consultants
Eng. Mo'tasem Al-Qaisi	Housing Bank	Premises and administrative services in the Housing Bank
Eng. Nidal Alewais	Greater Amman Municipality (GAM)	Project coordinator- Housing Bank Park

Interview information	
Type of the interview: **Expert interview** Interviewer**: Mais Aljafari**	
Interviewee**: Dr Mohammad Al Asad**	Position**: director of Center for the Study of the Built Environment, CSBE,** al-asad@csbe.org
Date/Time**: 23.10.2012, 2:00 pm** **19.10.2011, 3:00 pm** **Interview duration**: 40, 90 minutes	
Institute: Center for the Study of the Built Environment, CSBE, http://www.csbe.org/	

The researcher did the interviews using an informal list of questions as interview guidelines. The interviewee was contacted by email one week before the actual date of the interview. The sent email included: Introductory paragraph of the researcher (as a PhD student in the field of Spatial Planning), the questions and objectives of the research and the guiding questions that the interviewee is expected to answer. However, it was mentioned that the interview will be an open discussion and no need for intensive preparation.

The interview focused on the following issues:

- Public spaces in Amman as they are conceived and if the process of making these social spaces is a bottom-up or top-down process.
- Negotiation of the recently developed/regenerated/produced public spaces in Amman between developers and users.
- Challenges of the public-private Co-produced urban space in Amman context, and what impact of the private engagement has on the users of open space.

I started the interview by asking Dr. Al Asad about his opinion, from his research experience, about how the planners and decision makers in Amman, at the current time, conceive public space? And what are their visions toward public spaces in Amman?

Dr. Alasad started the conversation by pointing out that there is an administrative problem currently in Greater Amman Municipality (GAM) and therefore no spatial achievement is being noticed from GAM recently. He added, "I feel that GAM at this moment is having some kind of rigidity, they are confused and don't know what to do and even facing difficulties in accomplishing simple duties they normally have

to do. If we went to get back one or two years ago before these entire problem occurred …. We see that now there are slower in doing everything."

Dr. Al Asad pointed that CSBE, two years ago, has conducted a research study about public spaces in Amman. From their experience they noticed that there was no thinking of theses spaces as public spaces for people. The making of these spaces focused on spatial and form-related issues. On the other hand, people perceive GAM initiatives towards rehabilitating the existing spaces as if they are destroying their space, specially the owners of the shops at any of these public spaces….. They have no visions and ideas about the future of the space, Dr Al Asad adds.

Furthermore, he emphasized that with most of newly developed public spaces there is a management problem in which there has been always a lack of communication between different actors/ stakeholders where different interests contradict.

Additionally, He pointed that in GAM there is no strong institutional documentation of the public spaces in Amman. He further gave an example of the National Gallery of Fine Arts Park in Alwebdeh. The establishment date of this park, until this moment, still not clear. They assume that it dates back to the 50es …..He added that they are not the only institute who is facing difficulties in finding documents about the history of public space in Amman; other institutes as well faced the same issues while trying to document the history of Amman. He further adds:

> We have individual memory of space rather than institutional one. Senior employees have a memory of certain events but when they leave, knowledge disappears with their absence. This is one of the problems….. This park has no clear documented memory.

Dr. Al Asad elaborated more on the example of Al Webdeh Park and explained how this park developed through the last 5 decades. During the last decade CSBE received funds from GAM and from USAID for the purpose of investing on the park since it's an important part of the history of Amman. However, the expectations were larger than actual work. There were no adequate human resources for that project. CSPE did some meetings with the locals. Their attitude was negative. They felt that they were treated as if they are a secondary element in the development process.

The park renovation included different stakeholders which CSBE need to coordinate between all of them. The first stakeholder was the residents of the neighborhood of the park; the second stakeholder is the National Gallery of Fine Arts. They were very positive; the 3rd stakeholder is the administration of the restaurant inside the park (private investor). The administration of the restaurant started to make their own rules such as not to open the park for the public. The fourth stakeholder is GAM. Regarding opening hours, the mayor of GAM wanted to open the park for the public along the daytime. The council of the

museum wanted it to be open for certain hours. On the other hand, the restaurant was with closing the fully the park, they wouldn't mind closing it 24 hours and use it just as a view for their customers and makes it for their private purposes. CSBE suggested closing it within sunset time.

Finally CSBE convinced the mayor to fence and make a clear gate for it with certain opening hours.

Dr. Al Asad gave further an example of other public spaces in Amman such as Wakalat Street and Faisal Street: "I noticed that the quality of Wakalat Street is getting less, we did a study last summer and since then I go frequently there. I notice that the quality is descending. In the case of King Faisal Street, the development was just a beatification of the street. I don't consider it as a whole project."

<u>In the second half of the interview I asked Dr. Al Asad about his opinion about GAM's role in public private partnership projects, PPPs.</u>

He started the answer with pointing that GAM is still not experienced with PPPs.

He further pointed out to consider including shopping malls in my research as a special of public space that can't be avoided in the context of Amman. The purpose would be to investigate how people's preferences are changing toward attending shopping malls due to the security/safety factors rather than other types of open public spaces. This is a fully privatized form of public space but, however, unfortunately a more successful experience in Arabic societies.

Amman has no effective public spaces.

Amman had a strong sense of public spaces in the 50es where people used to go out and walk in the city. This public culture was unintentional part. It was part of resident's everyday life. The gab occurred in the 70es, he said. This period was the period of disappearance of the public spaces.

<u>Another question was asked about the link between the design of the public spaces and the spatial practices taking place there:</u>

What do you think about the social tension happening in public spaces in Amman? Is it related to the spatial design of the public space, for example, most of activities are designed towards teenagers or males? Or, this tension is happening due to the migration factor and the heterogeneity of people living in Amman and attending these spaces?

He answered: Based on CSBE research study, we came up through our study with a very simple conclusion which is, that it is all about demand and supply! When they first opened supermarkets in Amman, people used to go very often to these supermarkets because it was a new to them. They used just

to go there, not buying anything! But later on, when it became very basic element of the city neighborhoods, they go there just when they need and act in a different way. The point is, the provision of public space plays an important role especially for the young people. In my opinion, people who attend public spaces they are seeking breathing spaces from work pressure, social constrains, city crowdedness…and so on. If there were a lot of them we might not find this problem (social tension).

Additionally, he pointed out that there are extreme economical and social differences in Amman which add to the problem of public spaces. Most of these social issues are connected to the gender separation aspect. A lot of young guys are raised with the thoughts that they should be protective about their mother and sisters so they have this attitude against public spaces were both genders mixes. This group unfortunately deals with females as a weaker class. This problem had deeper social roots but it appears greatly in the public spaces because these guys think that in public space they could talk or bother any women there alone without a guy protecting her or supporting her.

In counteracting this gender issue, he added, that females should more impose their presence on the public space. That needs ideological change from the female's side to believe that they have the same rights as males to attend any public space. Secondly, there should be a strong female collective attitude against bad practices form some male groups. This attitude should exceed the individual level toward the collective level to have a stronger impact in some of the inappropriate behaviors patterns in public spaces in Amman. Of course, on the other hand, there are mature people and they believe in mixed society behave in an appropriate manner in public space.

Interview information	
Type of the interview: **Expert interview** Interviewer**: Mais Aljafari**	
Interviewee**: Arch. Nehmeh Qatanani**	Position**: Head of Studies and Design Department** nemeh.q@ammancity.gov.jo
Date/Time**: 17.11.2011, 11:00 am** **19.11.2011, 3:00 pm** **23.10.2012, 2:00 pm** **Interview duration**: 30, 40, 60 minutes	
Institute: Greater Amman Municipality, GAM, http://www.ammancity.gov.jo	

The interview aimed to have more information about the recent projects implemented by Greater Amman Municipality (GAM) through the public private partnership (PPP).

I started with introducing myself as a researcher, and by giving a background about my research objectives and interests.

Arch. Qatannani explained that PPPs are a new planning culture in GAM which is different from the conventional strategies that GAM followed for a long time. Additionally, this Partnership is implemented within a strategic goal to enforce the partnership with the private sector. This vision is seen by the king to encourage the cooperation, integration and communication between the private and the public sector.

> PPPs help public sector to enhance the quality of its projects. And this enables exchange of the knowledge between the two sectors. The private sector is more exposed to new updates and development than the public sector (translated from Arabic).

In this regard, Arch. Qatannani adds more to the benefits of the private sector involvement in the projects of public projects:

> Financially, public sector has specific budget for each project. By involving the private sector GAM raises and enhances the quality of the public projects (translated from Arabic).

> In some projects GAM doesn't have the capacity and the knowledge to operate some projects, but by involving the private sector the know-how operation is guaranteed. The private actor will have a partial control over the public property for a certain time any by end of the contract, the knowledge will be transferred to the public sector again (translated from Arabic).

A transfer of the property will occur under the principle design-build-operate-transfer. After the concession period, GAM will again fully own the projects.

Arch. Qatannani commented that GAM is satisfied so far with this trend, however GAM still have no long experience with this kind of partnerships. Until now they have done just three projects with PPPs; the Housing Bank Park, Park Plaza in Swefyeh and Street furniture project.

> What is your opinion about the PPP at the scale of production of public spaces? Does the involvement of the private sector change the people's perception of public space, especially in terms of accessibility? What are GAM considerations of the public understanding of public space and after applying these projects have GAM made studies to analyze the success of these public projects at the social level? (translated from Arabic).

Arch. Qatannani opinion was that the local community is not very much interested in how the service was delivered to them. They receive the service and they don't care if GAM was in consolidation with a private sector or not. What matters for them is the quality of the service they receive and the fees they might need to pay, if there is any. So what could bother the public are the fees that they might need to pay. In the case of Housing Bank Park there is no fee because it's a park. However, in other projects like Park Plaza they need to pay. The argument supporting this is that these projects belong to the GAM and why should we pay for public services.

> In the case of the Housing Bank Park, the opening hours are defined by the investing actor. In general, when profit is involved, the private sector has the right to define the way this project is operated, including the accessibility and opening hours (translated from Arabic).

The answer was yes, GAM is considering making more projects in consolidation with the private sector. However, In GAM there is still no law for PPPs and unil this moment it's depending on the low followed by the ministry of municipalities in that matter.

She adds, in this kind of projects, all details should be written in the agreement contract, otherwise the private sector will find a way to manipulate and reorient things to its end.

> The private sector is always trying to find gaps in the contract with GAM to support certain practices from their side. For example, in the case Housing Bank Park, they tried to separate the

entrance of the Bank to be directly connected to the street and in this case they are no longer part of the park (translated from Arabic).

Another question was raised to Arch. Qatannani about the issue of accessibility to public spaces in the case of the partially privatized public spaces projects.

The answer was that this is out of GAM consideration and such issue would be left to the circumstances of the agreement with the private sector. It might be their right to control the aspect of accessibility, entrance fees and other related issues.

The share of public spaces projects in Amman within the urbanization movement was another topic to be discussed, and if it is possible for GAM to use some lands which are reserved for public spaces projects to be for another direct-profit investments.

Since GAM prepared Amman metropolitan master plan, the share of the Public spaces projects are well defined and we don't change the land use especially that GAM doesn't have a lot of these lands which are reserved for public spaces. Just like in the case of Abu Darwish plaza, we had to appropriate private ownerships and demolish them for the account of creating a public space at that area. So it's very difficult to give a land that is classified for public space uses since it will be difficult to find other alternative land.

Abu Darwish Mosque Plaza

At this part, the discussion started about the case of Abu Darweesh Mosque Plaza and if GAM considers it as a successful experience as a public space, especially that this project was already a public space and the development aimed to enhance the quality of it to be more public and accessible to the locals.

GAM doesn't consider this project as a successful experience. Young male gatherings, noise, drugs deals and other bad practices are sources of dissatisfaction to the local community there. The residents of the neighborhood there asked us to return the situation as it was before, to return the street in the middle of the plaza.

The original vision for this project was to add the adjacent street of the plaza to that plaza, the plaza will be more public and accessible. However, the result was not as expected. GAM added new functions as shops, a social center for children and women. What the spatial treatment resulted in is gender issues and socially unaccepted and sexual practices between the buildings.

GAM doesn't consider returning the plaza to its previous situation. Instead, GAM will install camera though it's believed that this is against public privacy in public spaces. Another treatment was that GAM fenced a certain area within the plaza that act as a gathering space for bad groups.

In this she adds:

> It is a bad experience not because of GAM. It's not working because of the local community there, not because of GAM. The community there has bad behavioral patterns. We have a security there and management units but in this case it is different…. The deficiency I saw in Ashrafyeh is due to the local community there (translated from Arabic).

On the other hand, she added that there is other successful experience for GAM with creating public spaces projects like in Rainbow Street. The only critic she has on this project, that it is gentrified by including so many restaurants. This has transferred Jabal Amman into restaurants and cafes area and most of the traditional old houses were used for those purposes. This is not due to the original plan of the project but due to the illegal licenses and permissions which were done in an illegal way and through personal relations with high rank employees at GAM. If I were one of the heritage committee I wouldn't go for many of the granted café investments. In this she adds:

> But you know how it works in our country [why this bidder won the project and not me]. They don't understand that there is a vision and guidelines for the development of the neighborhoods and we are strict to follow it. They think about the individual interest not about the common interest (translated from Arabic).

Wakalat Street

Wakalat Street has a problem in common with Abu Darwish Mosque plaza. Wakalat Street was supposed to be a model of Solitaire in Beirut but it didn't work due to the local's bad practices. Consequently, GAM needed to remove the benches in order to prevent the gender issues and the young males gatherings and therefore to prevent female's harassments.

Hashemite Plaza

In the case of the Hashemite Plaza, the situation is different. The location of the plaza is in a transitional area between the downtown and Almahata. So it has a strategic central location. It should remain open. In the new design of the plaza, GAM did minimal changes on the previous situation such as: in the old design there was a sunken plaza where bad practices took place but with the new development the whole plaza is at one level. Additionally, there was a dense trees area where specific group occupied this area so GAM distributed the trees in different locations to make it more exposure. GAM made it open and exposed to be seen from all sides. Furthermore, GAM designed a small nice café and media wall for broadcasting the events happing in the roman theater next to the plaza. Some people might not be able to pay fee to a concert taking place at the roman theater, so they have the chance to watch it from the plaza. And this is the logic behind this plaza.

At the end of the interview Arch. closed the discussion with the following points:

- The present time is critical due to the political situation (Arab Spring). Management of public spaces in Amman is influenced by the critical political situation. Not all aspects could be controlled currently in public spaces in Amman such as controlling the vending and random selling activities on the streets. in this she elaborates:

There is management, there is police units ....but don't forget Arab Spring issue! The police have no power in the street. They don't dare to argue with people....if you recently noticed, the sidewalks are totally occupied by vendors, full occupation! We couldn't impose penalties due to the current political situation not just in Jordan, but in the whole region. We have orders from higher authorities not to mess with vendors at the current time (translated from Arabic).

- The bad practices are not coming just from the local community side, its coming as well from the owners of the shops at these public spaces. For example, in Faisal Street, some shops are considering the front sidewalk adjacent to their shops as if they are their own property. They are not using it properly and not keeping it clean and in a good manner.
- The success or failure of any projects of public space depend a lot of the culture of the users and their ethics

Interview information	
Type of the interview: **semi structured interview (with the users)** Interviewer**: Mais Aljafari**	
Interviewee**: Female, 45 years old, university education**	Location**: Faisal Street, traditional Hummus and Falafel shop**
Date/Time**: 12.10.2011, 12:00 am** **Interview duration**: 30 minutes	

I started the interviewee by introducing myself as a PhD student and by giving a brief background about the topic of my research. Additionally, it was asked if it is possible to record the interview for the purpose of documenting the conversation and analyzing it accurately. A set of guideline questions were prepared to orient the discussion during the interview, however the freedom were given to the interviewee to elaborate and to express freely her opinion.

Guideline questions:

Q1: How many public spaces do you know in Amman?

Q2: Which public space you prefer among all what you mentioned?

Q3: Why you go normally to these public space/spaces?

Q4: How often you go to public open spaces?

Q5: Is it affordable for you to come to this public space, does it cost you a lot?

Q6: Which open space you consider as a typical representation of Amman?

Q7: Are you satisfies about the quantity of open spaces?

Q8: What you don't like about open spaces in Amman?

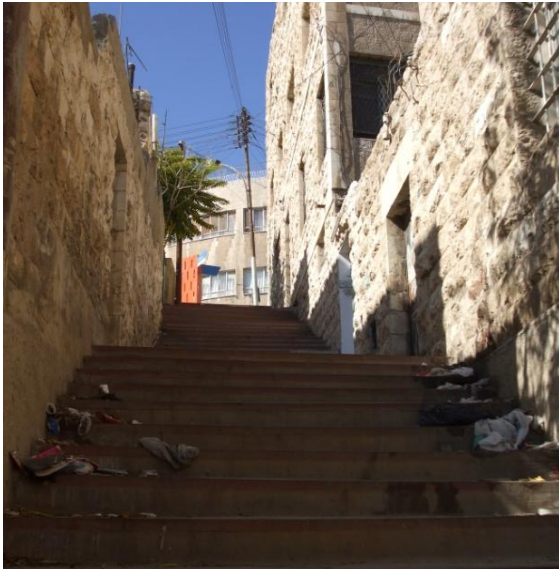Q9: Anything you would like to add?

Appendix B: Extra photos

Qala'a Archeological Site

Rainbow Street/ Jabal Amman

Kherfan Stairs, Jabal Amman

Kalha Stairs, downtown

Rainbow Street

King Faisal Street

Al Husseini Mosque Plaza/Amman downtown

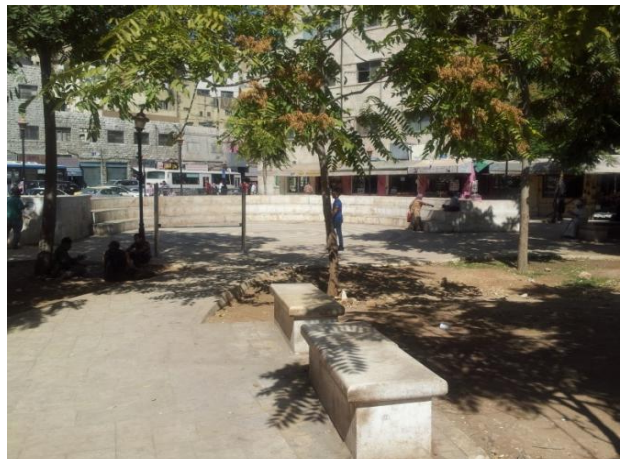Salt Street/Amman downtown

Wakalat Street/Sweifieh district

Housing Bank Park

Al-Hashimiyah Plaza

Al Nakhil Plaza

Cultural Avenue, Al Shmeisani

Abdoun Circle

Abu Nsair Road

Interior Circle