

BROWNFIELD RECLAMATION AND THE MITIGATION OF SPATIAL INJUSTICE IN
AMMAN, JORDAN

BY

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ABSTRACT

This thesis is part of ongoing research examining the interconnections between human geography and urban planning; simultaneously, it is part of a wider research agenda aiming to address gaps between Western and Non-Western literatures. Under the broader theme of *spatial justice*, understood as the manifestation of social justice in space, this thesis looks at two urban phenomena in the Middle Eastern context of Amman, Jordan: derelict and underutilised spaces known as *brownfields*, and; the practice aiming to revitalise vacant spaces in urban areas known as *temporary urbanism*.

Over the past few decades, these two urban phenomena have been extensively investigated in Western contexts using methods and tools designed in and for those contexts and using Western-centric theoretical frames. As highlighted by this study, in the Middle Eastern context, there is little or no work investigating brownfields, temporary urbanism or spatial justice; as a result, planning practices and frameworks fail to address them.

Accordingly, this thesis seeks to establish the debate on these three central themes and the links between them in Arabic literature and Middle Eastern planning frameworks. By examining both the brownfield sites and temporary uses that perforate Amman's urban fabric, a Lefebvrian and Lefebvrian-influenced critical spatial perspective is adopted that emphasises the social production of space and the right to the city. This thesis thereby argues that the reclamation of brownfield sites through temporary urbanism may enhance spatial justice within a wider global quest for just cities and just communities.

DEDICATION

لأبي وأمي...

لديما، مالك، علاء ودلامة...

ولوليد...

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قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ (٢:٣٢)

They said: "Glory to Thee, of knowledge We have none, save what Thou Hast taught us: In truth, it is Thou Who art perfect in knowledge and wisdom." (2:32)

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LIST OF ABBREVIATIONS

ARLEM	EURO-MEDITERRANEAN REGIONAL AND LOCAL ASSEMBLY
AURPG	AMMAN URBAN REGIONAL PLANNING GROUP
CABERNET	CONCERTED ACTION ON BROWNFIELD AND ECONOMIC REGENERATION NETWORK
CBA	COST BENEFIT ANALYSIS
CBD	CENTRAL BUSINESS DISTRICT
CERLA	COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT
CIA	CENTRAL INTELLIGENCE AGENCY
CIP	
CHAINET	EUROPEAN NETWORK ON CHAIN ANALYSIS FOR ENVIRONMENTAL DECISION SUPPORT
CLARINET	CONTAMINATED LAND REHABILITATION NETWORK FOR ENVIRONMENTAL TECHNOLOGIES IN EUROPE
CMP	THE COMPREHENSIVE MASTER PLAN DEPARTMENT
CSBE	CENTRE FOR THE STUDIES OF THE BUILT ENVIRONMENT
CSCMP	COUNCIL OF SUPPLY CHAIN MANAGEMENT PROFESSIONALS
CSO	CIVIL SOCIETY ORGANIZATIONS
DCLG	THE DEPARTMENT OF COMMUNITIES AND LOCAL GOVERNMENT
DHS	DIRECTORATE OF HOUSEHOLD SURVEYS
DOE	THE DEPARTMENT OF ENVIRONMENT
DOS	THE DEPARTMENT OF STATISTICS
DEFRA	DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS
DLS	DEPARTMENT OF LAND AND SURVEY

DPP	THE DEVELOPMENTAL PLANS AND PROGRAM DEPARTMENT
EA	THE ENVIRONMENTAL AGENCY
EFU	THE ENVIRONMENTAL FOLLOW UP DEPARTMENT
EIA	ENVIRONMENTAL IMPACT ASSESSMENT
EIU	THE ECONOMIST INTELLIGENCE UNIT
EJRE	EUROPEAN JORDANIAN RENEWABLE ENERGY PROJECTS
EPA	ENVIRONMENTAL PROTECTION AGENCY
EPA 1990	ENVIRONMENTAL PROTECTION ACT 1990
ESRI	ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE
GAM	GREATER AMMAN MUNICIPALITY
GAN	GLOBAL ARAB NETWORK
GAWC	THE GLOBALIZATION AND WORLD CITIES RESEARCH NETWORK
GNP	GROSS NATIONAL PRODUCT
GIS	GEOGRAPHIC INFORMATION SYSTEM
HCA	HOMES AND COMMUNITIES AGENCY
HDMU	HIGH DENSITY, MIXED USE
HUDC	THE HOUSING AND URBAN DEVELOPMENT CORPORATION IN AMMAN.
IAEA	THE INTERNATIONAL ATOMIC ENERGY AGENCY
IBP	INTERNATIONAL BUSINESS PUBLICATIONS
ICRCL	INTERDEPARTMENTAL COMMITTEE FOR THE REDEVELOPMENT OF CONTAMINATED LAND
IMF	INTERNATIONAL MONETARY FUND
INN	INVESTING NEWS NETWORK
JPMC(PLC)	JORDAN PHOSPHATE MINES COMPANY (PRIVATE LIMITED COMPANY)

JRES	JORDANIAN RENEWABLE ENERGY SOCIETY
LDEPP	THE LOCAL DEVELOPMENT AND ENHANCED PRODUCTIVITY PROGRAMS DEPARTMENT
LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN
LPP	THE LICENCING AND POLLUTION PREVENTION DIRECTORATE
LRO	THE LAND REGISTRATION OFFICE
MEI	THE MIDDLE EAST INSTITUTE
MoCA	MINISTRY OF CULTURE AND ARTS
MoE	MINISTRY OF ENVIRONMENT
MoP	THE MINISTRY OF PLANNING AND INTERNATIONAL COOPERATION
MoTA	MINISTRY OF TOURISM AND ANTIQUITIES
MPRDA	THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT
MSD	MINISTRY OF SOCIAL DEVELOPMENT
NEA	NUCLEAR ENERGY AGENCY
NIDL	NEW INTERNATIONAL DIVISION OF LABOUR
NLUD	NATIONAL LAND USE DATABASE
NRA	THE NATURAL RESOURCES AUTHORITY
NRTEE	NATIONAL ROUND TABLE ON THE ENVIRONMENT AND THE ECONOMY
NUFU	NATIONAL URBAN FORESTRY UNIT
OBG	OXFORD BUSINESS GROUP
OECD	ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT
OSWER	OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE
POST	PARLIAMENTARY OFFICE OF SCIENCE AND TECHNOLOGY
PSP	THE PRIVATE SECTOR PROJECTS DEPARTMENT

SEPA	THE SCOTTISH ENVIRONMENT PROTECTION AGENCY
SGN	SMART GROWTH NETWORK
SPA	THE SOCIAL PROGRAMS AND ACTIVITIES DEPARTMENT
SUC	STUDIO URBAN CATALYST
TSO	THE STATIONARY OFFICE
UCLA	UNIVERSITY OF CALIFORNIA, LOS ANGELES
UDD	URBAN DEVELOPMENT DEPARTMENT
UJ	THE UNIVERSITY OF JORDAN
UN	THE UNITED NATIONS
UNESCO	THE UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION
UNFPA	THE UNITED NATIONS POPULATION FUND, FORMERLY THE UNITED NATIONS FUND FOR POPULATION ACTIVITIES
UNHCR	THE OFFICE OF THE UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES, ALSO KNOWN AS THE UN REFUGEE AGENCY.
UNRWA	THE UNITED NATIONS RELIEF AND WORKS AGENCY FOR PALESTINE REFUGEES IN THE NEAR EAST
USDL	UNITED STATES DEPARTMENT OF LABOR
USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
USGBC	UNITED STATES GREEN BUILDING COUNCIL
WHO	WORLD HEALTH ORGANIZATION
WINEP	THE WASHINGTON INSTITUTE FOR NEAR EAST POLICY
WMHS	THE WASTE MANAGEMENT AND HAZARDOUS SUBSTANCES DIRECTORATE
WWF	WORLD WILDLIFE FUND

CHAPTER 1: INTRODUCTION

1.1. Background:

Over the past few decades, the topic of derelict spaces – known as brownfield sites – has been gaining increasing interest worldwide and abundant discussions highlight the benefits they may offer environmentally, socially and economically (Christopher A. De Sousa, 2006; De Sousa, 2002; Greenberg et al., 2001; Meyer and Estrin, 2001; Wang et al., 2011; Wedding and Crawford-Brown, 2007) as well as the barriers to their redevelopment (Coffin and Shepherd, 2016; Hudak, 2002; Lange and McNeil, 2004; Mashayekh et al., 2012; Siikamäki and Wernstedt, 2008; Williams and Dair, 2003). Moreover, numerous researchers developed tools for the identification of potential brownfield sites and the evaluation of their redevelopment (Cheng et al., 2009; Grigsby, 2010; Kurtović et al., 2014; NJIT-TAB, 2017; Michael R Thomas, 2002; Michael R. Thomas, 2002; Tilley et al., 2006).

Until the early 2000s, there was no general definition of the term brownfields (Chen et al., 2016) before USEPA defined it as “*industrial and commercial sites which were abandoned, idle or unused, with the presence of environment pollutants or the possibility of existence of pollutants*” (USEPA, 2017). The subsequent Brownfields Revitalization and Environmental Restoration Act of 2001 changed the way contaminated lands were managed. Today in different parts of the world, brownfield definitions are still being tailored, strategies to restore potentially contaminated sites, efficient management approaches for their reuse as well as regeneration tools are still being developed and incorporated into land and environmental regulations and this study argues that the Middle East needs to catch up with these changes. Accordingly, brownfields and the reclamation

of brownfield sites is the first theme this thesis bids to shed the light on within the context of the study area.

Temporary use is the second theme this thesis seeks to investigate within the context of the study area. Understood as a practice aiming to revitalise abandoned sites and decaying buildings (Németh and Langhorst, 2014), the revitalisation of underutilised, vacant and neglected space through the implementation of temporary use concepts has been highlighted by a number of authors (Bishop and Williams, 2012; Haydn and Temel, 2006; Horne, 2014). Moreover, the challenges that face the practice as well as the potential advantages it may offer to cities and communities have also been extensively researched (Bonner, 2016; Hadge, 2011; Lepeska, 2012; Moore-Cherry and Mccarthy, 2016; Perković, 2013; Stanley, 2017; Tardiveau and Mallo, 2014) where it has largely been debated that the *'informal'*, *'unplanned'* and *'spontaneous'* temporary urbanism offers numerous benefits to cities and communities. Without specifically being labelled as such, temporary urbanism practices have been expanding and thriving throughout the Middle East; they have been providing innovative solutions that address realistic concerns and promote a more cohesive planning practice.

The third theme this research sought to investigate in the case study context was that of spatial justice. The concept of spatial justice links social justice and space most notably in the works of geographers David Harvey and Ed Soja building on the thoughts of Henri Lefebvre which argues that the organization of space is a crucial dimension of human societies that reflects social facts and influences social relations (Lefebvre, 1968, 1972), therefore, both justice as well as injustice are manifested in space. In contemporary planning theory, the traditional argument for spatial justice in planning is one that incorporates the public interest into the development of land

(Klosterman, 2003) and assumes that spatial justice which does not only focus on distributional justice rather support the full development of each individuals and all individuals is a desired goal in any planning policy (Marcuse, 2009c). Numerous discussions also highlighted the role of spatial justice in the urban practice in general (Fainstein, 2000, 2009b, 2010; Marcuse, 2009b; Soja, 2009), however, few studies highlighted its role in the regeneration practice despite the fact that “*the regeneration of place that has socially just outcomes is taken as the broader definition of spatial justice*” (Bissett-Scott et al., 2015: 31) and numerous studies solely linked discussions on brownfield redevelopment to environmental justice (Teelucksingh, 2007). Accordingly, under the broader concept of spatial justice, and by examining the relationships between it and brownfields as well as temporary uses – which the study argues are unjust outcomes and unjust processes of the planning system – the study investigates to what extent can the reclamation of brownfield sites through taking forward temporary urbanism notions may help the city of Amman become a more just city.

The study leans on three extensive bodies of literature. Firstly, examining in-depth selected concepts theorizing space as well as concepts that make the theoretical framework of the study including Lefebvre’s *The production of space* and *The right to the city* as well as Harvey’s *Right to the city* and *Social justice and the city* in addition to Soja’s *Seeking spatial justice* amongst others. Secondly, examining the phenomenon of brownfields, their various definitions, obstacles and advantages as well as methods to identify them and evaluate their redevelopment. Thirdly, examining the phenomenon of temporary urbanism, describing its uses, users and various practices as well as the challenges it faces and numerous benefits it may offer to the development of cities.

Considering the above, this study argues that despite the numerous benefits the reclamation of brownfield sites may offer, these geographies remain very much under researched in Middle Eastern contexts, the fact that there is no official definition to describe them or put them in planning agendas confirms that they are overlooked in future development plans. Similarly, despite the numerous benefits temporary urbanism may offer to cities, in Jordan, they remain categorized as informal economies and are excluded from official statistics despite the fact they make almost half of the national income and their users are in constant battle with concerned authorities to terminate them. Moreover, where considerable efforts are being made to achieving spatially just cities and just societies, and despite the abundant ongoing research on the importance of the '*spatial*' in contemporary planning theory, it remains excluded from the Jordanian planning framework. Thus, guided by the theoretical framework of the study as well as the empirical fieldwork analysis, this research comes to shed the light on some of the critical issues that face the three interconnected themes, examine ways that may offer a better understanding of the topics as well as explore strategies and approaches to best address them.

1.2. Research focus:

The broad aim of this thesis is to provide a better understanding of brownfields, temporary urbanism and spatial justice in a Middle Eastern context by looking at the case of Amman, Jordan. To doing so this thesis revolves around three pivotal aims:

First, this thesis addressed the lack of both theoretical as well as empirical literature research concerned with urban brownfields in the study context. Through drawing together worldwide research around the phenomenon and pairing it with the empirical work on it in the study context,

the research highlights the lack of a systematic definition to describe brownfields both in Arabic literature as well as in Middle Eastern planning frameworks. The study highlights the importance of having a uniform definition to ensure in debate around brownfields, all stakeholders share the same understanding of what is being discussed and, thus, attempts to draft an initial definition in order to establish the debate around the geographies of concern on the local and regional scale. On the same topic, the study draws on the efforts made to identify potential brownfield sites by examining the methods developed to identify them and evaluate their redevelopment and develops a framework based on the general guidelines of the examined methods and tools to identify potential brownfield sites across the study case. As a result, this thesis presents potential typologies of brownfields in the city of Amman that may be generalised on the local and regional scale.

Secondly, this research investigates temporary urbanism, a phenomenon strongly connected to brownfields in the study context as the majority of temporary practices take place on vacant, underutilised or derelict sites across the country. Again, the study addresses the lack of formal information as well as theoretical and empirical research on the ambiguous practice and by demonstrating examples, attempts to expand upon the research into temporary urbanism and looks at the links between it and the theoretical framework of the study in order to highlight the gap between the theory and practice.

Lastly, this mostly empirical contribution seeks to address a third topic that has received less interest than in developing world contexts as demonstrated in literature discussions. Research on '*social justice*' may be available, and although much less, so is research on '*space*'. However, research that thinks about the two simultaneously in the quest for '*spatial justice*' is almost non-

existing in the study context. By looking at the spatiality of justice and injustice in the case of Amman, and arguing that brownfield sites and temporary uses are unjust manifestations, the study seeks to investigate the interconnections between the three themes to achieve a greater just city.

To sum up, the study aims to present an understanding and recall of the themes under study due to the considerable lack of information on all three in the particular study context, moreover, supported with the examined literature discussions and drawing upon the reviewed theorists work, the study bids to offer an analysis and synthesise for similar ideas but in different resources and contexts, then critically evaluating them in light of the case context particularities and research determinants in order to conclude with thoughts that may clarify some of the issues surrounding the phenomena in a Middle Eastern context.

1.3. Thesis structure:

Taking into account the overall focus of the study, this thesis was organised in eight chapters. After this *introduction chapter*, *chapter two* served as the literature review that provided the theoretical framework for the study. The chapter was divided into three sections each addressing one of the three themes of the study. The first section focused on attempts to theorise space firstly by examining space and the social theory including selected schools of thought such as Marxism, Structuralism, Poststructuralism as well as Postmodernism, and secondly by shedding the light on the works of Lefebvre in the production of space and the right to the city and resulting theories, it examined the concept of urban problematic, the question of participation and the right to appropriation. The second section of the chapter was dedicated to discuss theories and

concepts on brownfields and brownfield sites by particularly shedding the light on the variety of definitions of the urban phenomenon, highlighting the challenges as well as the potential benefits they offer to cities, as well as examining the methods to identify them and evaluate their redevelopment including the Smart Growth Network (SGN) integrated framework, Thomas' GIS-based evaluation framework, as well as tools including the Cost Benefit Analysis (CBA) the Environmental Impact Assessment (EIA) and the Multi-Criteria Evaluation (MCE). The third section of the chapter was dedicated for the temporary urbanism theme where it examined the phenomenon as demonstrated in theoretical discussions, it explored the evolving temporary city model and shed the light on some of the barriers as well as numerous advantages the practice offers to cities and communities.

Research aims and objectives, philosophy and background as well as data collection including the target population, sampling techniques and sample size in addition to data sources were discussed in *chapter three*, which also shed the light on the ethical considerations of the study including validity, reliability and generalizability. The chapter also briefly discussed the fieldwork experience and challenges faced throughout its conduct in both the data collection as well as the actual field findings and concluded with the analytical framework of the overall study.

Considering the high emphasis on the study context and the fact that the research took place in a Non-Western one, the sole purpose of *chapter four* was to portray the scene of Amman for both the reader and the examiner by providing a historical overview; a view on the political structure; demographic and socio-cultural characteristics, and; economy. The chapter then shifted its focus to explicitly demonstrate the urban planning scene of Amman by shedding the light on the rapid

growth of the city, the East-West urban segregation –which is picked up later in chapter seven—, and concluded with an overview of the urban and regional planning of Amman.

Chapter five was the first of the three empirical chapters that made the larger part of this thesis' body. Looking at the literature discussions introduced in the literature review as well as the empirical fieldwork analysis, the chapter highlighted the lack of a systematic definition for the urban phenomenon and by examining the available definitions worldwide, elicited a preliminary one to unify the understanding of all involved stakeholders when discussing brownfields as well as pave the way for future research on the topic in the study context. According to the definition, and utilising the previously examined methods and tools to identify brownfield sites and evaluate their redevelopment, the study identified five brownfield typologies that spread across Amman. The chapter later highlighted the particular challenges the reclamation of brownfield sites faces in Amman as well the potential benefits their redevelopment may offer on the local and regional scale.

Chapter six, the second empirical chapter, investigated temporary urbanism in the context of Amman. By sharing examples, the chapter shed the light on the six most prominent manifestations of temporary spaces, uses, and practices across the study case which some of are shared with the international context while others are specific to the Jordan case for context particularities explained throughout the chapter as well as previously in the context chapter, lastly, the chapter highlighted the numerous challenges the practices face as well as the benefits they may offer to the development of the city.

The third and final empirical chapter, *chapter seven* embarked on investigating the spatial justice theme, the connections between the three themes, and how they may inform the overall research

quest. To doing so, by looking at inequality indicators, the chapter firstly portrayed the overall justice scene in Amman in order to later investigate the spatial (in)justice scene. Afterwards, from the standpoint that locational discrimination is a fundamental catalyst for spatial inequality, the chapter shed the light on the East-West spatial segregation the city suffers from as highlighted in the context chapter. The chapter later shifted its focus to examine the links between the three study themes, brownfields, temporary urbanism and spatial justice in order to synthesise the research and elicit its findings and in its last section, outlined a set of recommendations which the study argues will further the achievement of a more just city.

In the conclusions chapter, the final chapter of the study, *chapter eight*, summarized the study by recapping the content of each of its chapters, it highlighted the key contributions this study may have offered to the ongoing research question, then shifted its focus to highlight the key contribution this study has made on the specific case of the study as well as the wider research sphere. The figure below outlines the overall thesis structure.

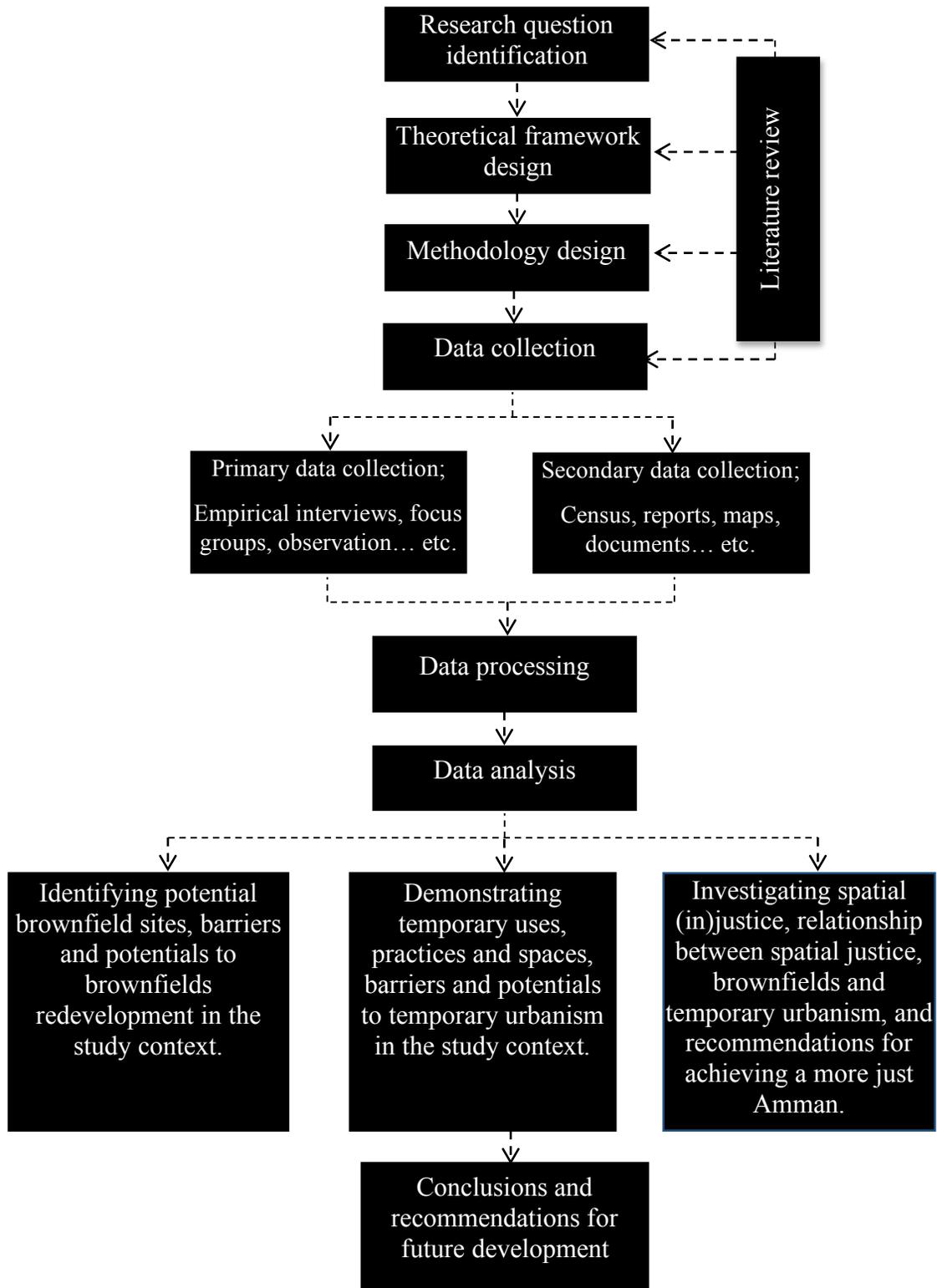


Figure 1 Thesis structure. Source: Author.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction:

Theories on the social production of space have been used extensively to question sustainable urban development, social diversity and spatial segregation (Allen and Pryke, 1994; Butler and Butler, 2012; Chaskin and Joseph, 2013; Goonewardena et al., 2009; Gottdiener, 1985; Lefebvre, 1991b; Merrifield, 1993; Tonkiss, 2009; Zieleniec, 2007). As the introduction emphasised, a wide overlap between the research problem and those theories exist since they both cover a broad range of themes and cross through multiple intersecting disciplines which entails an extensive literature review to capture the weight of the research theoretical fundamentals. Notwithstanding that, this chapter has three principal aims. Firstly, it comes to single out the three core areas this research revolves around; theories of social production of space, the right to the city and spatial justice, urban brownfields and temporary urbanism. Secondly, it aims —as all literature reviews do— to review and discuss how these three topics have been debated in theoretical discussions in order to highlight the gaps this research attempts to address. Lastly, the chapter aims to position very clearly the focus of the research by examining particular approaches and definitions (and working definitions), take forward specific concepts and theories within their peculiar context and look at the ways they could inspire the research case study which is extended later in the imperial chapters.

Consequently, the literature review chapter is divided into three sections, the first section broadly looks at elected conceptions theorising space, from Marxism, Structuralism, Poststructuralism and Postmodernism to finally arrive to the production of space, the right to the city and spatial justice theories which are the theoretical backbone of this thesis. Secondly, the chapter moves to

the research fundamental problem, urban brownfields, where it attempts to identify the terminology for the purpose of the study, discuss the advantages and obstacles to their redevelopment, investigate the developed methods to identify potential brownfield sites and evaluate their redevelopment, and identify the tools employed in the process, which the research argues would inform the brownfield case in Amman later in the empirical chapters. The third and final section of this chapter shifts its focus to temporary urbanism as a successful application of space rehabilitation, in this section the chapter discusses the concept of the '*temporary user*' city in addition to the benefits and barriers to temporary urbanism, an approach the study argues if appropriated to the context of the research project would result in similar effective outcomes.

2.2. Theorising space:

While this section starts as an exploration of spatiality, it remains open to host a variety of theories and thus interpretations the bulk of which is grounded on spatial analysis inspired by Lefebvre's spatial dialectics (1991b), more specifically theories that propose the social interpretation of urban space (Castells, 2005; Gottdiener, 1985; Soja, 2010b; Tonkiss, 2009; Whyte, 1970; Zieleniec, 2007). However, prior to investigating specific standpoints, the section preface with a discussion on space and the social theory.

2.2.1. Space and the social theory:

The origins of sociological recognition for '*the spatial*' can be traced in the works of Karl Marx, Ferdinand Tonnies, Emile Durkheim, Max Webber and Georg Simmel, amongst others, whom

theorised the social and cultural processes of urbanisation and human interaction in metropolitan areas (Caves, 2005; Flanagan, 2010; Gold, 2002; Gottdiener et al., 2014; Kaplan and Holloway, 2014; Kleniewski, 2005; Macionis and Parrillo, 2016; Palen, 1987). These theoretical foundations were further expanded in what became known as the Chicago School of Sociology which is thought to have revolutionised the purpose of urban research in sociology (Bulmer, 1986; Dear, 2001; Fine, 1995).

While the 1960s witnessed a literature influx more particularly about issues such as race, gender and poverty, the era was characterised as having mainstream and modest ways of understanding space which reduces it to a mere container of matter or looked at it as a human ecosystem (Gottdiener, 1985). In the late 1960s throughout to the early 1970s, the notion of relativity was added to space and critical geography considerably evolved. In addition to empirical observation and quantitative modelling, a cohort of radical human geographers identified that capitalist social relations are largely accountable for many of the contemporary geographical concerns (Peet, 1998). Consequently, conventional geographical concepts were challenged, Marxist theories were spatialized and, in Harvey's words (1989: 328), a "*historical geographical materialism*" rapidly evolved. Commonly referred to as the '*spatial turn*', the rise of the neo-Marxist geography channelled the renewed interest in spatial questions through social sciences. Following is a brief discussion for the three main sociological methods considered for the study and how they interpreted space.

2.2.1.1. *Marxism and the sociology of space:*

When conventional geography was unsuccessful to consider space in a comprehensive manner, Marxism's capacity to transform and amplify materialistic attributes of social relations under the capitalist mode of production allowed for the introduction of a spatial dimension. In the words of Lefebvre's "*...each of the concepts of Marxism may be taken up once more, and carried to a higher level, without any significant moment of the theory as a whole being lost...*" (1991b: 343)". According to Durkheim's *The division of labour in society* (2014), the separation between industries and activities results in a spatial detachment. Hence, one way of understanding the everlasting urban-rural segregation is as a direct consequence for the division of labour which is consequently attached to the today emerging New International Division of Labour (NIDL), a term coined by theorists seeking to explain spatial shifts, an ongoing geographic reorganisation of production which finds its origins in ideas about a global division of labour (Shields, 2005; Warf, 2010). A result for this approach was the Marxist materialistic dialectics that promoted spatial fetishism and unequal development which Lefebvre also referred to in his declaration. In his words; "*... understanding space as a product of social relations was certainly a powerful challenge to geographical determinism but simultaneously contributed to building the trap for reducing the complexity of the social totality to the mere reflection of its socio-economic features. In fact, it implicitly accepted spatial organisation as indistinguishable from the formation of its mental image...*" (Martins, 1982: 164). Geographical determinism –understood as the study of how the physical environment predisposes societies and states towards particular development trajectories (Maršík, 1970)— according to Lefebvre, suggests a profound conformity between the space of representations and the representations of space (ibid).

Drawing on the teachings of utopian socialists (Engels and Aveling, 2008; Kemperink and Roenhorst, 2007; Levitas, 2010; Owen et al., 2013; Taylor, 2013). Engels, the founder of Marxist urban studies, argued that a new mode of production with a more even distribution of population over space is the solution for creating balance between over-urbanised city and underpopulated countryside in what he called '*the suppression of the urban*' (Martins, 1982: 162). Such ideas had an impact on architects and planners whom asserted the need of a more even territorial distribution of people over space and thus reducing the need for metropolis cities (Brade et al., 2006; Cook and Lara, 2013; Smith, 2010; Stites, 1991). However, according to discussions, apart from this influence, Engels thoughts on the urban theory did not provoke further Marxist research and were left until almost a century later when neo-Marxist notions were introduced to the urban and political making of contemporary cities by geographers and sociologists. A preposition of this work was to focus on the spatial processes and effects.

The reproductions of Marxist thoughts in geography and urban sociology during the 1970s are numerous, however, the next few paragraphs will only focus on the work of two scholars, David Harvey and Manuel Castells and their interpretations of the Marxist spatial analysis in their political economy and structuralism methods (Castells, 1977, 1978, 1983, Harvey, 2006, 2007, 2010, 2012; Mingione, 1981; Scott, 2013; Stalder, 2006).

First published in 1973, Harvey's *Social justice and the city* which examined the links between urbanisation and capitalism and considered the highlight of his intellectual journey, emphasised the need for a more complex model that positivism and qualitative methods to unpack the geographical inquiries around the interactions of the urbanised settlement space. In his publication, he embarked on emphasising the links between the space-economy and land-use

patterns in the urbanised space and that the question of social justice cannot be detached from either of these factors (Harvey, 1973). In his later more Marxist-conscious work, he argued that the process of city development is but a spatial manifestation of the process of surplus capital accumulation (Harvey, 1975) and defined the city as the intersection point between space and economy (Harvey, 1978).

For Harvey, the built environment is exhausted by labour for consumption and self-reproduction. And, similar to other processes of capital accumulation, the creation of urban infrastructure necessities encounters with labour. The clash of the two, he argued, lead to conflicts over the quality and use of said built environment in addition to other conflicts on the question of investment and state intervention in space which he argued are married as the state functions as a manifestation for capital through its interventions, more specifically, through the facilitation of labour and managing collective consumption through urban planning and investment policies (Gottdiener, 1985). In Harvey's words, "*cities may once have been established through the geographic concentration of surplus value, however, today, they are sites of artificial simulation of consumption*" (1975: 139).

The space-economy model of urbanism raised a number of problems. For example, Harvey's hold on the state's intervention in space was influenced by functionalism which according to Gottdiener was a key weakness in Harvey's "*monolithic description of the ontological statue of state*" as an agent for capital in general (1985: 98), and his assumptions on state interventions whether in planning investment or the provision of infrastructure leaned heavily on a slender Marxist interpretation which mainly served for the benefit of the capitalist social class. Another problem of the Harvey model was its failure to explain investment mechanisms in which he

relays on the economic links to urbanisation and spatial politics to his meta-critique of capitalism. A third and last problem which Gottdiener also identifies in Harvey's portrayal of urban struggles, which he argued epitomise Harvey's conventional approach to Marxist theory, as a displacement of class conflict to the local community and thus reduce all struggles into slender compilations (ibid).

2.2.1.2. *Structuralism and the question of space:*

The second approach to Marxism this study takes into consideration is developed by Manuel Castells take on Marxism and spatial relations found in his writings more specifically the ones expressed in his early book, *The urban question* (1977). Despite the constant evolution in his thoughts from early 1970s till today's 'new social movement' and technological change in spatial relations (Castells, 1999, 2002, 2004, 2013a, 2013b, Castells et al., 2006, 2009, 2012; Castells and Himanen, 2002; Stalder, 2006), the approaches developed in his earlier work has been widely exercised in many disciplines.

Castells also looked at the relationships between 'the urban' and the collective consumption of social services through the states and defined the city as a 'site for collective consumption by virtue' while recognising its role as the regional centre of industrial production.

Written as an answer to Lefebvre's early thoughts on the theory of space which Castells accused of attempting to redraft Marxist theory in terms that emphasised 'the urban crisis' as the focal conflict of neo-capitalist societies, and where the political role of the working class was diminished. Still, Castells failed to make the connections Lefebvre made implicitly in his *Critique*

of everyday life (1991a) and other written works such as *The survival of capitalism* (1976) as well as *The production of space* (1991b) which entailed a more developed theory of space that articulated the relationship between space, everyday life and the reproduction of ‘social’ relations of production (Butcher, 2011; Gottdiener, 1987; Lefebvre, 1976, 1991b; Martins, 1982).

Compared to Lefebvre’s notion of ‘humanism’, Castells notion of ‘the urban’ attempts to combine it with the production of built environment under capitalism structuralist theory. In his words “*There is no theory of space that is not an integral part of a general social theory, even an implicit one*” (Castells, 1977: 115), and consequently, applied an economic-political-ideological framework to the urban system to eventually define ‘the urban’ as the “*spatial unit of the reproduction of labour power*”(Gottdiener, 1985: 118). In his argument, ‘the urban’ is constructed through the reproduction of labour power and the collective consumption is therefore the key object of question in the Marxist approach to ‘the urban question’ (Castells, 1977).

Essentially, the collective consumption described urban problems in Marxist terms which in itself is a return to a more basic, mainstream urban science that looks at cities as “*a site for social pathology*”(Gottdiener, 1985: 119). This school of thought influenced by Castells ideas conceived the collective consumption as the central focus of urban sociology (Saunders, 2013) and detaches it from the production and reproduction of social life which Lefebvre identified is not simply a question of consumption rather the reproduction of the social relations of production, this argument is picked up again in the following section. In Martin’s words “*it is necessary to reproduce the social relations of productions*” (Martins, 1982: 169). He argued that the “*simple reproduction of the labour force through consumption requires the extension of capitalist relations in order to recover every single moment of everyday life*” (ibid, p.170).

Early works of Harvey and Castells are obscured with influences from the Lefebvrian school of thought. Both writers are often positioned in relation to the French philosopher more specifically in how they counter his depiction on the urban being a fundamental factor to understanding the reproduction of social relations in neo-capitalism. There is much more to Lefebvre's theory of social space than what is presented in the work of Harvey and Castells. For example, in his opinion, Lefebvre looks at the structuralist division of society into congregations of production and units of consumption does not aid in unfolding capitalism, rather diminishes its complex dynamics such as the reproduction of social relations into the reproduction of labour power through consumption (Lefebvre, 1976).

In contrast, Gottdiener sees a bid to expand a more global perception of sociality in Lefebvre and Castells' work than in Harvey's conventional Marxist, political economy outlook. He argued that Castells' *The urban question* imposes a number of controversial categories in the urban phenomenon, which retracts form Lefebvre's broader question on the reconstitution of social relation in the urban space which is utmost of Lefebvre's charge (Harloe, 1979). In Lefebvre's words, "*in order to pose the problem which structuralism evades- the problem of the reproduction of social relations- it is necessary to proceed from the total to the particular. We must research for the explanation over an extremely wide range of social phenomenon*" (Lefebvre, 1976: 86).

2.2.1.3. *Poststructuralism and postmodernism:*

In addition to structuralist Marxist, a variety of approaches to space influenced spatial scholars throughout the 1970s and 1980s. In fact, a large group concluded that Marxist notions of space do

not exceed theoretical projections of an unreconciled Marxism into new disciplinary domains and discarding the prominence of space was highly unacceptable and demanded a form of exploration to conceptualize '*the spatial*' (Soja, 1989).

Alternatively, postmodern theories were seen as showing more promise to develop a critical spatial science approach. It was seen as resisting Hegel and Marx's historicism models which made it more attractive to a large number of philosophers and thinkers resulting in the emergence of a wide array of social phenomena emphasizing '*the spatial*' in contemporary social sciences, the developing concept employed metaphors, examples include Foucault's '*spaces of dispersion*' (Crampton and Elden, 2007; Foucault, 2002), Deleuze's nomad thoughts (Deleuze et al., 2004; Doel, 1996), discursive space (Bamford et al., 2014; Heiskala, 1990) in addition to discussions demanding more admission of difference and social and cultural pluralism (Brooks, 2002; Deveaux, 2000).

Notwithstanding the forgoing, '*spatial turn*' is not a postmodern outcome. In fact, in his *Postmodernism, or, the cultural logic of late capitalism* Frederic Jameson argues that it is more a cultural shift which associated the rise of social feature of postmodernism (Jameson, 1991).

According to him, a manifestation of spatial logic in the cultural production of space can be seen clearly in contemporary architecture, more specifically in fabricated spaces which render the user unable to cognitively '*map*' their position within the extended world (Jameson, 1991). Modern themes such as temporality, *durée* and memory thus found their way as '*spatial themes*' in social theory to save cultural production from this segregation (ibid). Also, for John Berger (2008), the simultaneity and extension of events and possibilities must be taken into account to convey this

cultural logic. In his writings, he argued that “*Prophesy now involves a geographical rather than historical projection; it is space not time that hides consequences from us*” (Berger, 2008: 40).

Similar thoughts are expressed in Lefebvre’s *The production of space*. In his words; “*with the advent of modernity time has vanished from social space. It is recorded solely on measuring-instruments, on clocks that are as isolated and functionally specialised as this time itself*” he argued that “*in the primacy of the economic and above all of the political implies the supremacy of space over time*” and that it is in “*our time, then, this most essential part of lived experience, ... is no longer visible for us, no longer intelligible. ... it leaves no trace. It is concealed in space, hidden under a pile of debris to be disposed of as soon as possible*” (1991b: 95).

Richard Peet and Fredric Jameson also confirms Lefebvre’s thoughts. In his *Modern geographic thoughts*, Peet saw that with the absence of depth in the social theory, history has been turned into a configuration of contemporary commodities and cultural obtrusion resulting in “*random cannibalisation’ of historic forms*” which Jameson argued Lefebvre referred to as “*the increasing primacy of the ‘neo’*”, and cultural production becomes splintered and inconsonant because of the subject’s failure to coherently introduce the past into the spatial logic (Jameson, 1991: 65; Peet, 1998: 217).

On the importance of space, Michel Foucault wrote: “*space was treated as the dead, the fixed, the undialectical, immobile. Time, on the contrary, was richness, fecundity, life, dialectic*” (1980: 70) in which he identified the recent shift in emphasis from fascination with historical modes of explanation and the order of events to an avant-garde spatial era (Crampton and Elden, 2007). In his book *Of other spaces* Foucault finds the spatial metaphor as he argues that “*our experience of the world is less of a long life developing through time, than that of a network that connects*

points and intersects with its own skin (1986: 22)”, spatial metaphors such as territory, region, field, domain and position in *Questions on geography* he argued are the tools to “*grasp the transformation of discourses through relations of power*” (Foucault, 1980: 68) .

Foucault’s enthusiasm about space extends this modest attachment to the identified metaphors Chris Philo argues, he identified where the historical process is deeply implicated with the “*geographical arrangement of people*” (Philo, 1992: 151). Foucault’s association to space remains past his death, in published work, he continues to describe the ‘*heterotopia-heterogeneous*’ space which he implicitly suggests is capable of bringing together several powers in one space (Crampton and Elden, 2007).

‘*The spatial*’ has become a key dimension of question in social theories which in return assert that subjects are now too fragmented and broken apart that are no longer capable of being perceived through the historical order of time and the individual consciousness, therefore, spatial imagery comes to metaphorically equip the representation of the plurality of social life. ‘*Spatial turn*’ is not a random manifestation of postmodernism. In fact, Jameson argued that the postmodern outline for ‘cultural logic’ offered an aspiration to interpret a deeper meaning for space of late capitalism (Jameson, 1991). Similarly, Lefebvre’s architecture of ‘*spatial turn*’ is another prominent postmodern offering. His analysis of social space, his critical-theoretical approach to question human geography, his pioneering critique of cities, urbanisation and everyday life, and indeed his central argument for what he called the reproduction of social relations of production in *The production of space*, suggest a dialectical in addition to a materialist grasp of social space. His position looks at how social relations are the production of

human struggle over space rather than looking at space as an organising metaphor (Merrifield, 1993).

Lefebvre's diversified definition of space averts both the political economy and structuralism approach found in Marxist geographers work such as Harvey and Castells. Alternatively, his theories extend the socio-spatial analysis using *The production of space* laws through the practices of everyday life. In Lefebvre's model, the production of space is problematic in the sense that struggle over space is fundamental to challenge capitalism which is the reason why his model suggests a transformation from Marxism towards the production of divergent, more collective form of space. The argument presented of this thesis relies extensively on Lefebvre's theoretical account of the production of spatial relations which will be further elaborated in the following section.

2.2.2. Lefebvre; the production of space and the right to the city:

This section offers a theoretical discussion on the production of space and the right to the city concepts which later lay the ground for interpreting spatial justice and the different rights to the city claims in the case project. Using the theoretical framework developed, along with the previous sections, the chapter aims to develop a theoretical framework in which the proposed realisation of spatial justice and the right to the city can be distinguished and analysed. The discussion begins with Lefebvre's urban problematic take and the ways he draws the notion of the right to the city to the previously discussed shifts he identified in the work of capitalism towards the 1960s. Reading the ways Lefebvre frames the city, three dominant nodes in his

theorisation can be identified particularly since the turn of the 21st century; participation; appropriation and value.

In addition to the philosophical opus, *The production of space* (Lefebvre, 1991b) Lefebvre's take on the right to the city in this research pays specific attention to his *Writings on cities* (1996) where he introduces the concept of the right to the city (*Le Droit à la Ville*) which he associated to the Parisian uprising in 1968 where the concept surfaced as a 'cry and demand' from the street later echoed in various forms of urban politics dispersed throughout this thesis. The discussions also briefly looked at the notion of the right to the city in another work of Lefebvre, *The urban revolution* (2003) and the ways it was interpreted by various scholars in order to establish the right to the city as a critical theory for alternative urbanism.

2.2.2.1. 'Urban problematic' and the right to the city:

In his argument in *The urban revolution* (2003) originally published in 1970, Lefebvre's notion of the right to the city claimed that alongside industrialization, urbanization has been the dominant force of capitalism. In fact, he observed the role of unique urban processes in the formation and accumulation of capital in the late 1960s and recognized that these urban processes give the urban question its unique capitalist model of production.

To Lefebvre, the urban problematic could not be contained within the industrial capitalism crisis and "was more profoundly a crisis of urban society" (Smith, 2003: xi). The French philosopher made the same point later the same year in *The Explosion; Marxism and the French Upheaval* (1969) where he argued that the structural problems with the neo-capitalism and centrality of the

French state enabled the spontaneous uprising, and that the dominant problems were those relating to urban society which he emphasize are becoming increasingly more important than industrialization problems (ibid). Moreover, Lefebvre established that urbanization should be viewed as a peculiar process with its own dynamics to examine and interpret rather than a mere work of capitalism. Notwithstanding the forgoing, Lefebvre argued urbanization should not be understood in isolation from industrialization, nor should his renewed urban question be irrelevant to the dynamics of industrial capitalism. Rather, he looked into the many ways in which industrialization poured into urbanization and vice versa, in addition, for him, industrial capitalism became about urbanization which by then was becoming a problematic phenomenon to capitalist societies.

Lefebvre's prescient work emphasized the pivotal role of urbanism in general and the production of urban space in particular in the reproduction of capitalist relations. According to him, this role went past the straightforward production of urban space as an exchangeable commodity, rather, he went from the simple organizing of production *in* space to synthesizing the production *of* space which he argued is the reason capitalism survived in the 20th century (1976, 1991b; 2009). His call confirmed the struggle is more over the shaping of the very processes that produce a capital urbanism which he argues denies the right to the city to most of its inhabitants.

The central arena of political struggles including democracy, social rights and justice in Lefebvre's analysis of capitalism and politics of emancipation underpin his understanding of urban space (Isin, 1999; Soja, 2010a). In his framework, the right to the city not only implies the right to the urban space but a right to a political space which constitutes the city as a space for

politics (Dikeç, 2001) –understood in Lefebvre’s visualization as the city where its inhabitants participate duly in the urban political life—.

Geographers such as Don Mitchell and Joaquin Villanueva share similar thoughts to Lefebvre’s, in their *Right to the city* where they emphasize it is “*an argument for the right not to be excluded, and especially for full political participation in the making of the city*” (2010: 668). The shared prominence of the city being both a space of politics and the central battleground where full political participation is presumed is where the two overlap, in Lefebvre’s words; “... *The right to the city manifests itself as a superior form of rights: right to freedom, to individualization in socialization, to habitat and to inhabit. The right to the oeuvre, to participation and appropriation (clearly distinct from the right to property) are implied in the right to the city*” (1996: 173–174).

Despite Lefebvre’s thought-provoking ideas on urban processes emerging as a distinctive question with respective dynamics and ‘*the urban*’ manifesting as a space of politics, the economic aspect remains unclear. The Lefebvrian take assert accentuate the fact that the urban space has become the central foci of the political struggle, yet the economic argument remains unfolded which becomes more critical considering the changing economic dynamics within capitalism. Unlike his lengthy and detailed discussion on the city being a political space, the argument on the economics are not as elaborate more specifically the role of the capital accumulation and circulation and the role of urbanization.

Reciprocally, David Harvey’s discussion on the process of urbanization under capitalism shed the light on this gap. According to him, urbanization has a historical role in digesting capital’s surplus (2012). In fact, in his *Rebel cities: From the right to the city to the urban revolution* he

argued that continuous expansion of surplus at a multiple rate is what capital growth is all about. Nonetheless, to achieve the desired continuous expansion of production, new sources of labour, new means of production, new materials, new technologies must constantly be found. Harvey also highlighted the need for capitalist to expand the market in order to increase its intake for products. However, he highlighted a serious complication to this model where he argued that once it reaches its limits –whether it be labour, means of production, materials, technologies or the process of realization— the capital accumulation model would cease and face an impending crisis (Harvey, 2012).

Under such conditions, Harvey argued capitalists should look elsewhere to reinvest the over-accumulated surplus capital. In his analysis, he discussed the possibilities of looking for ‘*spatial*’ solutions through investing in the built environment –whether in the form of productive assets such as factories and warehouses or physical entities of consumption such as streets and parks— to avoid the crisis of over-accumulating (Harvey, 1978, 1982), according to Harvey, this investment has considerable impacts on urbanization and consequently on the geography of capitalism and the cities we live in today. Nonetheless, it must be noted that Harvey argues this stabilizing role is temporary, moreover, it leads to a “*a pervasive tendency towards over-investment*” and this overinvestment he stresses, “*is in relation solely to the needs of capital and has nothing to do with the real needs of people, which inevitably remain unfulfilled*” (Harvey, 1978: 112).

This missing link in Lefebvre’s analysis between the materialization of the city and the emergence of the ‘*urban problematic*’ has been the foci of political struggle. Almost every case of urban political struggle considers that in the process of urbanization, more attention is given

for the *'needs of capital'* in comparison to the *'real need of people'* in order to avoid the over-accumulation crisis or seek alternative resources. The situation is similar in the research case where the right to the city struggles are agitated in opposition to irrational capital urbanism which simultaneously denies inhabitants the right to utilize urban space on the one hand while large numbers of vacant land parcels remain conglomerated throughout the city on the other. The city remains a site for political struggle, in the words of David Harvey, "*a process of displacement and disposition ... lies at the core of the urban process under capitalism... and is the mirror image of capital absorption through urban redevelopment*" (2012: 18). Accordingly, a revolutionary urban politics would require the *'right to appropriation'* and the *'right to participation'* which Lefebvre refers to when discussing the right to the city. The proposition that the contemporary city is an offspring of the capitalist quest for its realization problem, therefore, is produced as a space for capital where political struggle and resistance will take place, is why Lefebvre asserts the right to the city claim must include *'the right to appropriate'* the space of capital and the *'right to participation'* should be embodied in its political process.

In the past decade, the right to appropriation and the right to participation have been the central focus of scholars involved in the research on the right to the city's analysis. However, despite their popularity, their notion remains vague and unclear and consequently, have been exhausted by urbanists in conflicting manners. Discussion argues this is partly due to Lefebvre's unclear definition of what an urban dweller's right to participation is and the lack of a uniform answer to the question of what specifically the urban inhabitant participates in. Lefebvre's account renders a more radical notion of the right to appropriation and participation, an account which aims to transform the production of capitalist space. However, the initial obscurity resulted in a chain of

more unclear interpretations with reduced emphasis on an explicit definition for appropriation and participation, and the concepts became absent in formal procedures of existing urban governance.

2.2.2.2. *The question of participation and the right to the city:*

Lefebvre's emphasis on the right to participation as part on the right to the city in urban politics has been discussed extensively by both liberal and radical readers of Lefebvre, the notion has been widely accepted as a fundamental element to the right to the city and enjoyed a high degree of primacy. Identified as what "*seeks to encourage the democratic participation of all urban dwellers in decision-making processes ... thus fundamentally challenges existing power relations*" (Busà, 2009: 6–7); "*the right of city dwellers to enjoy urban services and the right to participate in the management of their cities*" (Fernandes, 2007: 208); "*the right to have sufficient access to urban public spaces*" and "*the right to directly participate ... in urban political processes*" (Plyushteva, 2009: 95), the notion to the right to the city has been explored in many discussions. Moreover, the human geographer Mark Purcell argued that "*the right to the participation is fundamental to the right to the city and poses a serious challenge to the established structures of liberal citizenship*" (2002: 103). Participation in the decision-making process and the urban management has also been fundamental themes in UN-organized World Urban Forms as well.

Through a radical reading to Lefebvre's right to the city and participation, Purcell's analysis emphasized that instead of confining the notion of the right to participation within the liberal democratic citizenship –which are primarily limited to decisions taken by the state—, urban

dwellers should participate in “*the decisions that produce urban space*” (2003: 577). In his words; “*I suggest that Lefebvre’s right to the city is an argument for profoundly reworking both the social relations of capitalism and the current structure of liberal-democratic citizenship. His right to the city is not a suggestion for reform, nor does it envision a fragmented, tactical, or piecemeal resistance. His idea is instead a call for a radical restructuring of social, political, and economic relations, both in the city and beyond. Key to this radical nature is that the right to the city reframes the arena of decision-making in cities: it reorients decision-making away from the state and toward the production of urban space*” (Purcell, 2002: 101).

In Purcell’s interpretations of Lefebvre, he acknowledged that his call is for a radical transformation of capitalist relations rather than for reform. However, despite the fact he accepts the significance of inhabitants’ participation in the production of space, his writings remain confined within the capitalist city context which is obvious in the title of his later article *Citizenship and the right to the global city: reimagining the capitalist world order* (Purcell, 2003) where he re-imagined a right to the city within the capital world.

The democratic participation in the urban governance processes is not all there is to Lefebvre’s notion of the right to participation in political struggles through the production of the urban, rather, what he emphasizes, is a call for urban dwellers to claim their right to take part in the urban political struggle through a political participation which bids to restructure the capitalist city through transforming the social and economic relations it sustains which produce the capitalist urban space.

Lefebvre envisions the ideal city as the political vessel of uninterrupted social change which is driven by the shared city dwellers, in his words; “*the ideal city... would be the ephemeral city, the*

perpetual oeuvre of the inhabitants, themselves mobile and mobilized for and by this oeuvre" (1996: 172–173). In his argument, the city and inhabitants are contained within each other, the city is a product of its inhabitants whom themselves are products of the city, they are intertwined, are mobilized and inspired by each other. However, it is crucial to note here that in Lefebvre's argument, the *ephemeral city* is yet to come, it exists potentially and is still in the making (1996: 173). As to him, to develop an urban society, new needs must be explored, ones that are discovered through their emergence and not pre-exist as objects (1996: 165). Similarly, Harvey argues "*the right to the city is an empty signifier. Everything depends on who gets to fill it with meaning ... The definition of the right is itself an object of struggle, and that struggle has to proceed concomitantly with the struggle to materialize it*" (2012: xv). Other scholars such as Margit Mayer and Mustafa Dikeç share similar thoughts to Harvey, while Mayer argues the right to the city is not inalienable by birth or by the virtue of being human, she implies the right to the city should be thought for through social and political action and that its strength lies in its absence (Mayer, 2009). Dikeç argued that "*the right to the city is not simply a participatory right but, more importantly, an enabling right, to be defined and refined through political struggle*" (2001: 1790). Accordingly, these analyses emphasizing Lefebvre's notion of participation in the right to the city exceed taking part in the course of the political process itself, rather are an invite to city dwellers to explore new needs for a new city through the *urban* administration.

In addition to the political rights, the social rights are evidently embedded in Lefebvre's quest for the right to the city. According to him, the right to the city "*cannot be conceived of as a simple visiting right or as a return to traditional cities*" instead "*can only be formulated as a transformed and renewed right to urban life*" (1996: 158). Lefebvre's assertion on the right to the

city being a transformed and renewed right to urban life underpins his take on the ‘*right to participation*’ throughout his argument. For example, he accentuated this right in not a ‘*visiting right*’, it goes beyond the ‘*individual liberty to access*’ which Harvey also highlight (2008: 23), where even negligible inhabitants practice their life freely far from exclusion, harassment or discrimination, a right that goes beyond creating a centric medium for urban dwellers and the users of the city.

Understood both politically and spatially, the right to the city Lefebvre argued is “*the right of users to make known their ideas on the space and time of their activities in the urban area; it would also cover the right to the use of the centre, a privileged place, instead of being dispersed and stuck into ghettos (for workers, immigrants, the ‘marginal’ and even for the ‘privileged’)*” (1996: 34). Centrality here understood as being in the centre of urban politics and urban space rather than the centre of the geographic location. Moreover, in Lefebvre’s notion the ideal city ‘*the ephemeral city*’ is the city that is constantly in the making by its inhabitants, therefore is dynamic and transformative. This tension between participation which challenges the current social and economic principals and participation which looks to explore new dimensions is dialectic, similar to the dialectic tension between the real and the imagined, the actual and the possible is important to highlight as we do not obtain the luxury to transform social relations away from the present condition. Distinguishing between the two modes of participation and the dialectic tension between them is therefore important to realize that the two should be thought of together.

Lefebvre’s notion to the right to participation is cautious to any imposed top-down intervention by the capital, expert or the state. According to him, “*by authoritarian means or by*

administrative prescription, or by the intervention of specialists” (1996: 146). Instead, his outlook promotes a right to the city where human needs are defined collectively through their political struggle in the urban society, or in Dikeç’s words; *“entails not a right to be distributed from above to individuals, but a way of actively and collectively relating to the political life of the city”* (2001: 1790). Lefebvre’s take on the ideal city is where inhabitants are themselves mobile and are mobilized by, not only in established political programs rather in the process of building said political programs. The process of formulating the city is what Lefebvre argues is our fundamental right to reshape it while being aware of the dialectic tension between the participation modes which collectively determine the political processes that might ultimately realize the right to the city.

2.2.2.3. *The right to appropriation:*

With less attention than the right to participation, the right to appropriation has also been at the centre of Lefebvre’s notion to the right to the city which has been discussed by a few of Lefebvre’s critical readers. The notion of appropriation of urban space has been associated to the notion of having access to urban space and the freedom to utilize it. For example, it has been defined as *“utilizing city’s use value”* (Duke, 2009: 112); *“the right of inhabitants to ‘full and complete use’ of urban space in their everyday lives. It is the right to live in, play in, work in, represent, characterize and occupy urban space in a particular city”* (Fenster, 2006: 219); *“the right to the city entails a continual and active process of appropriation in the sense of use ... of urban spaces”* (McCann, 2002: 77); in addition, it has been argued that *“appropriation includes the right of inhabitants to physically access, occupy, and use urban space”* (Purcell, 2002).

Indeed, the notion of appropriation implies the right to have access to urban space and utilize it, however, in Lefebvre's account, 'appropriation' is not limited to 'use', although this account does contribute to the suggestion of what the right of appropriation of the urban space might entail. In other words, the renewed interpretation of the right to appropriation acknowledges existing spatial rights such as the right for housing, to roam streets freely away from harassment or discrimination, to assemble in public spaces to practice political expressions, but in no way limits it to said consumption domains, rather attempts to introduce a production mode of appropriation which can generate various political, socioeconomic and spatial possibilities.

The appropriation notion mobilized in Lefebvre's discussions, some researchers note, finds grounds in Marx's notion which encompasses appropriation in both consumption and production while maintaining the tension between the dialects. In his words; "*In production the members of society appropriate (create, shape) the products of nature in accord with human needs; distribution determines the proportion in which the individual shares in the product; exchange delivers the particular products into which the individual desires to convert the portion which distribution has assigned to him; and finally, in consumption, the products become objects of gratification, of individual appropriation*" (1993: 88–89). In this key passage in Marx's *Grundrisse*, while the two notions have different meanings, they are still related and the appropriation in production is emphasized, an appropriation where humans' appropriate nature to produce use values. To him, the production of necessities is crucial to the production of human societies which requires the appropriation of nature through labour. Therefore, in the production process, nature is metabolized through human's (and their labour) which simultaneously produce use value and space within a single process (Smith, 2010).

In addition to the ‘*appropriation of production*’, Marx refers to another form of appropriation, the ‘*appropriation of consumption*’ where products become objects of individual appropriation. However, this research is more attentive to the first conception which introduces appropriation where humans’ appropriate nature and socialize within it through labour as essential to the production process and consequently to the production of space. According to Marx “*All production ... is appropriation of nature on the part of an individual within and through a specific form of society*”(1993: 87), and the ‘*appropriation of labour*’ should be understood as “*the real economic process of making something one's own*” (1993: 514). Marx reiterates his thoughts again in *Capital* where he argues that the ‘*productive activity*’, understood as “*an activity that appropriates particular nature-given materials to particular human wants*” (2004: 29), is characteristic to the appropriation of consumption process where labour’s objective products become individual through final consumption.

The distinction between the two modes of appropriation in Lefebvre’s discussions was not as evident in comparison to Marx’s explanation, moreover, the term ‘*appropriation*’ was unclear to begin with and alternated in meaning from paragraph to paragraph which made it ambiguous to interpret. For example, in his *The writings on cities* he refers to the notion of the concept incoherently, without specifically establishing its meaning in the first place and refers to it in contrasting arguments. However, in his opus, *The production of space*, there are more indications on the underlying meanings of the concept.

In *The production of space*, the reader finds a noticeable distinction between two concepts, ‘*appropriation*’ and ‘*domination*’, and thus ‘*appropriated space*’ and ‘*dominated space*’. According to Lefebvre, the two concepts dialectically contradict each other, however, are

inseparable from each other. In his words; *“Military architecture, fortifications and ramparts, dams and irrigation systems—all offer many fine examples of dominated space”* (1991b: 167), therefore, in his argument, dominant space refers to abstract space of power where means of technology envelope existing space, transforming and mediating it. Lefebvre adds; *“A motorway brutalizes the countryside and the land, slicing through space like a great knife. Dominated space is usually closed, sterilized, emptied out... is invariably the realization of master’s project”* whereby *“technology introduces a new form into a pre-existing space—generally a rectilinear or rectangular form such as a meshwork or chequerwork”* (1991b: 164–165). Generally, the initial definition of dominated space in Lefebvre’s writings included any space transformed by technology which almost always involved the practice of power, in other words, spaces produced by the powerful. To use Lefebvre’s term, this could indicate any pre-existing space, which seemed to denote certain interventions to space, such as boulevards and highways.

Lefebvre notes the opposition between the two notions, however, in contrast to his definition to appropriation, he gives more attention to the definition of domination. On his understanding on appropriation he argued that: *“Only by means of the critical study of space, in fact, can the concept of appropriation be clarified. It may be said of a natural space modified in order to serve the needs and possibilities of a group that it has been appropriated by that group. Property in the sense of possession is at best a necessary precondition, and most often merely an epiphenomenon, of 'appropriative' activity, the highest expression of which is the work of art. An appropriated space resembles a work of art, which is not to say that it is in any sense an imitation of a work of art. Often such a space is a structure — a monument or building — but this is not always the case: a site, a square or a street may also be legitimately described as an*

appropriated space. Examples of appropriated spaces abound, but it is not always easy to decide in what respect, how, by whom and for whom they have been appropriated” (1991b: 165).

However, in the following passage he argued that: *“The diversion and re-appropriation of space are of great significance, for they teach us much about the production of new spaces ... From a purely theoretical standpoint, diversion and production cannot be meaningfully separated. The goal and meaning of theoretical thinking is production rather than diversion. Diversion is in itself merely appropriation, not creation — a re-appropriation which can call but a temporary halt to domination” (1991b: 167–168).* In this paragraph, Lefebvre argued that diversion – repurposing space which outlived its initial reason(s)— is in itself appropriation. Here, it seems he referred to the appropriation of existing space rather than the production of space through the process of appropriation. In this meaning, Lefebvre emphasized that the appropriation of consumption only temporarily pauses the process of domination, the notion of appropriation of production is absent in this account. However, by taking into account the right to appropriation in production as this study argues, instead of understanding it merely as the right to accessing urban space, would emphasize the production of urban space aspect while at the same time looking at inhabitants as an active and indispensable part of this production process through their substantial right to radically change the ways urban space is made.

2.3. Urban Brownfields:

The lack of a systematic definition of brownfields or brownfield sites is a problem that extends beyond the boundaries of this research, therefore, in order to define brownfields for this research, it was crucial to examine the variety of existing definition in different context, display the

advantages to their development and the obstacles that hinder it. Moreover, in order to inform the later empirical chapters which attempt to establish the brownfield typologies in the research case, the following paragraphs also examine a selection of methods designed to identify potential brownfield sites and evaluate their redevelopment.

2.3.1. Defining ‘*Brownfields*’ for this research:

Initially used to describe sites which have been previously used and in contrast to ‘*greenfield*’ lands which is used to describe sites that have not been previously used (CLARINET, 2002b), the term is widely circulated by the US Environmental Protection Agency (USEPA) to describe “*abandoned, idle, or underused commercial properties where expansion or redevelopment is complicated by real or perceived environmental contamination*” (USEPA, 1997b). Looking at the variety of definitions, this section will shed the light at some of the interpretation of the term in different context in an attempt to inform its definition for the case of this research.

The redevelopment of brownfield sites has received growing attention in both the US and Europe since the early 1980’s for its multiple benefits; from controlling urban expansion; creating jobs and tax revenues; in addition to the added environmental improvements. However, it should be noted that risks such as the lack of finance; the uncertain market potential; the high-cost of clean-up activities and time delays are higher in comparison to greenfield development. In fact, Howland (2007) argues that contamination, the non-existing legacy of environmental laws, and the industrial history are in particular the origin of obstacles facing brownfield redevelopment. For example, because of the tagged liability risks and associated financial penalties, initial environmental assessments conducted in the US underwent meticulous investigations to

determine the level of contamination which defines them -or not- as brownfield sites (USEPA and OSWER, 2002). Consequently, brownfield redevelopment became limitedly exclusive to big cities where the demand on land is higher, land resources are tight and development is rapid. Examples where available land was in the form of brownfields was found vastly in Toronto, Chicago, Detroit Petersburg and Philadelphia. In the UK and European context cities such as in France and Germany where population is high and little land was available for development within the inner-city boarders, therefore in return, favoured derelict land policy development and generated an array of land recycling programmes. On one hand, these cases emphasized the awareness towards the negative economic and ecologic impacts of derelict sites while on the other hand recognised the positive potentials for development (Grimski and Ferber, 2001), to facilitate the redevelopment of brownfield sites the government at all levels in both the US and European cases endorsed and implemented a variety of programs and policies to standardise the regulations for brownfields at the national level and reach out to the private sector since the mid-1990s (Bartsch et al., 2001; USCM, 2010; USEPA and OSWER, 2002). Known as the superfund law, the Comprehensive Environmental Response, Compensation and Liability Act (CERLA) enacted by the USEPA in the 1980's is a recognised example. The law safeguards property owners/ users, ensures that past contamination is cleaned-up and that contributor(s) of toxic waste shall be held responsible for the cost of clean-up.

The term brownfield has been regularly employed in governmental communications in England without being specifically defined. It has been frequently used interchangeably with the term '*Previously Developed Land*' despite having distinct connotations (DCLG, 2011). However, since the English Partnership took the role of the Government's advisor on brownfield lands,

further weight has been added to the definition as part of the governments national brownfield strategy development (English Partnerships, 2003, 2006).

Despite the ambivalence, this thesis will consider Ferber and Grimski's version (2002) later adopted by the Concerted Action on Brownfield and Economic Regeneration Network

(CABERNET) which identifies Brownfields as "*sites which have been affected by former uses of the site or surrounding land; are derelict or underused; are mainly in fully or partially developed urban areas; may have real or perceived contamination problems, and; require intervention to bring them back to beneficial use*" (CABERNET, 2007). In addition, this thesis while acknowledges the significance of rural Brownfields will solely focus on urban Brownfields. This argument is picked up later in the *Brownfields in Amman* chapter.

Several discussions highlighted the necessity for a sound and robust Brownfields definition (Alker et al., 2000; Andres, 2012b; Coffin, 2003; Lane, 1999; Nathanail et al., 2003; Oliver et al., 2004; Yount, 2003). In these discussions, while Oliver et al. and Nathanail for example explored the international definitions, Alker et al. and Yount suggested ones for the use in the UK and the USA respectively. Alker highlighted many of the outcomes resulting from the absence of an agreed definition such as the fail to interpret the perspectives of different stakeholders in England which adopt different definitions of the same term. The multiplicity of definitions endorsed in different policy contexts across the country Alker et al. argued are anticipated and predicted due to the absence of a statutory definition in the national policy. In fact, Hanham (1997) asserted that any policy on brownfield sites is pointless without a definition of what is one. The situation is yet to be resolved despite the government's persistent to use the term brownfield often as a synonym

for Previously Developed Lands. As underlined earlier, the definition of Previously Developed Land does not require the site to be vacant or derelict despite the National Land Use Database of Previously Developed Land surveys available for development in England (2014) which includes vacant land; derelict land and buildings; vacant buildings; land currently in use with planning allocation or permission, and; other land currently in use with known redevelopment potential.

In addition to defining what is a brownfield, it is crucial at this point to touch on their types. This research will adopt Ferber et al.'s (2006) *Brownfield handbook* brownfield type by previous use categorisation. The categorisation classifies brownfield sites by their previous use to industrial; military; railway and transport; agricultural; institutional (schools, hospitals, prisons); commercial (shopping centres, offices); cultural (culture houses, cinemas); leisure (sports ground, parks, open space). Moreover, the study will also adopt the brownfield type by likelihood of reuse categorisation which classifies the sites in accordance to their commercial viability, in line with the broadly accepted CABERNET project model which looks at two variables, land value (after reclamation) and reclamation cost. The types are accordingly classified into three categories; (1) self-developing sites –through private driven projects—; (2) potential development sites –through public-private partnership—, or; (3) reserve sites –through public driven projects—.

2.3.2. Brownfields development/ redevelopment:

Another loosely defined expression associated to brownfields is brownfield redevelopment also interchangeably used with brownfield regeneration. However, this thesis embraces Roberts and Sykes's (2000) specific meanings where brownfield redevelopment is taken to mean “*the process*

or action of converting a brownfield site for a new use” and brownfield regeneration to mean “addressing urban problems through improving the economic, physical, social and environmental conditions of an area that are delivered through brownfield redevelopment”.

Stakeholders whom can influence the redevelopment of brownfield sites are also numerous and come from different levels, however, this research will adopt Ferber et al.’s (2006) stakeholder possibilities which they put in five categories:

- **Stakeholders on a personal level**, and these may include: brownfield sites owners; problem solving consultants; specific NGO’s; individual citizens; individual administrators.
- **Stakeholders on a local level**, and these may include: brownfield sites owners; local investors; local authorities; local statutory regulating bodies; financial institutions; technical and real estate consultants and lawyers; local citizens; local community.
- **Stakeholders on the regional level**, and these may include: regional self-governing authorities; regional financial bodies and institutions; regional development agencies; regional statutory regulators; regional investors; public within the region.
- **Stakeholders on the national level**, and these may include: the government; the parliament; national decision-making and legal framework formulating institutions; national regulators; national financial institutions; national investors.
- **Stakeholders on EU and global level**, and these may include: EU commission, EU parliament; EU departments; global investors; global finance; global brownfield owners.

Achieving workable solutions for brownfield sites redevelopment Ferber et al. (2006) argues necessities the collaboration between the different stakeholders and stakeholder groups.

According to the USEPA (2006), an ideal brownfield redevelopment process must consist of seven steps; (1) site identification; (2) initial site assessment; (3) economic assessment; (4) detailed site assessment (optional), (5) project development and finance; (6) clean-up planning and execution (7) implementation of site redevelopment. The widely adopted, seven-steps model Thomas (2002) argues is summarised in a three-activity-process aimed to priorities the selection of sites for redevelopment, investment and marketing. The model also identifies the levels of decision-making for each stakeholder group and the possible collaborations amongst them. Similar the USEPA model, the first step in Thomas's model is site identification and data collection or site inventory, the second is screening and ranking (with the intention to narrow down the number of candidate sites), and the third process is the analysis and evaluation.

2.3.3. Advantages and obstacles to brownfield redevelopment:

In addition to its numerous individual benefits, brownfield redevelopment plays an integral role in achieving overall economic, environmental, social sustainable development goals De Haes et al. (1997) argue. Brownfield development promoters also assert an interdisciplinary approach offers numerous benefits for both cities and communities (Gernstein, 2002; McCarthy, 2001; USCM, 2010) including but not limited to *economic benefits* such as increasing investment, creating additional tax revenue, creating job opportunities, and making better use of existing, often underutilised, infrastructure and service; *environmental benefits* such as reducing metropolitan expansion/ urban sprawl, reducing traffic congestion and related air quality problems, preventing other forms of environmental degradation, and improving air and water

quality; *social benefits* such as better public health, improved public safety and promoting further neighbourhood revitalisation.

On the other hand, the redevelopment of brownfield sites is faced with numerous obstacles, in fact, Brachman (2004) argued that the majority of these obstruction fall in one of three groups; (1) the legal category which includes issues such as liability, property transfer decisions, site control and title problems; (2) the institutional and political category which includes issues such as reluctant stakeholders and bureaucratic delays, the lack of political will and leadership, and; (3) the economic category which include issues such as lengthy pre-development periods due to thorough assessments, remediation expenses and inadequate public funds.

In addition to the advantages and obstacles of brownfield sites redevelopment, other factors must be taken into consideration to adequately evaluate the redevelopment potential of brownfield sites. Browner (1998) for example found that five critical factors influence the decision on brownfield redevelopment. These factors include; (1) the '*market mismatch*' between brownfields and greenfield where he argued every brownfield disincentive is a greenfield incentive; (2) actual or perceived urban crime rates which according to him make brownfield sites unattractive; (3) intergovernmental competition; (4) the need to assemble parcels of land into tracts of sufficient size to permit economic redevelopment as well as cleaning land titles, and; (5) the need for governmental leadership.

The '*urban image*', which is considered a prime motive for development in Jordan, is another factor that this study takes into consideration. According to Daher (1999), the majority of approved projects in Jordan in the last decades had the '*urban image*' as their top priority in addition to the promised economic development which is considered a key outcome for

municipal governments which are today more than ever competing for a thriving city image that can attract more investment and skilled labour force (ibid).

A last factor this study brings to attention is '*end land use*' which discussions argue is substantial to considering potential development for brownfield sites (Davis, 2002; Devine, 1996). End land use is essential to brownfield redevelopment as it measures the compatibility between the brownfield site current condition and the desired future use. For example, given that the standards for clean-up are less compromising for residential use, a moderately contaminated industrial site wished to be developed into a residential end use would require more resources than if it would be developed into a commercial end use.

2.3.4. Methods to identify potential brownfield sites:

In the investigated study cases, the identification of brownfield sites is often done by comparing the prospect site to the described characteristics of the definition, however, with the absence of one, such a process becomes problematic. In addition, with the absence of a database for brownfield sites, their information might not always be available or accurate (USCM, 2010). The problem is more evident in the US context for example where records are incomplete due to property owners resisting to register their properties as brownfield sites which Coffin (2003) argues is due to one of four possible reasons; (1) the fear about potential negative impacts on property values; (2) the fears about using the wrong data to characterise a site as a brownfield; (3) concerns about limited industrial capacity for developing such an inventory, or; (4) the inability of communities to coherently identify the purpose behind such lists.

Little research has been done to improve the identification of brownfield sites and the situation is no better in the Middle East context. However, Coffin method made effective use of databases to identify potential brownfield sites, and by linking available information sources, she managed to overcome many barriers that encompass the identification process.

Separating brownfield data sources into three groups; federal, state environmental agencies and local sources. Coffin managed to confirm information such as location and contamination from federal and state environmental agencies which was a key indicator for environmental and safety requirements. Local sources such as local environmental records, zoning and individual parcels' property tax record on the other hand provided accurate and valuable information to identify potential sites especially in ones where contamination is not problematic. By crossing the information from the three information sources, Coffin came closer to develop an approach to identify potential brownfield sites.

Together with the insufficient governmental budget and the large number for potential brownfield sites, the process of site selection for development becomes more problematic. For a sound decision to be made, both available and accurate information, as well as a means to integrate this information are equally significant. Therefore, the study also looks at two methods to identify potential brownfield sites; the Smart Growth Network (SGN) and Thomas GIS-based evaluation framework. The following paragraphs briefly discuss the two methods;

- ***The Smart Growth Network (SGN):***

Consistent with the USEPA (2006) model previously highlighted, to identify a priority brownfield site, a six-step model is considered. The information is provided for both individuals and organisations involved in developing strategies and setting priorities

for brownfields redevelopment. According to the SGN framework for brownfield site prioritisation, the process is straightforward; (1) geographic areas are targeted; (2) brownfield sites in each area are identified; (3) brownfield sites are characterized based on their marketability; (4) sites with high potential community benefits are screened; (5) potential impacts of redevelopment alternatives are evaluated, and; (6) strategy for brownfield redevelopment activities is developed. The process unfolds as follows;

(1) Geographic areas with a focus on targeted areas that enjoy similar location characteristics and where brownfield redevelopment objectives can be better achieved are targeted. This initial step means that the choices are already narrowed down which will result in a more efficient decision-making process. The identification is typically focused on three geographic areas; (a) mixed use areas with highly exposed, low income, minority population; (b) industrial areas with large land tracts and significant job creation potentials, and; (c) waterfront/downtown areas that are attractive to business.

(2) Potential brownfield sites for each geographic area are identified, this step is aimed to reduce the complexities and uncertainties of site location selection, in addition to cutting the planning costs for developers. The information for this step are gathered from a variety of sources; (a) local knowledge and land use surveys; (b) contact local economic development offices; (c) coordinate with city urban planning activities; (d) federal and state environmental agencies, and (e) GIS databases.

Afterwards, (3) the identified potential brownfield sites are characterised based on their marketability. This step takes into consideration both site specific as well as

more general neighbourhood characteristics. Moreover, this step needs to be revisited as market and social conditions change information. In this step, sites are characterised either as; (a) low marketability, in this case public funds are necessary and public sector takes the lead; (b) marketable for specialised developers, in this case sites could make use of alternative funding sources and public-private partnerships emerge, or; (c) high marketable, and in this case traditional sources of funding takes lead such as the private sector.

(4) Sites with high potential for community benefit are then screened for the government to focus its effort accordingly. The screening criteria include site and neighbourhood characteristics in addition to the redevelopment plan attributes. This step helps identify sites that are likely to provide substantial community benefits while identifying obstacles that might stop the benefits from being realised.

Coming towards the end, (5) potential impacts of redevelopment alternatives are evaluated. This step is of high importance to redevelopment implementation, firstly, this step aids government to priorities sites in terms of the overall benefits, public funding efforts and redevelopment projects are focused accordingly. Secondly, this step helps identify site characteristics which qualify projects to alternative funds and thus outline the logic to tap into these resources.

Finally, (6) strategies for brownfield redevelopment activities are developed. This last step includes establishing development priorities, identifying funding resources and setting an action plan.

Overall, and as emphasised earlier, the Smart Growth Network integrated framework is aimed for both individuals and organisations involved in developing brownfields

strategies and setting their priorities including city managers, state and federal governments, stakeholder groups such as community development organisations, environmental justice advocates, lenders, developers and other private businesses, environmental regulatory agencies and local economic development agencies.

- ***Thomas' GIS-based evaluation framework:***

The second approach proposed by Thomas (2002) for site prioritisation and selection is a '*Brownfield Site Ranking Model*'. In this tool, Thomas utilised GIS which he argues is an effective tool to integrate multiple geo-spatial and socio-economic data, both as an essential information source and analysis tool for urban studies in general and brownfields in particular (2002). Thomas chooses to use GIS as relevant information can be quickly and easily accessed to both public and stakeholders which he argues will push forward the advancement of public participation (ibid).

In his evaluation framework, Thomas proposes the Brownfield Site Ranking Model to aid the selection of potential brownfield sites for development. His model identifies 12 sitting criteria concluded from general formerly used site review for business. The criteria include: commercial marketing guidelines; financial incentives; environmental regulatory compliance requirements; regional infrastructure and labour resources; and local community acceptance. The factors are integrated into a conventional step-by-step site identification and selection process using a weighted multi-criteria procedure. According to Thomas, the local government is more considered with the physical conditions of the site whereas the county authority is more considered with marketability. Therefore, his model sets two criteria to identify the factors contributing to the decision-making process when developing the evaluation

framework for potential brownfield sites redevelopment, both sets are equally significant to take into consideration (2002). Thomas's method provides a practical model for the different stakeholders including commercial developers, real estate mediators, consultants and the local community in selecting target sites for development, moreover, it provides a process which can completely be computerised and adapted to a geographic information system.

To conclude, in principle, the SGN model underlines the importance of effective use of land in addition to being used in brownfield conservation, however, although it emphasizes the economic and social criteria, the environmental criteria is to some extent ignored. In addition, the concept suggests the improvement of transportation patterns in order to increase availability and the availability/ ability of people to reach the desired goods, services and activities (Đokić and Sumpor, 2010). The US Smart Growth Network (1996) integrated approach suggests a tool which aids in the selection process based on economic feasibility, environmental and social benefits but with more emphasis on the economic and environmental considerations. On the other hand, Thomas's GIS model integrates geographic, spatial and socio-economic data which enables stakeholders and the public to easily participate in the planning process. Moreover, the ranking criteria designed to select potential brownfield sites it priorities the physical factors to the local authority while highlights the market factors to the regional government (Kurtović et al., 2014).

In addition to the methods to identify potential brownfield sites and priorities their redevelopment, the following section touches on three evaluation tools developed to aid the decision-making of the potential brownfield sites redevelopment evaluation process

(CLARINET, 2002b) which will inform the identification and evaluation of potential brownfield sites later in the study case.

2.3.5. Methods to evaluate the redevelopment of potential brownfield sites:

Similar to the research on methods to identify potential brownfield sites, the research around the evaluation of their redevelopment is also insufficient. Therefore, the study looks at three evaluation tools; the Cost Benefit Analysis (CBA); the Environmental Impact Assessment (EIA), and; the Multi-Criteria Evaluation (MCE).

Many discussions investigated decision support tools whether for prioritizing their sustainable management (Sorvari and Seppälä, 2010), the regulatory decisions and the challenges in their policy implementation (Rodrigues et al., 2009a, 2009b), and the possibilities of the assessment tools (Swartjes et al., 2008) in different contexts such as the UK, European cities such as Portugal and Finland in addition to China (Chen et al., 2009; Christie and Teeuw, 1998; Hollins and Percy, 1998; Luo et al., 2009; Page and Berger, 2006; Rodrigues et al., 2009a, 2009b; Sorvari and Seppälä, 2010; Swartjes et al., 2008; Wedding and Crawford-Brown, 2007). Within the broader research topic of characterizing and quantifying success in brownfield revitalization and with a focus on sustainability and green building, Wedding and Crawford-Brown (2007) for example measured site-level success in brownfield developments. Their model defined 40 total indicators that define and determine the success of brownfield redevelopment in four categories: environment-health; finance; liveability; and social-economics. They used these indicators to develop a partially automated tool that stakeholders in brownfield redevelopment may use to more easily assess and communicate success (or failure) in these projects. Their model integrated

'green' building as an important aspect of successful brownfield redevelopment and developed this tool within a framework of a specific multi-attribute decision method and analytical hierarchal process.

Chen et al. (2009) designed a strategic classification support system for brownfield redevelopment. In their research, they surveyed and assessed currently available strategic decision support tools; developed a dominance-based rough-set approach and used it to classify cities with brownfield issues in the US according to the level of two characteristics: brownfield effectiveness and brownfield future needs. According to Chen et al. (2009) the unique features for their method are its reduced requirement for preference information; its ability to handle missing information effectively, and; the easily understood linguistic decision rules that it generates.

In addition, Onwubuya et al (2009) developed decision support tools for the selection of 'gentle' remediation approaches, 'gentle' used in their approach to refer to the selection of less invasive, alternative remediation options such as phytoremediation and *in situ* immobilization. In their research, they critically review available decision support tools in terms of their fitness for purpose for the application of gentle remediation technologies. Stakeholders feedback indicated there is a lack of knowledge on currently available decision-making support tools and their research suggested a decision support tool which focuses on gentle remediation should be more strongly incorporated into existing, well established (national) decision support tools/ decision frameworks to promote more wide spread use and uptake.

Prior to the development of their tool, Onwubuya et al. identified the software-based decision support tools which have been developed across Europe whether in-house or under regional or

other funding programmes including Cost Benefit Analysis (CBA), Environmental Impact Assessment (EIA), and Multi-Criteria Evaluation (MCE). Moreover, prior to Ouwubuya et al.'s research, in the early 1990s, Pollard et al. (2004) also identified a variety of tools including CBA, EIA, and MCE. Following is a brief overview of the three tools.

- ***Cost Benefit Analysis (CBA):***

According to the European Network on Chain Analysis for Environmental Decision Support CHAINET project (2002), the CBA is an economic tool used as a decision support tool on large investment projects. In CBA, all considerations are expressed in a common unit of measurement, that is, currency. Both economic and environmental values are interpreted as monetary values.

According to Martin et al. (1997), CBA typically consists of three steps; firstly, the determination of which costs and benefits are involved, secondly, valuing these costs and benefits and finally weighing them against each other to produce a final sum of value.

Although simple and straightforward, CBA suffers from several limitations including that the monetary valuation of environmental benefits and impacts is hard to quantify on a reliable and consistent basis; concerns exist about discounting future effects to net present value, when the potential for (detrimental) or positive environmental effect in the long term is important; the appropriateness, or lack of, a monetary value for less tangible environmental values such as biodiversity, and; the limitations of converting all decision factors to a single dimension.

- ***Environmental Impact Assessment (EIA)***

Identified as the process of establishing the environmental and social impacts of a project prior to decision-making, EIA aims to predicting environmental impacts at an early stage in project planning and design; it helps finding ways and means to mitigate adverse impacts; shape projects to suit the local environment; and present the prediction and options to decision makers (CHAINET, 2002). EIA is utilised diversely for different practises in different countries, however, CHAINET (2002) concludes four significant aspects of it are increasingly approaching consensus. Firstly, the consideration of impacts on both the physical and the social environment; secondly, as a tool for decision-making, EIA is more likely to be realised in a timely communication of information between stakeholders such as the planners and individuals conducting the assessment; thirdly, EIA should consider quantifiable as well as non-quantifiable attributes (e.g. sociological, political and psychological factors) which may also have significant influences on the process; and lastly, the mitigation of significant impacts, which implies to minimize undesirable and enhance the desirable impacts, must be assessed for all possible impacts. Many environmental impacts can be achieved by utilizing EIA including reduced costs and time of project implementation and design in addition to avoiding treatment/ clean-up costs and impacts of laws and regulations. EIA provides a decision-making support tool that not only considers the economic factors, but also offers stronger consideration for the social and environmental aspects.

- ***Multi-Criteria Evaluation (MCE)***

The previously discussed CBA and EIA are traditional decision theories based on single-criteria focused to find the best solution for any decision problem which according to Munda et al. (1994) is not sufficient in most cases. In their research they argue that in contrast to the orthodox approach, the case of brownfield redevelopment necessitates the combination of environmental, social and economic factors into one decision-making framework. Multi-Criteria Evaluation MCE is in principal the best method to that Munda et al. (1994) debate.

As a tool designed for multidimensional decision problems, MCE is considered a structured system for ranking alternatives and making selections and decisions which is both simple and able to handle numerous criteria. According to Jankowski (1989) MCE is particularly useful when three features are combined; the need for a discrete decision; different choices are possibly measurable, and; that the data have a quantitative and/or qualitative character. MCE has two considerations; how great an effect is (score) and how important it is (weight).

Given the brownfield redevelopment process is complex to begin with, this tool can handle a great amount of data, therefore, for many stakeholders, it is considered the best tool to systematically analyse and weight the multiple factors involved (CLARINET, 2002b). Where CBA and EIA are relevant tools that may be used to assess complex decision-making. However, the first provides a more economically focused perspective and the second provides a more environmentally focused perspective. On the other hand, MCE provides a systematic approach to analyse a vast amount of criteria, moreover, it provides the possibility to rank and select between two or more sites (ibid).

To sum up, in addition to the need to develop a systematic definition for brownfields for the study case, the need to develop methods to identify their potential sites and evaluate their redevelopment, this research argues, is equally urgent. With the absence of a database for brownfields in Jordan, the study argues developing an approach similar to Coffin's would be the most efficient, moreover, to evaluate the development potential of the identified brownfield typologies, a combination of both the SGN model and Thomas's GIS-based model in addition to tools including CBA; EIA; and MCE are also recommended. This is also picked up later in the *Brownfields of Amman* chapter.

2.4. Temporary urbanism:

Understood in contemporary contexts as the practise of urbanism aiming to revive under-utilised or vacant space –which may also include buildings— within the urban areas, temporary use has been gaining attraction within the architecture and planning literature since the early 2000s (Németh and Langhorst, 2014; Southworth, 2014; Tonkiss, 2013). Temporary uses have been successfully implemented around the world (Haydn and Temel, 2006; Pop Up Park, 2012; Portas, 2011; Renew Australia, 2012; Rowe, 2012) as an inclusive and participatory measure that promote the economic development of the city at a very low cost (Stadtentwicklung, 2007).

In response, many theories interested in informal and participatory urbanism emerged, the 'creative city', for example, proposed by Richard Florida (2003) and Charles Landry (2000) argues that finding solutions to future urban issues will demand creative and imaginative thinking, thus cities need to attract professionals with matching criteria. Moreover, Landry (2000) argues, that by promoting creativity and validating the use of imagination –and then evaluating

the variety of generated alternatives— societies could enable “*flexibility to respond to changing circumstances and thereby create the necessary resilience to possible shocks to the system*” (2000: xxii) and in doing so, he argues, societies could achieve better solution to urban issues and better ways to explore urban opportunities. In his words; “*The city of the future needs to be thought of differently from how we considered cities in the past. A city that encourages people to work with their imagination goes well beyond the urban engineering paradigm in city-making*”. (Landry, 2000: xxii)

In comparison to formal planning and its role in shaping cities, both planning theory and practice took on these ideas with great uncertainty. However, the decline of large- scale, expert-driven, top-down schemes aimed to creating cities nothing more than functional has been extensively debated since Jane Jacobs (1961), and the need for new models which take into consideration today’s economically fragmented, socially less homogenous environments and critique the obstinate and impotence to radically change cities models emerged (Castells, 1997; Sandercock, 1997; Sassen, 1996).

According to Harvey, a corresponding shift which emphasized the strategic role of private venture and better responded to the rapidly shifting urban characteristics escorted the transition from centralized to ‘*flexible accumulation regime*’ towards the late 1980s and the early 1990s (1989). However, his proposed new ‘*neo-liberal city*’ failed to generate the promised sustainable economy nor the desired urban form. In fact, the critiques of Harvey’s ‘*neo-liberal city*’ focused on three core themes; firstly, its lack of social infrastructure socio-economic polarization (Brenner et al., 2009; Hamada, 2014; Harvey, 1989; Smith, 2002; Smith and MacQuarrie, 2012); secondly, its poor neighbourhood design which encouraged unhealthy lifestyles and the overuse

of natural resources (Fairweather et al., 2013; Gleeson and Low, 2000; Lathey, 2008; Nichols et al., 2010); and thirdly, the absence of coherent public space which discussions argue, results in a critical decline in the sense of community and civic identity (Augé, 1995; Hajer, 1999; Putnam, 2001; Sennett, 2008; Sorkin, 1992).

According to Smith, Harvey's new '*neo-liberal city*' model proved as inadequate in emphasizing public participation as the previous ones as was resistant to development (Smith, 1996), moreover, the market driven model seemed incapable of equitably distributing the economic growth which resulted in a long-term economic decline.

Towards the late 1990s, numerous cities embarked Florida and Landry's thoughts and commenced attractive the sought after '*creative class*' whether through introducing top-down art ventures and infrastructure into underprivileged areas; provoking grassroots resistance and segregation issues; or picking up exorbitant failures (Porter and Shaw, 2009). Between the recession of centralized planning, the opposition to neo-liberalism and the rise of new schemes advocating for creativity, the 2000s witnessed substantial development to the temporary urbanism practice.

2.4.1. The temporary user city model:

Despite the fact temporary use precedes the 2000s, it is when the practice witnessed its research prime. Abundant discussions describing, evaluating and actively promoting the practice emerged around the world where temporary use offered solutions for rehabilitating derelict urban areas, emphasized the role of local communities and experimented with creative designs. The term has

been used in contemporary contexts to refer to short-term ventures which reuse vacant or under-utilized space to achieve social or economic gain (Berwyn, 2012). However, this thesis embraces the German Federal Office for Building and Regional Planning definition of *Zwischennutzung* ‘*interim use*’ which argues that: an interim use happens if a building or site is abandoned or unused— or there is a willingness to establish another concrete use for it in the future—, meanwhile, an alternative, non-compliant use can take place. The emphasis here is on the flexibility of both user and use, in general, no change in ownership or existing planning permits follow, and due to time limits, temporary use often results in low investment projects (Schlegelmilch et al., 2008).

The practice includes both the re-use and re-development of space and is referred to by a variety of terms; temporary use/ temporary urbanism (Bishop and Williams, 2012); interim use (Arieff, 2011); tactical urbanism (Lydon et al., 2015); meanwhile use (The Meanwhile Foundation, 2010); guerrilla urbanism (Lydon et al., 2015); DIY urbanism (Zeiger, 2012); open-source urbanism (Urban Catalyst, 2007); bottom-up urbanism (Hill, 2010); emergent urbanism (Hill, 2010) or pop-up urbanism (Thompson, 2012). With manifestation including, but not limited to, markets and shop, parks and gardens, art installations and galleries, restaurants and cinemas as well as sport facilities, in spaces including, but again not limited to, vacant or under-used shops or office buildings, warehouses and factories, land parcels, underpasses and other types of urban spaces (Haydn and Temel, 2006; Lydon et al., 2015).

Prior to becoming a ‘*trendy*’ topic in 2004, there is hardly a mention of temporary use. Moreover, given that it started as an informal practice, most of the introductory literature either catalogued or described temporary use projects with little theoretical or critical grounding, the majority of

which came from German-speaking countries in architecture and design books and magazines (Haydn and Temel, 2006; Oswalt, 2002; Urban Catalyst, 2007). However, after the publication of Berlin's ground-breaking experience with temporary use, *Urban Pioneers* (Stadtentwicklung, 2007), abundant websites, books and articles started to emerge, often targeting non-expert audience as it documented temporary use projects and practices and offered a collection of manuals and guidelines.

2.4.2. Benefits of temporary urbanism:

According to Junge-Reyer in *Urban Pioneers* (2007: 17), "*Temporary use has already become a magical term: on the one hand, for those many creative minds who, in a world ruled by the profit maxim, are trying nevertheless to create spaces that reflect and nurture their vision of the future; and, on the other, for urban planners to whom it represents a chance for urban development, albeit one to which they much first grow accustomed - for planners tend not to have to deal with matters of a temporary nature*". Numerous critical discussions identified and emphasized the advantages for temporary use, five main categories are highlighted in this research; (1) greater democratic participation in urban development decisions; (2) flow-on social and economic benefits for the local community; (3) added adaptive and experimental characteristics to urban change processes; (4) economic benefits for the property owners, the users, and the larger urban context, and; (5) low-cost implementation. The five potential benefits unfold as follows;

- **Greater democratic participation in urban development decisions:**

A growing body of literature emphasize the political progressiveness of temporary use.

For example; Lehtovuori and Havik praised temporary use for its '*place-based and*

embedded' character (Lehtovuori and Havik, 2009); while Stevens and Ambler emphasized its '*post-Fordism*' place making (Stevens and Ambler, 2010) which according to them translates into an adaptive and context-specific mode of urban space production; Blummer (2006: 9) also argued that temporary uses "*offer the possibility for average citizens to take a more active role in the development of their neighbourhood, which may be seen as an opportunity or a risk, depending on the city and its politics*", moreover, many discussions identified the heavy weight of grassroots involvement in temporary use practices and projects (Franck and Stevens, 2006; Groth and Corijn, 2005; Stevens and Ambler, 2010). Similarly, Lydon (2015) noted the openness and compliance of temporary urbanism to potential participants which consequently can build trust between the different groups with shared interests, while Colomb and Krivy agreed on how easy temporary use projects incorporate within the existing '*normal*' neo-liberal urbanism (Colomb 2012; Krivy 2013).

- **Flow-on social and economic benefits for the local community:**

Amongst others, Urban Pioneers have also noted how temporary use reconnects the city by integrating vacant space mushrooming in different locations back into the urban fabric. According to Groth and Corjin's research (2005), temporary use practices and projects in Germany, Belgium and Finland indicated considerable social benefits such as the provision of non-commercial activities and public space; increased involvement in local-political processes, and; promoting participatory city-making. Similarly, Urban Pioneers confirm that experimental businesses that develop to become permanent aid the long-term, sustainable development of the location (Stadtentwicklung, 2007). Zagami's (2009) study in Berlin also confirm these finding, according to him, the aesthetic benefits of

temporary use go beyond the artistic value and contribute in creating the sense of place and community pride. In the UK, similar findings are found, Meanwhile Project (2010), for example, emphasize the wider public benefits. In their meanwhile project report they argue that temporary use would result in more lively and appealing streets which would attract more visitors and potential investors and prohibit decay and decline in areas of numerous vacant premises. Moreover, the services provided for temporary use projects, they argue, benefit the community in general and consequently, strengthen the [non-profit] sector (Meanwhile Project, 2010). Lastly, according to Urban Catalyst, the tendency of temporary uses to cluster increase the attraction for the destination and negotiating powers which, according to them, has beneficial side-effects on the revitalization of space as once a location become recognized, competing temporary uses trigger a chain of activities. However, despite the competition, the clusters of similar projects lure consumers interested in the product range to the location and consequently establish the site on the long-term (Stadtentwicklung, 2007).

In addition to the social flow-on benefits demonstrated above, significant economic (direct and indirect) flow-on benefits of temporary use to the local community have been identified, examples include; creating new jobs; developing skills; engaging volunteers; creating intellectual capital; preventing urban decay; boosting business and community audacity; advertising local brand value, and; reducing maintenance and insurance costs (Stadtentwicklung, 2007).

- **Adaptive and experimental characteristics to urban change processes:**

Numerous discussions on temporary use agree on how adequate it is for testing uncertain urban ideas. According to Havemann and Schild for example, when undertaking

complicated urban issues, taking action is often postponed until enough funds are attracted, once the issue evolves faster than the investment could be attracted, serious long-term issues may unfold. In this case, temporary use would allow for an abrupt and immediate intervention, in other words, a temporary use would allow for a *“hands-on experience on a trial basis and hints at options once it is no longer in use. (...) With the help of a provisional solution a poorly defined problem can evolve into a clearly defined one”* (2007: 54). Correspondingly, temporary use is increasingly employed in both greenfield and brownfield redevelopment at early experimental stages, testing programs prior to the application of large investment projects (Colomb, 2012).

Similarly, Graham’s research outlines a comprehensive listing of temporary use characteristics which, she argues, brings to conventional planning (2012). According to her, temporary use allows planners to extend and advocate adaptive reuse; examine new resilient and versatile methods to the practice; promote change, and thus accomplishing unmet needs and advancing public participation in planning. Moreover, Graham emphasizes other benefits of temporary use such as promoting entrepreneurship; providing compensation to property owners; highlighting innovation and creativity, and; contributing to deliver sustainable development (Graham, 2012).

- **Economic benefits:**

Since the preliminary study of temporary use in Berlin, pragmatic and concrete economic benefits for the practice have been identified. According to Urban pioneers for example, for property owners, temporary use can enhance their property’s image, increase its value and, attract more potential tenants which, they argues, even if not paying rent, undertake maintenance and repair costs, reduce the need for security and insurance, and can reduce

vacancy penalty charges—depending on the local legislation system of the country—(Stadtentwicklung, 2007). Moreover, Bastian Lange refers to the token rents as a fraction of the funding which supports entrepreneurs in experimenting with their new ideas in the ‘*start up cocktail*’, in many cases he argues, temporary use created incubators where many informal activities grew to become professional and permanent (Stadtentwicklung, 2007). Similarly in the British context, the Meanwhile Project (2010) confirms these findings, in addition to more research which emphasized that for activities which remained unprofessional or unprofitable, the incubators created alternative culture equipped with the needed intangible values for them to thrive (Groth and Corijn, 2005; Lehtovuori and Havik, 2009; Shaw, 2005; Zagami, 2009).

- **Low cost:**

Lastly, it must be noted that many discussions emphasized the considerable low-cost for the different groups of stakeholders. On the one hand, the costs of tools, restoration and labour in addition to the fact that risks are carried by the temporary users themselves (Graham, 2012; Meanwhile Project, 2010; Stadtentwicklung, 2007).

2.4.3. Barriers to temporary urbanism:

According to Lydon et al (2015), planners are progressively convinced with the added value of temporary urbanism, official bodies are beginning to further experiment with temporary projects and moreover, temporary use has promptly evolved into an ‘*accepted*’ practice form previously being an ‘*unaccepted guerilla*’ practice in the governmental outlook (Rowe, 2012). However, despite the considerable literature on why temporary use must be incorporated in the planning

processes, little has focused on the technicalities of its implementation and even less has discussed how (productively) can planning processes employ the method.

If guided properly, researchers argue urban planning has the potential to promote the temporary practice, yet, simultaneously, if not amply administered, could hinder it and limit its benefits (Graham, 2012; Stadtentwicklung, 2007). Moreover, in addition to difficult property owners and the lack of suitable sites, discussions suggest the absence of interaction with the planning process is a substantial barrier to temporary use (Bishop and Williams, 2012; Meanwhile Project, 2010; Stadtentwicklung, 2007). These findings are confirmed by the Urban Catalyst team which note the absence of differentiation between long-term and short-term projects within the planning system in the sense that temporary projects are subjected to long-term procedures such as time consuming authorizations and high-cost approval which some temporary users might not be able to afford which is the reason why, according to the Urban Catalyst team, many temporary users either venture on authorities tolerance or search for alternative locations (Stadtentwicklung, 2007). The incorporation between the planning system and temporary use is rarely uncovered, however, where temporary uses mushroom, changes in the planning system are advised. In the UK context for example, it has been discussed that; *“Until recently, obtaining planning permission for temporary uses proved too onerous for all but the most determined. However, the government is now considering reform to allow such temporary uses to be up and running quickly, and they are likely to become a more regular feature of towns and cities”* (Ground, 2013).

To sum up, as the literature emphasized, the marriage between temporary use and traditional urban planning appears to be in a crisis as long as the first maintains its lengthy procedure and

top-down decision-making characteristics while the latter remains an independently developed, continuously evolving, informal practice. In addition, while discussions emphasized the contributions of temporary use to the urban environment on one hand, they also highlighted the missing role of traditional planning in facilitating and forwarding temporary practices and use.

2.5. Conclusions:

As the introduction emphasized, this chapter outlined the three fulcrums of this research; the production of space and the right to the city theories; urban brownfields; and temporary urbanism, since the whole premises of this research argues that reclaiming of urban brownfields through temporary urbanism would help achieve a more just city. It demonstrated how the three topics have been extensively debated and discussed in Western contexts such as the UK, Europe, and USA, which in return indicated a comprehensive investigation of these notions in the study case context is long overdue.

By exploring Lefebvrian –and Lefebvrian influenced—approaches to looking at space and theorising it, this chapter provided the theoretical framework that underpins this study and guides the investigation and interpretation of similar concepts but in the study context. The chapter highlighted the need for a more complex model to look at space in the study case context, a model that explores the ‘*social spatiality*’ of the city, unpacks the geographical questions of the ‘*urbanised*’ city, and challenge the conventional ways that looks at the city merely as a container of matter where right to the city claims can be distinguished and analysed. Moreover, by exploring discussions on brownfields, their definitions, an array of methods to identify them and evaluate their redevelopment in addition to barriers that face their redevelopment and benefits

they offer, the chapter provided the backbone for their analysis throughout this study. And by exploring discussions on temporary urbanism, the temporary city model, as well as the challenges hurdling the practice and benefits it offers, the chapter provided a guideline to research the two urban phenomena but in the study context.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction:

This chapter discusses the methodology of the study. In seven sections, it briefly recalls the research aim and objectives that guide the premises of the argument; outlines the research philosophy and study background; demonstrates the approaches and processes used to conduct the study and collect the necessary data from identifying the target population of the study, describing the sampling techniques performed and the sample size, to discussing the data sources and employed research instruments. The chapter later highlights the ethical considerations faced throughout its conduct; discusses the data collection process and fieldwork challenges and lastly outlines the analytical framework that underpins the methodological positioning throughout the study.

3.2. Research aim and objectives:

To underline the methodological approaches chosen for the study, a reminder of its aim and objectives is touched upon. As the introduction chapter emphasised, the broader aim of the study is to help achieve greater spatial justice in the city of Amman through proposing the reclamation of brownfield sites by means of taking forward notions of temporary urbanism. To meet this aim, the study identifies a set of objectives, including but not limited to;

- Measure the level of awareness to concepts such as the production of space, spatial justice and the right to the city and grasp their interpretations within the different stakeholder circles in Amman.

- Evaluate the level of local people involvement in the management of urban space in general and brownfields in specific.
- Explore the factors behind the emergence of particular brownfield sites in the context of Amman and identify the challenges they face and the benefits they may offer.
- Define brownfields in the context of the Middle East in general and Jordan in specific using the previously discussed, already available, definitions from the UK, European and USA contexts.
- Identify potential brownfield sites using the previously discussed methods including the SGN model and Thomas's GIS model in addition to debate the potential to their development using the previously identified tools including the CBA, the EIA and the MCE.
- Conduct a preliminary map of the identified potential brownfield sites in order to estimate the required efforts needed to complete such a task. The mapping would be aimed to create a database for these sites which the research notes a lack of.
- Evaluate Amman's temporary urbanism compatibility in comparison to contexts where its methods have been practiced and resulted in successful outcomes. The evaluation would include the planning processes, the urban context as well as the everyday practices.
- Assess the organisational arrangements, or the lack of, surrounding the management of brownfield sites and temporary urbanism.
- Identify the challenges that face this practice and conversely, the advantages it may bring to the context of the study.

- Recommend strategies to reclaim, rehabilitate and renovate brownfield sites in Amman through taking forward notions of temporary urbanism in addition to appropriating suggested brownfield reclamation policies and programs.

The identified objectives are guided by the listed below research questions:

- To what extent do the local people in Amman grasp the interpretation of the production of space, spatial justice and the right to the city concepts?
- What is the level of participation of the local people of Amman in the management of urban spaces in general and brownfields in specific?
- What are the reasons behind the emergence of specific brownfield typologies in Amman? And how can they be both defined and identified?
- Does Amman have what it takes to employ concepts of temporary urbanism? And what are the indicators to that?
- What are the challenges that face both the reclamation of brownfield sites and the application of temporary urbanism concepts in Amman and how they can be addressed? And conversely, what are the potential benefits they may offer to the urban development of Amman?
- How can Amman become a more spatially just city? And how can this be accomplished through the reclamation of brownfield sites and taking forward temporary urbanism notions?

The research objectives and the research questions are guided by the following propositions;

- There is a lack in awareness of fundamental concepts such the production of space, spatial justice and the right to the city.
- The local people of Amman's participation in decision-making and management of urban spaces in general and brownfield sites in specific is very limited.
- There is no systematic definition for brownfields in the organisational planning structure in Jordan, accordingly, brownfield typologies and potential sites are unidentified or included in future development plans and do not have a base-map to their locations or amounts.
- Brownfields of Amman enjoy similar characteristics to their parallels in the different explored contexts worldwide, therefore, a similar definition may be derived and consequently, similar methods to identify potential sites may also be employed.
- Many everyday practices in Amman already feature temporary urbanism concepts, moreover, qualities such as the urban context, the type of users and nature of uses are very similar to ones where temporary urbanism has been adopted and resulted in successful outcomes which suggests Amman is a potential candidate to embrace similar concepts, another premise this research attempts to test.
- The reclamation of brownfield sites through taking forward temporary urbanism notions may aid Amman in achieving greater spatial justice.

3.3. Research philosophy and study background:

According to Denzin and Lincoln, the study identifies as qualitative interpretivist since it attempts to “*study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them*” (2005: 3). By definition, ‘*qualitative*’ in ‘*qualitative research*’ puts an emphasis on the ‘*quality*’ of the examined subject, on the processes and meanings which are difficult, if possible at all, to experimentally examine or measure. Moreover, it focuses on the social construction of reality and the intimate relationship between the researcher and the research through highlighting the specific situational constraints that define its questions. Qualitative research seeks to answer questions that emphasize how the social experience is created and given meaning (Guba and Lincoln, 2005) which is primary to this study.

The study considers the qualitative form of inquiry for its design, data collection and data analysis characteristics. Firstly, in terms of ***design***, discussions argue qualitative design is; ‘*naturalistic*’ as in it looks at how realist life situations unfold; ‘*emergent*’ as in adaptive to change and thus the researcher everts strict designs that do not respond to the research challenges as they emerge, and; ‘*purposeful*’ as it considers a specific group of cases whether it be people, communities, organisations... etc. Secondly, in terms of ***data collection***, in qualitative design, carefully conducted cases, interviews or observation yield in detailed understanding to the situation investigated; the personal experience and engagement of the researcher is emphasised; moreover, by practising mindfulness, being open, sensitive, respectful, aware and responsive, empathy and neutrality are established, and as a result; the collection of data becomes dynamic. Lastly, in terms of the ***analysis of data***, in qualitative design, there is a unique orientation of the

case in the sense that its particularity is emphasised; the inductive analysis allows the researcher to come across underlying themes, which guided by the analytical principles confirm or reject its findings; a holistic approach is developed to interpret the complex interconnections of the phenomenon as a complete rather than the sum of its parts; the analysis of data becomes context-sensitive, and; the reflexivity of the researcher conveys authenticity, objectiveness and credibility provided the researcher is self-analytical, politically aware and conscious (Berg and Lune, 2014; Guba and Lincoln, 2005; Marshall and Rossman, 2010; Merriam and Tisdell, 2015)

Within the wider qualitative design, the study adopts an interpretivist philosophy. Also known as interpretivism, by definition again, '*interpret*' in '*interpretivist*' puts an emphasis on the researcher to '*interpret*' the elements of the study which necessitates a human interaction.

Accordingly, it assumes the access to reality –whether given or constructed— is obtained through social constructions such as language, shared meaning, consciousness and/or other instruments (Myers, 2008). Interpretivism is associated to a variety of approaches including social constructivism which rejects the objectivist take that meaning is established separate from consciousness (Collins, 2010), moreover, it highlights the role of the researcher as a social actor to distinguish difference between the different cases. The approach focuses on meaning and may employ numerous methods to reflect the research's different aspects (Saunders et al., 2015).

The study research approach is inductive which according to Bryman contributes to the materialisation of new generalisations and theories (2012). The approach starts with formulating research questions, aims and objectives, the observation and/or tests are grouped into patterns or themes, the themes are then generalised into theories. The logic of inductive approach uses already known premises to generate unproven assumptions; it generalises the specific; in this

method data collection is employed to investigate a phenomenon, pinpoint themes and patterns and create a conceptual framework (Bryman, 2012).

The research design is exploratory, once again by definition, this type of research puts an emphasis on '*exploring*' specific areas of the research and does not necessarily strive to achieve final or conclusive answers to the research question. Moreover, this type of studies is adaptive to change throughout the course of the study or according to the emergence of new evidences.

The research purpose of exploratory design is general; the data it requires is vague and its sources are ill defined; the form of exploratory data collection is open-ended; the sample size is relatively small; the data collection is flexible and its analysis is informal, and; the recommendations are more tentative than final (Sandelowski and Barroso, 2007) which is in line with the study's aims and objectives.

Within the broader research philosophy, the research employed the case study method which Yin defines as "*an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used*" (2003: 23). Accordingly, the method offers to provide an understanding to a complex issue or object and extends what is already known through previous research. The approach has been employed extensively by researchers in different disciplines including social sciences which made a wide use of the method to examine contemporary real-life situations and as a base for the application of numerous ideas and methods extensions (Soy, 1997).

As many discussions argue, conducting case study methods on a small group of cases offer no ground to establish reliability or generate findings (Farooq, 2013; Guba and Lincoln, 2005; Murphy, 2014; Popper, 2002; Zainal, 2007). However, others argue the extensive exposure on the study case biases its finding, many researchers continue to employ the method with success provided it is carefully planned and crafted to the specific real-life circumstances which is what this study aims to do (Gomm et al., 2000; Simons, 2009; Stake, 1995; Swanborn, 2010).

According to Mills et al. (Mills et al., 2010), the case study method focuses on the interrelationships between the context and researched entity such as individuals, communities or organisations and their analysis which is one of the aspects the research attempts to address, therefore, by adopting the case study method, the study focuses on the interrelationships between the context of Amman and the researched urban phenomena and their analysis to ultimately enable a comprehensive exploration of the research problem within its natural context.

Overall, the adopted research philosophy allowed the study to present the realistic condition of the three investigated topics in the study area without manipulation; it allowed the integration of human thoughts through considering both the participants' in-depth experience and the researcher's reflections to better understand the research problem. However, numerous disadvantages also associated the adopted philosophy throughout. The fieldwork experience and challenges section will further discuss.

3.4. Data collection:

The following section describes the overall data collection process for the study, it begins with describing the target population considered to take part in the study, later, it moves on to discussing the sampling techniques and sample size and lastly, it outlines the data sources and research instruments employed throughout the conduct of the study.

3.4.1. Target population:

The study targeted five groups of participants;

(1) locals of Amman, which the study argues are the rightful users of brownfield sites and driver for temporary urbanism, they were involved in the study for their local knowledge and experience of their surroundings, moreover, as a primary stakeholder group which the study argues is overlooked;

(2) Non-Governmental Organisations (NGO's) were considered as another target group for a variety of reasons, as the investigations revealed; they are widely accepted as representatives of the civic society in Amman; they act as advocates for justice and since the study is looking at spatial justice and people's right to the city they seemed of considerable benefit to the research, moreover; in the past few years, the NGO's platform in Amman has been widely involved in many space rehabilitation initiatives which the study attempted to investigate. A total of four NGO's and six non-profit community projects and initiatives were selected for the study. In terms of the NGO's;

- Ahel NGO (Arabic: أهل, *Ahel*.) was chosen for their justice and human rights agenda through empowering and mobilizing communities in active citizenship (Ahel, 2016);
- Zikra NGO (Arabic: ذكرى, *Zikra*) was considered for their sustainable development goals through capitalising local people’s strengths, skills and heritage to achieve social equality (Zikra, 2016);
- Ta3leelih NGO (Arabic: تَعْلِيلِه, *Ta’leelih*) was considered because it functions as an open social platform for people to discuss their ideas, issues and community concerns, or as in the words of one of its founders “ *is an open and safe space for expression in the community*” (Suleiman, 2016);
- Ruwwad NGO (Arabic: رواد, *Ruwwad*) a non-profit community development organisation that works with deprived communities through education, youth volunteerism and grassroots organising to achieve child development, youth organising and community support in underprivileged neighbourhoods. The NGO was considered for its focus on civic society and entrepreneurs to advance its sustainable development goals by nurturing civic engagement and actively encouraging grounds-up solutions (Ruwwad, 2016) which is aligned with what this study intends to investigate.

In terms of projects and initiatives, the study considered;

- Hamzet Wasel initiative (Arabic: همزة وصل, *Hamzet Wasel*), a platform for diversity, urban activism and inclusion, which was considered because it advocates the community involvement in decision-making for a “*human-centric urban planning and development*” in addition to the social venture work to revive and enrich the social and cultural fabric of

urban communities in the Arab world and initiatives to re-explore cities by uncovering their cultural heritage and urban realities (Hamzet Wasel, 2014);

- Urban reflection initiative (Arabic: انعكاسات حضرية, *En'ekasat Hadareyyah*) an artist-community inclusive collaborative program which was considered for the study as it invites artists in collaboration with the local community to address social, cultural and environmental concerns through realistic solutions and “*space transformations*” rather than mere “*cosmetic enhancements*” (Tabbaa, 2012);
- Art for All (Arabic: الفن للجميع, *Alfann Liljamee'*) another non-profit project aimed to “*create a nicer world, by bringing artists from around the world to paint street walls for unprivileged communities, to enhance tourism and economy*” (BeAmman, 2015b);
- Gardens of freedom (Arabic: حدائق الحرية, *Hada'eq Al-Hurreyyah*), a derelict space rehabilitation attempt guided by a German activist which employed informal DIY urbanism concepts was also considered for the study. The neglected piece of land was turned into a garden and a playground for the neighbourhood with very limited resources and zero fund. According to Maurice “*The volunteers bring their own tools, and both the volunteers and the children dig with their own hands the sloped land, without any bulldozers or anything like it*” (2012);
- Reclaiming our Streets (Arabic: شارعنا, *Share'na*) initiative launched through Al-Balad theatre (Arabic: مسرح البلد, *Masrah Al-Balad*) was also considered for the study, a project aimed to strengthen citizenship through different forms of art, more specifically graffiti art. A project based on the believe that citizenship is strongly connected to the feeling of ownership which the project aims to “*beautifully express*” (Al-Balad Theater, 2015). The

theme of the project is ‘*resistance*’; resistance on all kinds of oppression whether it be social, political, religious, personal or historical, the project aimed to harness the creativity and imagination of participants to express resistance through urban graffiti art.

- Finally; the last project considered for the study was Jadal (Arabic: جدل, *Jadal*) for knowledge and culture, an initiative which provides an open space to “*evoke and spread renewed societal values*”. The project is aimed to encourage creativity, innovation and collective activities that benefit the community which is in line with their sustainable social and urban development vision (Indiegogo, 2016);

(3) the third target group consisted of city authorities represented in Greater Amman Municipality (GAM) and its various departments including the Geographic Information System (GIS) department, the Comprehensive Master Plan (CMP) department, the regulation department, the legal department, the planning and studies department, the building supervision department, the Private Sector Projects (PSP) department, the Environmental Follow Up (EFU) department, the Social Programs and Activities (SPA) department. In addition to ministries such as the Ministry of Environment (MoE) including the nature protection directorate, Sustainable Management of Land Use (SMLU) section; the monitoring and assessment directorate –including the environmental monitoring section and the State of the Environment and Environmental Indicators (SEEI) section—; the environmental inspection directorate –including the environmental inspection section and the Emergency Management and Environmental Control (EMEC) section—; the Waste Management and Hazardous Substances (WMHS) directorate—including the Solid Waste Management (SWM) section, the Hazardous Waste Management (HWM) section and the dump site division—; the Licencing and Pollution Prevention directorate (LPP) –

including the environmental licencing section and the Environmental Impact Assessment (EIA) section—. The Ministry of Planning and International Cooperation (MoP) including the policies and strategies department –including the national economy section, the sustainable development section, and social studies section—; the projects department –including the Services and Investment Infrastructure Affairs (SIIA) unit—; the Developmental Plans and Program (DPP) department; the Local Development and Enhanced Productivity Programs (LDEPP) department –including the civil society institutions section—. In addition to the Natural Resources Authority (NRA) including the mines and quarries directorate –including the licencing section; the Inspection, Monitoring and Quality Control (IMQC) section; the technical studies section and the follow-up section; the geographic information section at the information directorate. In addition to the Department of Land and Survey (DLS) and the Land Registration Office (LRO).

(4) Planning professionals including architecture and urban planning private practices to get a grasp of the private perspective, in addition to architecture and urban planning undergraduate and postgraduate students whom mainly participated in the workshops and mapping exercise later discussed;

(5) the last and final target group consisted of miscellaneous bodies associated to the research problem such as private investors and estate developers, as they are considered a primary stakeholder group which the research argues are the most considered in the decision-making process around the development of urban space, local media platforms were also considered, in addition to language experts which were considered in the brownfield definition project, and legal consultants.

The table below provides an overview of the total number of participants that were involved in the study. Please note the sample size is discussed in the following section.

No.	Target group	Sub group	Description	No.
1.	Locals (by area)	Downtown Amman/ near historical and archaeological sites.	A cross-section of passer-by's in each of the different areas.	13
		Near unfinished mega projects.		7
		Near discontinued mines or quarries.		5
		Western Amman.		10
2.	NGO's, projects and initiatives	NGO's	Ahel founders	2
			Zikra founders	2
			Ta3leelih founders	2
			Ruwwad's community outreach officer and knowledge coordinator	1
		Projects and initiatives	Hamzet Wasel coordinator	1
			Urban reflections volunteer	1
			Art for all founder	1
			Gardens of freedom volunteer	1
			Reclaiming our streets organiser	1
			Jadal founder	1
3.	Governmental officials	GAM	Head of the GIS department	1
			Head of the CMP department	1
			Head of the regulation department	1
			Head of the legal department	1
			Head of the planning and studies department	1
			Head of the building supervision department	1
			Head of the PSP department	1
			Head of the EFU department	1
		Head of the SPA department	1	
MoE	The assistant manager of the nature protection directorate	1		

			The assistant manager of the monitoring and assessment directorate	1
			The assistant manager of the environmental inspection directorate	1
			The assistant manager of the WMHS directorate	1
			The assistant manager of the LPP directorate	1
		MoP	The assistant manager of the planning and studies department	1
			The assistant manager of the projects department	1
			The assistant manager of the DPP department	1
			The assistant manager of the LDEPP department	1
		NRA	The manager of the mines and quarries directorate.	1
			The manager of the information directorate	1
		DLS and LRO	DLS vice president	1
			LRO vice president	1
4.	Professionals	Private practices	Architecture and urban planning practices founders and seniors	4
		University students	Undergraduate and postgraduate architecture and urban planning students	31
5.	Miscellaneous	Investors and real estate developers	A total of six local and international investors and real estate developers	6
		Psychological consultant	One psychological consultant.	
		Local media agencies	Editor in chief of Al-Rai newspaper	1
			Journalist at The Jordan Times	1
		Language experts	Associate professor at the languages centre	1
			Arabic linguist	1
		Legal practices	Legal consultant	1
			Lawyer	1
Total:				118

Table 1: Detailed participants list. Author constructed.

3.4.2. Sampling techniques and sample size:

In each of the target population groups, the study employed purposeful sampling to select its participants.

Also known as judgmental, selective or subjective sampling, purposeful sampling is a technique widely used in qualitative research to identify and select information-rich cases to achieve the most effective use of limited resources (Patton, 2014). As indicated, the method involves the identification and selection of individuals or groups with special knowledge or experience around the phenomenon of the study (Creswell and Clark, 2011), moreover, the approach emphasizes the availability of participants and their willingness to take part, in addition to their ability to communicate their experiences and opinions in an articulate, expressive and reflective manner (Bernard, 2011; Spradley, 2016). '*Judgmental*' in '*judgmental sampling*' also implies it relies on the researcher's '*judgment*' when choosing participants to engage in the study (Patton, 2014).

Purposeful sampling is employed to optimize validity and efficiency and must be coherent with the aims and assumptions of the study, therefore, in qualitative research is used to achieve in-depth understanding as it places primary emphasis on attaining an inclusive understanding of the phenomenon under study (Patton, 2014). Moreover, using purposeful sampling for this study proved effective particularly when senior level managers in GAM, MoE, MoP, NRA DLS and LRO were selected for in-depth interviews, as due to the nature of the research design, aims and objectives, they served as a primary source of data. Similarly, the method proved effective when chosen NGO's founders and volunteers were interviewed.

The study employed a variety of purposeful sampling categories such as *typical* cases when it considered a cross-section of the local people of Amman and examined their perspective on the

three research topics; *extreme* cases when it interviewed the previously mentioned governmental officials to investigate the phenomenon; *critical* cases when it considered people living next to brownfield sites or people who were directly affected by their implications and similarly with temporary users; *homogenous* sampling when it assigned the group of students whom participated in the workshops and mapping exercise, and; an overall *heterogeneous sampling* when the totality of the five groups of target population were considered for the study in general.

The study employed purposeful sampling for a variety of reasons; the method is well known as cost and time effective; it is very popular when primary data sources are limited; and is considered practical when exploring anthropological situations where seeking meaning can benefit from exercising an intuitive approach (Bernard, 2011) which is in line with the study's aims and objectives. However, despite the wide use of purposeful sampling, the method faces many challenges such as vulnerability to errors in the researcher's judgment; little to insufficient reliability and conversely high chances of bias, and; failure to generalise research findings (Bernard, 2011). The highlighted shortcomings were taken into consideration and special attention was given throughout the conduct of the method to avoid them, this is further highlighted in the fieldwork experience and challenges section.

3.4.3. Data sources and research instruments:

As the research philosophy highlighted, the study adopts a qualitative interpretivist design which is based on a naturalistic approach of data collection (Creswell and Clark, 2011; Locke et al., 2009; Marshall and Rossman, 2010). In such cases according to Creswell (2014), data collection

is produced through one of four categories; observations; interviews; documents and audio-visual materials.

Guided by the study aims and objectives, the nature of data collection entailed a combination of all four, for example, one phase required having participants –including experts and non-experts– describe their perception of a specific notion or share their opinion about a certain practice taking place within their urban surrounding, in-depth interviews were therefore employed; another phase focused on the interactive thought process and decision amongst a target group, in this case the data collection was obtained through focus groups; another phase was directed at the knowledge structure of participants in which was determined by a researcher-constructed instrument. The following paragraphs briefly illustrate.

- **Interviews:**

Without doubt, interviews are the most common source of data in qualitative studies.

Whether person-to-person or group interview (focus group) in format, highly structured or less structured open-ended conversational in style, according to Merriam and Tisdell (2015) remain the most prevalent. There are three fundamental types of research interviews; structured, semi-structured and unstructured. The study employed the semi-structured type as in structured interviews discussions argue there is little to no variation or scope for follow-up questions, they only allow for limited participant responses and are, therefore, of little use if ‘*depth*’ is required. Conversely, unstructured interviews do not reflect preconceived theories and ideas and are performed with little to no organisation, they are very time consuming and difficult to manage and therefore only considered where significant ‘*depth*’ is required or when virtually nothing is known about

the subject area (Gill et al., 2008; May, 1991). On the other hand, semi-structured interviews consist of several key questions to help define the areas to be explored while allowing the interviewer or interviewee to diverge in order to peruse an idea or response in more detail. The flexibility of this approach allows for the discovery or elaboration of information that is important to participants but may not have been thought of as pertinent by the researcher the reason why the method was adopted for the study (Gill et al., 2008; May, 1991).

In this study, interviews were used to explore participants' views, experiences, beliefs, and motivations on the subject of matter as the method is most appropriate to study phenomena where little is already known and detailed insight from individual participants is required. Moreover, in designing the interview schedule, it was taken into consideration to ask questions that yield as much information about the phenomena under study as possible while also addressing the study's aims and objectives. Therefore, the interview guide was open-ended –required more than a Yes or No answer—, neutral and in simple words in order to put respondents at ease, help them gain confidence, and establish rapport. This is further discussed in the fieldwork experience and challenges section.

- **Focus groups:**

Another type of research techniques employed in this study was focus groups. The technique was efficient as it allowed to gather the information of several participants in one session (Morgan, 1997a). The method was used three times for three homogenous groups, two groups of local people and one group of undergraduate students.

According to Patton (Patton, 2014), focus group interviews provide quality control as participants check and balance one another which serves to curb false or extreme views,

moreover, Patton argues focus groups are often enjoyable for participants as they are less fearful of being evaluated by the interviewer because of the group setting, in addition, participants are stimulated to think of their own views when listening to what others have to say, another advantage why the method was used for the study.

A focus group is a group discussion on a particular topic organised for research purposes. The discussion is guided, monitored and recorded by a researcher –often called a facilitator or mediator— (Kitzinger, 1994; Morgan, 1997b). Although they share many similar features with less structured interviews, focus groups are more than data collection tool for several participants. Focus groups are used to generate information on collective views and explore the meanings behind those views, moreover, they are useful to generate a rich understanding of participants’ experiences and beliefs (Morgan, 1997b).

As Bloor et al. (2001) suggest, focus group can be used in a multi-method design to explore a topic or collect group narratives; to clarify, extend, qualify or challenge data collected through other methods, or; as a feedback result to research participants. These criteria were employed in the study.

- **Observation:**

Understood as “*the systematic description of events, behaviours, and artefacts in the social setting chosen for study*” (Marshall and Rossman, 2010), observation enables the researcher to describe the existing situation and provide a ‘*written photograph*’ of the phenomenon under study (Erlandson, 1993); it is a primary method in fieldwork which involves “*active looking, improving memory, informal interviewing, writing detailed field notes, and perhaps most importantly, patience*” (DeWalt and DeWalt, 2014: vii); it enables the researcher to learn about the phenomenon under study in its natural setting

and provides context to develop sampling and interview guidelines (DeWalt and DeWalt, 2014).

Using observation over other methods of data collection provided the study with several advantages; it afforded access to “*backstage culture*” (De Munck and Sobo, 1998: 43); it allowed for richly detailed description of “*behaviours, intentions, situations, and events as understood by one's informants*” (ibid p.43); it provided an opportunity to view participants in unscheduled events (DeWalt and DeWalt, 2014), and as Dewalt and Dewalt note; “*improves the quality of data collection and interpretation and facilitated the development of new research questions or hypothesis*” (ibid p.8).

Despite the advantages of the method, there are also disadvantages to its conduct, the most noted and relevant to the study was the stance of the observer understood as the degree to which the researcher is involved in the phenomenon or individuals under study which Gold (1958) argues affects the quality and amount of data gathered. This limitation is further discussed in the fieldwork experience and challenges section.

- **Secondary data:**

Understood as “*the analysis of data that was collected by someone else for another primary purpose*” (Smith et al., 2011), secondary data was also an embraced data source which according to Fielding (2004) is a favoured method to continue in-depth analysis of previous data sets; study additional subsets of the original data, and; help describe the historical/contextual characteristics of populations and societies.

The method was adopted for the study due to its numerous advantages including; time saving as rich data can be obtained with little work; the secondary datasets are useful to compare the researchers’ own datasets which facilitates generalising findings; gives the

researcher access to unreachable or sensitive population where otherwise gaining access to may be difficult and decreases the strain on vulnerable population, as a result; the research becomes more convincing as there is less interaction between the researcher and population of study (Fielding, 2004; Smith et al., 2011).

The secondary data considered for the study included traditional sources such as archival data, reports and publications from various studies departments at governmental bodies and authorities such as GAM, MoE, MoP, DLS, LRO and NRA in addition to previous postgraduate studies from universities and research centres databases such as the University of Jordan (UJ) and the Centre for the Studies of the Built Environment (CSBE). In addition to non-traditional sources such as internet-based social media sources mainly Facebook as it is the most popular social media platform in Jordan (Ghazal, 2016a) which was also used as a recruiting tool due to its popularity. Regardless whether traditional or non-traditional, secondary data was employed in this study as any other data source to explore, describe, compare, or test the units of analysis whether it be people, groups, sites, objects or events (Bernard et al., 2016).

Similar to the other methods employed, this data source also faced limitations. In the case of this study, the biggest barrier was the access to information— if existing in the first place— this obstacle was overcome most of the cases through utilizing aspects of the researcher's positionality, this issue is picked up later in the fieldwork experience and challenges section.

- **Visual methods:**

Images have been used in social research whether as tools of assessment; to stimulate or trigger a response; or as mean to display cognitive models and represent results (Bagnoli,

2009; Frith et al., 2005). Traditionally, visual methods have involved coding and more recently the method has increasingly been used to explore participants' experience and meaning making (Frith et al., 2005). Discussions argue photos improve the quality of interviews in many ways; it prompts memory; reduces misunderstandings, thus; elicits high quality and more comprehensive interviews (Harper, 2010). Moreover, in addition to optimizing the interview process by breaking the ice; improving the flow of the conversation, establishing rapport and shared understanding (Bagnoli, 2009; Harper, 2010), it has been argued that the use of images can place control of the interview process by bringing out issues that are meaningful to participants (Frith et al., 2005) which elicits details that might otherwise be overlooked or difficult to talk about (Bagnoli, 2009). Harper argues that the process of producing a visual image allows participants time to reflect on the topic being explored, thus, produce rich and insightful information and inform more detailed interviews, a process which he describes as '*breaking the frame*' (Harper, 2010). However, like all data, visual data must not be interpreted as representing a fixed reality the researcher can access, rather as a way of constructing multiple realities influenced by the socio-cultural factors in a particular time and space (Frith et al., 2005; Guillemin, 2004).

In line with the study aims and objectives, visual data collected included; cartographic data such as maps and diagrams; photographs, in addition to; collages and drawings. The maps and diagrams were used both during the interviews and the mapping exercise; the photographs were used during the interviews and as an observation method, and; the collages and drawings were used during focus groups and during the mapping exercise.

- **Researcher-instructed instrument:**

The last source of data for this study was a researcher-instructed instrument designed to collect further data on the phenomena under research. The tool consisted of an exercise to mapping the derelict, vacant and contaminated sites in a sample area within the context of the study in collaboration with undergraduate architecture and urban planning students from UJ.

To prepare for the tool, a workshop which covered basic social research concepts and planning methods was advertised through Facebook, 92 students showed interest in the workshop, however, after filtering the group based on year level and availability, the number was reduced to 28 students fully committed to the project. The workshops were conducted prior to the mapping exercise to make sure all involved students were familiar with basic social research concepts and mapping methods and as a sort of a quid pro quo as in collaboration with the head of the department and to encourage students to get involved in the project, the workshop was considered as the equivalent of three credit social services hours, an obligatory course for all students at any university in Jordan. The 28 students were equipped with the information to conduct a preliminary mapping, the aim of this mapping was to be a pilot that can be developed in the future in collaboration with GAM which was interested in the idea in order to build an official base-map for brownfield sites for future official use. The group was divided into four groups of sevens where each group covered one neighbourhood. The maps were afterwards connected and a follow-up discussion session was held to discuss each group's findings.

To sum up, following is a summary table of the research instruments used throughout the conduct of the study and the individuals/ phenomenon it was administered on.

Research instrument	Individuals/ bodies/ phenomenon administered on
Secondary data	<ul style="list-style-type: none"> - The studies and planning departments and the official websites of GAM, MoE, MoP, DLS, LRO and NRA. - UJ theses database and CSBE database.
Informal chats	Locals of Amman in different areas (<i>see table 1</i>).
In-depth interviews	<ul style="list-style-type: none"> - Officials in GAM, MoE, MoP, DLS, LRO and NRA (<i>see table 1</i>). - NGO founders and members (<i>see table 1</i>). - Private practices - Investors and real estate developers - Local media agencies (<i>see table 1</i>). - Language experts (<i>see table 1</i>). - Legal consultants. - Psychological consultant.
Focus groups	Locals of Amman in different areas (<i>see table 1</i>).
Observation	Different brownfield locations in Amman
Researcher-instructed instrument	UJ students

Table 2 Research instruments and individuals/ phenomenon administered on. Author constructed

3.5. Ethical considerations:

In an attempt to conduct an ethical research which protects better the rights of participants –as well as the researcher—, a number of key principles were employed including *voluntary participation* which required people not being forced into taking part in the study (Rubin and

Babbie, 2009); the requirement of *informed consent* where participants must be fully informed about the procedures and risks involved in the research and must give consent to their participation (Kimmel, 1988). Moreover, the ethical standards also required participants not be subjected into situations of potential *risk of harm* during or as a result of their participation. Harm includes both physical or psychological damage (Mertens and Ginsberg, 2009).

To help protect the privacy of research participants, two fundamental standards were applied. Firstly, participants were guaranteed *confidentiality* where they were assured that identifying information will not be available to anyone who is not directly involved in the study. The second standard applied was the principle of *anonymity* where participants remained anonymous throughout (and past) the study and sometimes even to the researchers themselves (Wiles, 2012).

Furthermore, as part of the University of Birmingham's commitment to excellence and scientific integrity of its research, an application for ethical review to obtain an ethical approval was completed and approved. The application covered issues such as; consent; participant feedback and withdrawal; compensation; confidentiality; storage, access and disposal of data; significance and benefits of the study in addition to its risks. Thus, permission to undertake the fieldwork was secured. Moreover, to guarantee informed consent under the University of Birmingham guidelines, the designed consent form included that the information participants supply and that which may be collected as part of the research project will be entered into a filing system or data base and will be only accessed by authorised personnel involved in the project. The consent form also emphasised that the information will be retained by the University of Birmingham and will only be used for the purpose of research and statistical and audit purposes. Therefore, participants were informed that by supplying this information are consenting to the university to storing the

information for the purposes listed above which will be processed by the University of Birmingham in accordance with the provision of Data Protection Act 1998 and that no identifiable personal data will be published.

3.5.1. Validity, reliability and generalizability:

Understood as the '*appropriateness*' of the tool, processes and data (Kirk and Miller, 1986), validity measures whether the research question is valid for the desired outcome. It measures whether the methodology is appropriate for answering the research questions; the design is valid for the methodology; the sampling techniques and data sources are appropriate to the data collection; and ultimately; the findings are valid for the sample and context (Leung, 2015).

Reliability, on the other hand, refers to the exact replicability of the process and the results (Kirk and Miller, 1986). On its own, the definition is challenging to achieve, however, the essence of it relies in consistency as discussions argue, a margin of result variability is tolerated provided the methodology consistently yield roughly similar data (Carcary, 2009; Grossoehme, 2014). To enhance the reliability of processes and results, Silverman (2009) proposes five approaches, three of which are adopted for the study which are; refutation analysis; constant data comparison, and; comprehensive data use.

In terms of generalizability, it is not often an expected attribute in qualitative studies as each focus on a certain population of a locality in a particular context which makes it a difficult, if at all possible, task to accomplish. However, within the rising trends of knowledge synthesis, the evaluation is becoming more pertinent (Leung, 2015). Adopting similar validity criteria Leung (2015) argues, a pragmatic approach to assess generalizability of qualitative studies which

includes the use of systematic sampling; triangulation; constant comparison, in addition to; good audit and documentation is a preferred approach (Finfgeld-Connett, 2010).

Moreover, to ensure the overall '*trustworthiness*' of the research, and looking at Noble and Smith's research (2015), the following strategies were applied;

- Personal biases which may influence the findings were accounted for (Morse et al., 2002).
- Biases in sampling and ongoing reflections of methods in order to ensure sufficient depth of analysis and relevance of data was acknowledged (Sandelowski, 1993).
- Record keeping was meticulous, which demonstrated a clear trail and ensured interpretations of data were consistent and transparent (Long and Johnson, 2000; Sandelowski, 1993).
- A comparison between the similarities and differences across the different target groups to ensure the majority of perspectives are represented was established (Morse et al., 2002; Slevin and Sines, 2000).
- Descriptive diaries with daily logs were drafted to support the findings (Slevin and Sines, 2000).
- Terms and thoughts were demonstrated with clarity during the data analysis and subsequent interpretations (Sandelowski, 1993).
- Respondent validation which included participants review their transcripts and comment whether what is put down in writing represents their thoughts about the research phenomena under investigation was adopted (Long and Johnson, 2000).

- And lastly, data triangulation using different methods and perspectives to produce a more comprehensive set of findings was employed (Kuper et al., 2008; Long and Johnson, 2000; Sandelowski, 1993).

3.6. Fieldwork experience and challenges:

3.6.1. Data collection:

Fieldwork took place over three eight-week long trips to Amman in 2014, 2015 and 2016 consecutively. The first trip was dedicated to pilot research the phenomena under study as the framework was still a work in progress and the research aims and objectives were still being formulated. In this phase, informal chats were conducted with random participants; different brownfield locations were visited, and; preliminary secondary data such as cartographic data, studies, archival data and reports were collected. The official data collection took place in the second and third trips, in these phases, more focused informal chats in addition to interviews and focus groups were conducted; the bulk of the secondary data was collected; the observations and critical reflections continued, and; the researcher-instructed instruments –the social research and mapping methods workshops, the mapping exercise, and the follow-up workshop— were conducted.

As a result, four sets of data were produced, the interpretation of which informed the remainder of this thesis. (1) A library of audio records for the interviews, focus groups and workshops; (2) three descriptive and reflective fieldwork diaries; (3) a library of images for potential brownfield

sites, temporary uses and other urban observations; (4) a body of publications, reports, studies, archival data in addition to maps and diagrams.

3.6.2. Actual field challenges:

This section reflects on the particularity of the fieldwork experience; it outlines some of the challenges I faces during this phase and what strategies were adopted to avoid them.

- **Bias:**

Defined as any tendency which prevents unprejudiced consideration of a question (Dictionary.com, 2017), in qualitative research, bias occurs when “*systematic error [is] introduced into sampling or testing by selecting or encouraging one outcome or answer over others*” and can happen at any stage of the research (Merriam-Webster, 2017a). In qualitative research, bias affects the validity and reliability of data and consequently, the findings. Studies argue bias in inevitable and needs to be recognised in order to be minimised (J.Pannucci and G.Wilkins, 2011).

Due to the subjective nature of the qualitative interpretivist approach, bias –on behalf of the researcher or participants— may easily occur. Moreover, since the data is strongly affected by participants’ individual viewpoints and interpretations, it cannot be generalised. Therefore, to a certain extent, its representativeness and reliability is threatened (Gordon, 2015). To minimise bias, the following steps were undertaken: potential types of bias were identified whether from personal believes, biased questions or answers, or biased reporting; the identified bias was acknowledged; the participants were

not pressured to give preferred answers, in fact, it was established from the start that any answer was an accepted answer, and; results were promptly recorded.

The potential types of bias were derived from Sarnick's (2015) research, her nine identified types of bias were acknowledged and taken into consideration as they were very similar to the ones the study faced. The types of bias included respondents bias such as (1) the *acquiescence bias*, also known as the friendliness bias when participants demonstrate a tendency to agree with the moderator presents; (2) *social desirability bias* which involves participants answering questions in a way that they think will lead to being accepted and like; (3) *habituation* where participants provide the same answers to questions that are worded in similar ways; (4) *sponsor bias* when participants know – or suspect – the sponsor of the research, accordingly, their feelings and opinions about that sponsor may bias their answers, or researcher bias including (5) *confirmation bias* which occurs when a researcher forms a hypothesis or belief and uses participants' information to confirm that belief; (6) *culture bias* which occurs when judging another culture solely by the values and standards of one's own culture; (7) *question order bias* where participants are primed by the words and ideas presented in questions that impact their thoughts, feelings and attitudes on subsequent questions; (8) *leading questions and wording bias* which occurs when the researcher elaborates on a participant's answer and put words in their mouth, or; (9) *the halo effect* which occurs when moderators and participants have a tendency to see something or someone in a certain light because of a single, positive attribute.

- **Time:**

Another challenge was time, interpretivist studies are well known to be time consuming (Creswell, 2014). Qualitative data collection is time-intensive, according to Locke et al. (2009), collecting good data takes time as quick interviews and short observations are unlikely to aid the researcher gain more understanding of the research phenomenon under study. Moreover, little time does not allow to establish rapport, which is extremely important for participants to trust the researcher in order to share their honest thoughts and impartial opinions. Complete rapport is established over time. Special attention was given to this shortcoming through planning enough time to collect enough data.

Moreover, the fact that fieldwork spread over three years allowed for enough time to collect the needed data, establish rapport and more importantly, identify missing information in order to collect it in the next visit.

In addition to the judgement of the researcher, applying purposeful sampling in this study also counted on the availability of participants and their willingness to participate.

Therefore, in addition to the general times challenges, the study faced more specific ones, for example, in order to include young participants or observe this category, part of the fieldwork needed to be conducted during the summer holiday while another part needed to be conducted during the school year. Moreover, in order to conduct the mapping exercise and the workshops with university students, part of the fieldwork needed to be conducted during university term time.

Fieldwork also needed to be conducted anytime throughout the year but winter as the city's infrastructure is not well prepared for the season, floods are expected anytime throughout winter, and in many times, connectivity between the different parts of the city

is lost. Moreover, in this season, as the days get shorter and darker earlier, it becomes dangerous to stay outdoors.

One specific field trip was extremely difficult to plan time wise as to accommodate for the previously mentioned constraints, the optimal time happened to be during the Holy month of Ramadan. In this year in particular, the fasting lasted for 19 hours per day and the country was struck by a heat wave where temperatures rose around 10+ Celsius degrees higher than their average around this time a year. The official work hours were therefore extremely shortened which obstructed the conduct of the fieldwork. In addition, many participants were agitated during fasting hours due to the lack of caffeine, nicotine, sleep, or all three, thus, many interviews had to be postponed, cancelled or rescheduled until better times. This year was also difficult to plan as it was a World Cup year which added to the traffic jam, made scheduling interviews difficult which generally hampered the conduct of fieldwork.

One last time-related challenge was getting participants to keep their appointments.

Almost all participants agreed on the appointments made which were fashioned around their times, however, the majority either showed up late –sometimes more than an hour late— or postponed or cancelled and rescheduled last minute. To overcome this, more participants were considered to compensate for any information loss, moreover, I was very tolerant and happily rescheduled many appointments more than once.

- **Interview recording:**

Recording the interviews using a digital recorder is without doubt the most common method to preserve verbal data, however, the method does not come free of drawbacks, equipment malfunction for example – which thankfully did not occur in my case— is

always a possibility, however, as a preventative measure, interviews were recorded on two devices, a tape-recorder and a smart phone, fortunately, the tape-recorder versions were the ones used for transcription and later analysis, the smart phone copies remained as backup. Moreover, extra fresh batteries and a power bank were always packed.

In addition to technical obstacles, the study was more concerned with another set of challenges, for example, the nervousness of respondents when being recorded, an unease often disappeared after the few first minutes. Moreover, even though permission was asked for, recording interview in some cases posed difficulties which is a common problem when conducting research in cross-cultural research (Gokah, 2006; Subedi, 2007).

According to Mangen (1999: 117), *“recording can inhabit respondents or cause them to decline to participate: Some cultures are not attuned to non-official interviews at all, especially when they are being recorded; and in ‘expert’ interviews there may be the added possibility of respondents’ concern about the attribution of the material being collected”*. Instead, rather than tape-recording the interviews, in some cases, notes were taken. In their research, Hall and Kulig (2004) faced similar challenges, notes were taken during the interviews and a summary was tape-recorder immediately after interviews to allow other team members to process the data. According to Hall and Kulig, although a large sum of the data was lost in the process, it was their way to show respect to the cultural group they worked with.

Moreover, in many occasions, despite the assurance of anonymity, asking permission to tape-record conversations was met with difficulty. Gokah (2006: 68) notes that some participants cannot overcome the fear of being taped, in his experience when one

participant got nervous he narrates; *“she jerked backwards, panicky and requested to seek further clearance from her boss”* while another participant *“spoke very low and carefully. No amount of prompting will make him speak up as if to say he did not want those nearby to hear what he was saying... I literally had to push my microphone under his chin to ensure that I had recorded his voice”*.

The conduct of this study occasionally came across this problem. More specifically when interviewing governmental officials and the reason given was due to the sensitivity of their positions. In these situations, to prevent or minimise any undue anxiety, extensive notes were taken, a summary was tape-recorded as soon as the interview was finished, and at the end of each day, the diary log was updated with the new information.

Conversely, the locals were very happy to be recorded, permission to use their statements was given almost immediately, and in many cases, an informal chat intended to ask few questions would extend to over an hour of critical discussion.

In the case when notes were taken I faced a common drawback, where I often became disengaged with the conversation or could not follow up with the participants' chain of thoughts. Some data loss was therefore inevitable, to compensate, as mentioned earlier, more participants were interviewed to recover the lost information.

- **Practising skilful interviewing:**

In an attempt to practice skilful interviewing; I tried to maintain non-judgmental, remained alert of both verbal and nonverbal messages that I might send; and used words that are clear and meaningful to the participant, and; above all, tried my best to be a good listener.

One of the constraints of constructing interviews was that open-ended questions needed to be brought to a conclusion within a fairly short time, however, the fundamental purpose of conducting an interview is to listen attentively to what respondents have to say in order to acquire the needed knowledge. To overcome this situation, participants were given time to wrap up their thoughts and if deviated, return their focus to the topic being discussed which did ultimately cost me some extra time.

In terms of practising skilful interviewing while conducting group interviews or focus group, certain group dynamics such as power struggles in addition to some participants' reluctance to express their views publicly were the obvious obstacles, in addition to the limited number of questions that could be discussed in one session. However, this was not considered as a challenge for the study as the method was combined with other data-collection techniques, therefore, any data loss from focus groups was compensated from the other methods more specifically the informal chats and the in-depth interviews.

Another particular challenge related to practicing skilful interviewing was that due to critical current circumstances, and the overall situation in the Middle East in general and Jordan in specific, when asking people about their political views, I often received the culturally approved answers from the majority of the participants. To overcome this obstacle and looking at the work of Kirk and Miller (1986), practicing skilful interviewing called for techniques such as changing the style into less-sensitive format which resulted in different more opened and elaborate answers.

- **The observer stance:**

Understood as “*spending sufficient time in the field to learn or understand the culture, social setting, or the phenomenon under study*”(RWJF, 2008), prolonged engagement

was difficult not to exceed. Due to the nature of qualitative studies and inconclusiveness of data, it was difficult for me to know for sure I collected sufficient data, moreover, it was easy to get trapped into unnecessary chains of investigations if slightly deviated from the original research framework. In my case for example, in the fieldwork, everything/ everyone seemed interesting!

To overcome the extent of the researcher engagement in the observation process, as mentioned earlier, Gold's description where he identifies four observer stances; the *complete participant*; the *participant as observer*; the *observer as participant*; and the opposite extreme of the *complete observer* was adopted. Of the four stances, Gold argues, the role providing the most ethical approach to observation is that of the *observer as participant*. In this category, the researchers' observation activities are known to the group being studied, yet the emphasis is on the researcher to collect data rather than participating in the activity being observed (Gold, 1958). In addition, to overcome over-prolonged engagement, a Gantt chart schedule was designed to manage the time spent in fieldwork as well as the tasks to be completed.

- **Positionality and quid pro quo:**

According to Denzin and Lincoln, in qualitative research, special consideration is given to the researcher as a person. In addition to reflections, attitude, and position, the role of the researcher in society is vital. In their words; "*Behind all research stands the biography of the gendered researcher, who speaks from a particular class, racial, cultural and ethnic community perspective*" (2005: 21). They argue that one only sees what the researcher's class, culture, race, gender or other factors allows them to recognize (Guba and Lincoln, 2005)

In term of my female positionality, Dewalt and Dewalt (2014) note that female and male researchers have access to different information as they have access to different people, settings and bodies of knowledge. They note that conducted by a biased human, the researcher must learn how their gender, sexuality, ethnicity class and theoretical approach might affect the observation, analysis and interpretation (Kawulich, 2005). In my case, being a female from un upper class was both an advantage and disadvantage, it equally allowed me access to certain locations while denied me the same privilege to other locations, I was welcomed to certain participants while seen as offensively self-assertive to others. To overcome this shortcoming/ advantage, I was aware to when and where I can employ it to gain best results, this was relatively easy as I come from the area and am conscious of the merits of my own positionality in my own context.

Lastly, to overcome other particular obstacles, ways were developed on-spot mostly utilising my positionality such as my social class and family connections in addition to my position at the University of Jordan. For example, instead of interviews scheduled during official work hours, they were transformed into informal chats over a cup of tea, this technique was especially used during the Ramadan interviews. Services were given in exchange of some interviews, for example, one of the NGO's was doing a report of my hometown, in exchange of their interview, I set them up with relatives in high positions to get the information they needed. In exchange of the mapping exercise, as previously mentioned, I gave two workshops on research methods and mapping, moreover, I pursued the architecture department at UJ to calculate attending the workshops in addition to the mapping exercise as the three-obligatory university requirement social services credit hours, the department agreed provided I contribute to graduation projects discussions as

an external juror. In exchange of help from one practitioner, I had to give a free architectural consultation and work on a submission as they had a deadline coming up in three days and time was limited, for another participant I helped arrange an event and assisted around in exchange of doing the interview on the occasional breaks during the event. I also volunteered for two of the considered initiatives.

- **The translation problem:**

The cross-cultural nature of the research being conducted in a non-English speaking country resulted in a translation problem which according to Maclean (2007) is far reaching as communicating participants' words said in another language in another context may impose other conceptual schemes of their thoughts which confirms rather than challenge theories and concepts developed in the west. Moreover, many researchers argue, when using translation in research, the researcher is talking *for* participants in a language or culture which they may not understand, therefore, expressing their original meanings might be impossible (Birbili, 2000; Mohanty, 1995; Spivak, 2012).

Accordingly, in this study, there was a risk that participants' views were forced to fit the concepts or theories being researched. As discussions argue that if a researcher accepts that words and conceptual schemes are situated in their cultural contexts, and that each language has its own conceptual scheme, then logically, translation is impossible (Birbili, 2000; Maclean, 2007) or the researcher is unable to analyse (Alcoff, 1991), or inevitably imposing their own views on participants which according to the ethics of research is an immoral act (Mohanty, 1995; Temple and Edwards, 2002)

To minimise the error margin, Maclean's (2007) perspective was taken into consideration where he argues that the fact that language can develop means that translation, or the

comparison between two sets of schemes, is not impossible. Moreover, he argues that as languages constantly evolve, the distinctions between different words and categories which outline perception become permeable and accessible to speakers of different languages. Common points and differences become describable, and translation becomes a tool to explore the perception of participants. However, for this barrier in specific, it has to be noted that both culturally and linguistically some misperception and mistranslation are unavoidable, therefore, looking at Spivack's (2012) work, and being the translator for this study, it was an essential part of the methodology and translation practice to "*do my homework*" and destabilise my own terms by "*unlearning one's learning*" (2012: 9). According to Maclean (2007: 786) translation should be seen as a "*relationship between the original and target language that takes into account the cultural and contextual import of words, as well as the interconnections of the original terms with other words and clusters in the same language*" moreover, he argues that "*to create the epistemological conditions for dialogue across languages, translation should seek to find common functional points in language and then deconstruct the boundaries and categories implied by terms in both the source and the target languages*".

The study was conducted across two languages, Arabic and English depending on the target population being addressed but mainly Arabic, my mother tongue and the official spoken language in the country. Accordingly, two types of translation were involved, the Arabic-English translation and the everyday spoken English to academic English.

Moreover, in addition to the difference in language, the difference in agenda between the different target groups from the governmental bodies and institutions and their conservative views, to NGO's which already adopt western development theories to the

everyday life and its less developed understanding of the researched concepts and theories which was prominent throughout the fieldwork also affected the process of translation. Ultimately, since there is no definitive direct compatibility between languages, the translation of participant's words from their original language remains subjected to the researcher's creativity and logic. Nonetheless, every parallel and equivalent presumed remains infinitely debatable as even between same language speakers' readings and interpretations differ and it is arguable that "*understanding is the act of construction and creation*" (Maclean, 2007: 786). Moreover, as Maclean (2007) argues, the interpretation and understanding has been predominantly the privilege of Western researchers where the words of others are translated detached from their embedded linguistic, social and cultural context, therefore, being the translators for this study, I tried to remain alert to the arguments discussed above while keeping in mind my words are not the sole reproduction of what is being said, rather an attempt to convey and express ideas from another linguistic scheme and cultural environment.

3.7. Analytical framework:

To guide data generating techniques and analysis, and in line with the study's theoretical question, aims and objectives, the analytical framework developed for this study linked the theoretical question to the empirical analysis through summarising what is theoretically already known around the relevant phenomenon –and accordingly what needed to be empirically investigated— (Miles et al., 2013).

The study employed Braun & Clarke's (2006) thematic analysis which they describe “*as a method for identifying, analysing, and reporting patterns (themes) within data*” that “*minimally organises and describes your data set in (rich) detail*” (2006: 6). The approach shares many similar phases with other qualitative research methods, therefore, its stages are not necessarily unique to thematic analysis. However, according to Ryan and Bernard (2000), “*The process starts when the analyst begins to notice, and look for, patterns of meaning and issues of potential interest in the data – this may be during data collection. The endpoint is the reporting of the content and meaning of patterns (themes) in the data, where themes are abstract (and often fuzzy) constructs the investigators identify [sic] before, during, and after analysis*” (Braun and Clarke, 2006: 15). In thematic analysis, constant moving back and forth throughout the data sets is required, and writing is an essential part of the process that does not only happen at the end rather starts at the early beginning with the jotting of ideas and potential codes and themes and continues throughout the entire coding/analysis process (ibid).

The figure below outlines Braun and Clarke’s six phases of analysis method, however, it is important to note that they are guidelines not rules, in other words, the basic precepts needed to be applied flexibly to fit the research question and data (Patton, 2002). Moreover, it is also important to note the process is not linear, instead, recursive, where moving back and forth throughout the phases is likely possible. Lastly, the process develops over time which means it should not be rushed (Ely, 1997).

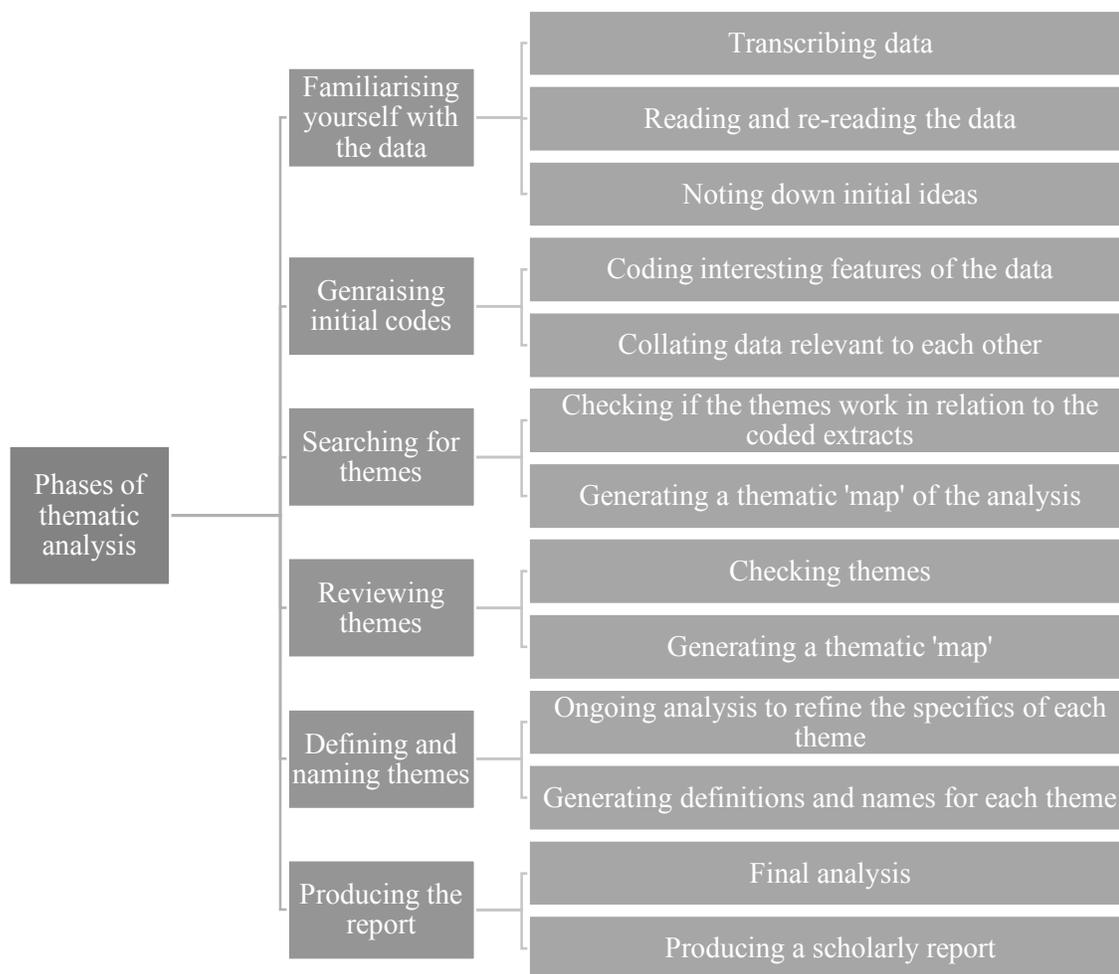


Figure 2 Phases of Thematic Analysis. Adapted from Braun & Clarke, 2006, p 87.

Using Creswell's (2014) (*as seen in* (Stokes and Urquhart, 2013)) seven-step data analysis process overview, the figure below demonstrates the interactive and reflective nature of data coding, data reduction and data display processes in the overall schematic framework. Like Braun and Clarke, Creswell also suggests his framework should merge with the research specific strategy to provide a complete technical framework for the qualitative research analysis

The critical incident technique is a systematic, inductive method which involves the collection of events and behaviours descriptions, which are then grouped and analysed using contextual, content or (as in this study) thematic analysis (Aveyard and Neale, 2009) where an incident is “*any observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act*” (Flanagan, 1954). According to Flanagan (1954), conducting critical incident technique involves five steps; (1) giving a clear statement of what is being investigated; (2) specifying inclusion criteria; (3) collecting data; (4) analysing the data, and finally; (5) interpreting the data.

3.8. Conclusions:

This chapter demonstrated the overall methodological positioning of the research guided by the broader aim of the study and identified set of objectives to aid achieve this aim in addition to the research questions and propositions informing the research throughout. Through unfolding the research philosophy, the chapter concluded that in line with the study’s aims and objectives and within the broader *qualitative* research spectrum, the study is *interpretivist* in its philosophy; follows an *inductive* approach; using an *exploratory* method of choice; through employing a *case study* strategy. The chapter amply explained and justified the selections of choice.

In addition, through describing the array of target groups considered to take part in the study, discussing the sampling techniques and sample size, and outlining the data sources and research instruments employed throughout the conduct of the study, the chapter demonstrated the process of data collection. This chapter discussed the ethical considerations surrounding the study including validity, reliability and generalizability and outlined the strategies followed to insure

the research trustworthiness. Moreover, the chapter extensively reviewed the fieldwork experience through describing the data collection process and resulting data sets in addition to the actual particular field challenges. Lastly, the chapter demonstrated the taxonomy of the data analysis process through describing the analytical framework adopted for the study.

CHAPTER 4: CONTEXT

4.1. Introduction:

Until this point, the theoretical framework of the study has been discussed from either a Western or European point of view, literature discussions included theories conceived by non-Arabic philosophers, visualized for their peculiar contexts and their applications have been tested and implemented in similar environments as discussed in the literature review chapter. Hence, in an attempt to bridge the gap between the two ends, and before seeking to appropriate the notions and concepts brought together in this research to an unfamiliar setting, this chapter aims to introduce the context of the Jordanian case with an emphasis on the city of Amman where the research takes place.

In six sections, the chapter describes the urban context of Jordan in general and Amman in specific yet in relevance to the Middle Eastern scope. Firstly, the chapter begins with a brief chronicle of the history of the settlement and the political structure of the kingdom; the demographics are afterwards outlined and a look at the area's geographic composition is described. The chapter moves on to portray the social and cultural characteristics of Jordan and Jordanians; and later, briefly demonstrates the economic profile of the country. Lastly, the chapter shifts its focus on the city of Amman where the empirical work has been conducted and where the research ultimately seeks to introduce change. In this section, the chapter discusses the rapid growth of the city and traces the planning policies adopted throughout history to pinpoint the ones that contributed to the emergence of the brownfield phenomenon and its different typologies, highlights where alternative planning methods such as temporary urbanism may be

introduces, and portrays the urban scene of the city in order to inform the examination of concepts such as spatial justice and the right to the city later in the empirical chapters.

4.2. Historical overview:

Throughout history, many civilizations inhabited what is today known as Jordan, from the Palaeolithic period and the kingdoms of Ammon, Moab and Edom towards the end of the bronze age, followed by the Nabataean kingdom, and the Roman empire and the more recent Ottoman empire. However, the turning point which marks the contemporary urban history of Jordan dates back to the Great Arab's Revolt in 1916 during WWI when the Ottoman empire was divided between Great Britain and France which resulted in the establishment of the '*Emirate of Transjordan*' by prince Abdullah I as a British protectorate in 1921 (MoTA, 2016). The country was given its independence in 1946 where it was renamed to be known as the '*Hashemite Kingdom of Transjordan*' until two years later after the Arab-Israeli war in 1948 was given the name it is until today known for as the '*Hashemite Kingdom of Jordan*' in reference to the house name of the royal family (Khalil, 1964).

Throughout history, the country passed through five key intervals; the ancient period; the classic period; the Islamic era; the Modern era, and; the Post- independence era. However, since this research is interested in the time from 1921 onward (the modern era and the postmodern era), the following paragraphs will briefly skim through the first three periods to provide a historical context and move on to describe the last two eras in more details.

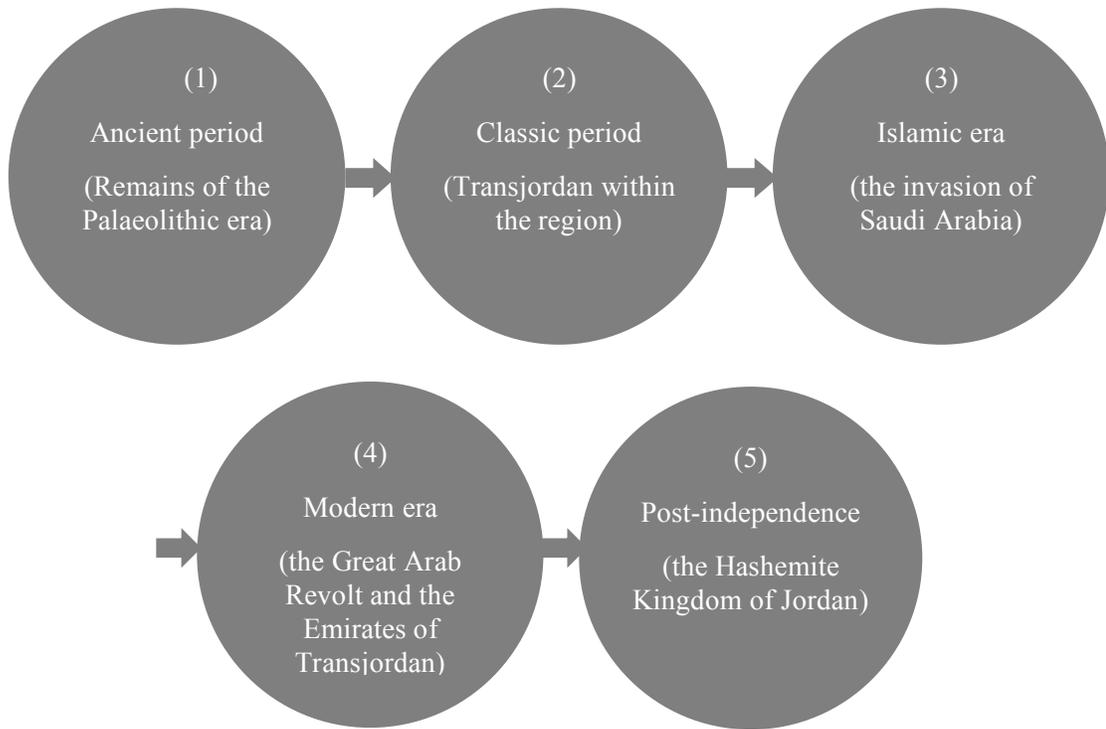


Figure 4: The historical timeline of Jordan. Source: Author

1. **Ancient period:** The oldest evidence of human inhabitation in Jordan dates back to the Palaeolithic era around 250,000 years ago. 20,000 years old human huts were found in eastern Jordan in addition to several early agricultural community settlements which emerged in the Neolithic period making Amman one of the largest prehistoric settlements in the Near East (Ababsa, 2014; Al-Nahar, 2013; Kafafi, 2013; Patai, 2015; Steiner and Killebrew, 2014). With the arrival of the Amorites Semitic nomads at around 2000BC the prehistoric period in Jordan came to an end, the country became home to several ancient kingdoms in the following bronze and iron ages which were described as tribal rather than states, a characteristic Jordan seemed to have preserved until this day (Insoll, 2011), moreover, these Transjordan kingdoms had constant feuds with neighbouring Hebrew

(Levy, 1998). These tribal kingdoms have existed throughout several regional rules and influences shifts and have been under the control of numerous distant empires until the Roman ruled the Levant at around 63BC where the indigenous of Transjordan lost their identities and were absorbed by the roman culture (Levy, 1998).

2. **Classic period:** in addition to being a disputed land between the Ptolemais and Seleucids, the Nabataeans was the independent kingdom in Jordan despite the many Greek attempts to annex it. The Arab nomads of Nabataeans continued the tribal regime and strategically located their capital Petra approximate to main trade routes which transformed the city into a regional hub (Taylor, 2001). The Nabataeans were well known for their progressive water collecting methods which was crucial for their survival in the barren desert in addition to their talents in carving structures into solid rocks which made most of the Jordanian geography (ibid). The Greek still founded many cities that are today some of the major attractions of Jordan and later under the Roman rule, the cities were linked to the economy of surrounding countries such as Syria and Palestine in a loose but acknowledged confederation (MoTA, 2016; Schumacher, 2010). Roman remains are well-reserved in Jordan and it is said that the Nabataeans continued to flourish in Jordan but with replacing their Gods with Christianity in order to satisfy the Romans as Christianity became the official state religion in 390AD (Walker and Firestone, 2009).
3. **Islamic era:** despite the imperial support for the Arab Christians and winning their first engagement against Muslim forces in the Battle of Mu'tah, the Byzantines lost their second fight in the Battle of Yarmouk and with that lost their control over the Levant and the country was Arabized (Bowersock et al., 1999). Transjordan was an essential territory in the region, several desert castles and palaces constructed throughout history in different

parts of the country under the Umayyad's and Crusader's rule (Altman, 2000). Later at the early Ottoman empire, the country witnessed an economic boost as the Ottomans took advantage of the proximity of Jordan to the Muslim pilgrimage route to Mecca and constructed a railway linking Mecca to Istanbul, many fortresses were built along the route to secure the pilgrims' caravans and the route later became a vital path for trade and transportation for the whole region (The Jordan Times, 2016b). Agriculture also witnessed an era of prosperity, however, many of the agricultural villages were abandoned in the following Ottoman rule centuries, they became absent and were extensively reduced which allowed for a short-lived occupation of the Muslim Wahhabi forces (Rogan and Tell, 1994). The return of the Ottoman empire wasn't successful, the oppressive policies led to a revolt as many Jordanian cities were destroyed and the overall population of urban settlements declined due to oppression and neglect, urban life became more and more underdeveloped and the situation was exhibited by Bedouin raids (Rogan, 2002). As a result, the brutal ottoman oppression provoked the revolt of the region's both urban (non-Bedouins) and Bedouins notables (Laura, 2014; Milton-Edwards and Hinchcliffe, 2009). The Great Arab Revolt is further discussed in the modern era.

4. **The modern era:** the best title for this phase would be the Great Arab Revolt and the establishment of the Emirates of Transjordan. Four centuries of stagnation, long-term resentment to the Ottoman authorities and their brutal oppression, in addition to the emergence of Arab nationalism led to the notorious Arab revolt in 1916 (Laura, 2014; Metz, 1991) which Jordan just celebrated its centennial in 2016. The revolt was launched by Sharif Hussain of the Hashemite clan (Sharif, Arabic: شريف, a traditional Arab title meaning noble or highborn. In the case of the Hashemite's they attained the title by

claiming to be descending from the Islamic prophet Muhammad which is another definition for the word (Oxford Dictionary, 2016)). From the inside, the takeover of Transjordan attained support of local clans and Bedouin tribes in addition to the Circassians and Christians communities (Joffé, 2002) while from the outside, the revolt was supported by the allies of WW1 including Britain and France (Sicker, 2001). Although the Great Arab Revolt managed to successfully gain control over east Jordan, it failed to attain the much needed international recognition as an independent state mainly due to the Sykes-Picot agreement and Balfour promise which both the Hashemites and Arabs saw as a betrayal of the British agreement that promised to recognise the independence of the unified Arab state under the rule of the Hashemites (Salibi, 1998). In 1921, the back then prince Abdullah I, founding king of Jordan and the second son of Sharif Hussain, established the Transjordan Emirates which shortly after became a British protectorate (Wilson, 1990). Multiple difficulties emerged in the region over the assumption of power to the Hashemites leadership and Wahhabi's from what is today known as Saudi Arabia repeatedly raided the territory of Transjordan which with the help of local Bedouins and British were obstructed, the reason why the British maintained a Royal Air Force detachment near Amman (Salibi, 1998). One year after its establishment, by the British mandate for Palestine and Transjordan memorandum, the Emirate of Transjordan was recognised as a state. The memorandum excluded territories east of the river Jordan from the provision of Jewish settlements and Transjordan remained a British protectorate until it gained its independence in 1946 (Bishop, 1995).

5. **Post-independence era;** Jordan and the timeline of the Hashemite kingdom. On 25th May 1946, the '*Emirates of Transjordan*' celebrated its independence and became the

'Hashemite Kingdom of Transjordan' as stated by the London Treaty signed jointly between the British Government and Prince Abdullah I whom shortly after was re-designated as king by the legislative power of the parliament of Transjordan. Three years later the kingdom's name was altered to become the *'Hashemite kingdom of Jordan'* (Jordan), the name the country still hold until this day (Kerr, 1971). Jordan became a member of the United Nations in 1955 (Khalil, 1964).

The root of the Jordan-Palestinian conflict is believed to have commenced in this era when Jordan took part in the 1948 Arab-Israeli war against Palestine alongside other Arab states (Morris, 2008). As a result of this war, Jordan occupied the West Bank in 1950 and officially annexed these territories, this actions was considered by other Arab countries as a betrayal and in response, they demanded the exclusion of Jordan from the league of Arab States (today known as the Arab League) (Aruri, 1972). The expulsion lasted for less than two months when the Arab League declared the annexation was a temporary practical measure and that Jordan is only holding the territory as a *'trustee'* pending a future settlement (El-Hasan, 2010). The situation was escalated in the following year when king Abdullah I was assassinated by a Palestinian militant at Al-Aqsa mosque, Jerusalem in 1951 following rumours spread on his intention to sign a peace treaty with Israel. Prince Talal then, the late king son, succeeded his assassinated father and became king of Jordan but two years later renounced his throne in favour of his eldest son Hussain due to claimed illness. King Hussain ascended the throne in 1953 at the age of 17 years old (Casper, 2003). In his rule, Jordan attained many achievements and fought many wars such as the six-days war in 1967 where the Arabs were defeated and the West bank became under the Israeli control and many Palestinians fled to the East Bank (Jordan)

(Quigley, 2013). However, despite the fact that unlike the Jordanians whom had several encounters with the Israeli force by means of the Jordanian Armed Force, Palestinians had limited involvement and yet the Palestinian parliamentary elements (Arabic: الفدائيين, English: *Al-Feda'yeen*) gained much recognition and acclaim from other Arab states and shortly became a threat to the rule of law in Jordan. As a response, the Jordanian army targeted the Feda'yeen in a war known as Black September in 1970 and the result led to the expulsion of the fighters to Lebanon (Syed et al., 2011). Few years later in 1974 Jordan along with the rest of the Arab league agreed that the Palestinian Liberation Organization (PLO) is the '*sole legitimate representative*' of the Palestinian people and Jordan renounced its claims to the West Bank in 1988 (Syed et al., 2011). Upon the death of king Hussain in 1999, king Abdullah II ascended the throne (Wagner, 2005). The young king realized his country's economic potentials and consequently focused on it, the king was credited with the increase of foreign investment, improving the public-private partnership, and the flourishing of the information and technology sector. These reforms resulted in a thriving economic growth (IMF, 2006). However, despite the king's efforts to improve the Jordanian economy, the great recession and the regional turmoil in the late 2000's (until today) have crippled the Jordanian economy and its growth severely and made it extremely dependent on foreign subsidies and aid (Sowell, 2016). Nonetheless, the internal security of Jordan remains integral, despite the one Al-Qaeda attack in 2005, which the security dramatically improved afterwards, no attacks have occurred (Cordesman, 2006; Magid, 2016). Finally, while surrounding countries still suffer from the aftermath of the Arab spring which instead of achieving economic and political reform resulted in more instability, Jordan has so far succeeded to avoid the internal unrest and as

a precautionary measure introduced a number of reforms as part of his majesty's request of the government to "*take quick, concrete and practical steps to launch a genuine political reform process, to strengthen democracy and provide Jordanians with the dignified life they deserve*" (USA today, 2011).

Accordingly, Jordan ranked first in the state of democratic reforms out of fifteen Arab countries at the 2010 Arab Democracy index (Voice Of America, 2010) and 78 on the global level according to the Human Freedom Index 2015 (Ghazal, 2015), 55th out of 175 countries in the Corruption Perceptions Index (CPI) issued by the Transparency International in 2014 were 175 is the most corrupt (Transparency International, 2014). In addition, although the Arab spring and the Syrian conflict led to the country tightening its grip on media, Jordan still managed to score 5th place out of 19 countries in the Middle East and North Africa at the 2016 Press Freedom Index (Malkawi, 2014).

In terms of the geographic profile of the country, sitting strategically at the crossroads of Asia, Africa and Europe (Teller, 2002), Jordan is part of the Fertile Crescent of the Levant. The country is approximately 89,341 Square kilometres (34, 495 sq. mi) large and 400 kilometres (250 mi) long between its utmost northern and southern points (CIA, 2016). The eastern part of the country is described as an arid plateau irrigated mostly by oases and seasonal water streams. Urban settlements and cities are mostly located in the northern-eastern parts of the country mainly because of the fertile soil and relatively generous rainfall while the mountainous regions in the northwest are covered with forests (McCoy, 2003).

Officially known as the Hashemite Kingdom of Jordan (Arabic: المملكة الأردنية الهاشمية English: *Al-Mamlakah Al-Urdunnīyah Al-Hāshimīyah*), Jordan is an Arab kingdom located on the eastern

bank of river Jordan in western Asia sharing borders with Syria and Lebanon to the north, Iraq to the north-east, Saudi Arabia to the east and south, the Red Sea to the extreme south-west, and Palestine, Israel and the Dead Sea to the west (McColl, 2014).



Figure 5 Jordan on the world map, orthographic projection. Source: World map. Retrieved: October 2nd 2016.



Figure 6 Jordan on the middle east map. Source: the world fact book . Retrieved: October 2nd 2016.

In addition to the River Jordan and the Dead Sea, Jordan has a 26 kilometres (16 mi) of shoreline on the Gulf of Aqaba but is otherwise landlocked (McColl, 2014), and despite the Yarmouk River to the north which makes part of the Jordan-Syria boundaries, the remaining boundaries with Iraq and Saudi Arabia are either a result of international or local agreements and lack any defining characteristics. The highest point lies at 1,854 m (6,083 feet) above sea level, while the lowest is at -420 m (-1,378 feet) at the Dead Sea, the lowest point on earth (McCoy, 2003). The diversity of Jordan's geography is evident in its wide array of habitats, biotas and ecosystems mainly as a result to its varied landscape and environmental scene (MoE, 2014).

4.3. Political Structure:

The governmental regime in Jordan is unitary, parliamentary, and constitutional monarchy. Unitary in the sense that the country is governed by a single power where the central government is ultimately supreme but delegates particular powers to sub-national administrative division units (CIA, 2016; UN Statistic Division, 2016). Parliamentary in which the executive branch derives its democratic legitimacy from the legislature (parliament) which is also held accountable to that legislature. Jordan's parliamentary system, similar to many parliamentary countries, is a constitutional monarchy; understood as a form of monarchy where the monarch executes their authorities in accordance with a set constitution, in Jordan's monarch system, the monarch (the king) is the head of the state and commander-in-chief while the head of the government is the prime minister which is appointed by the king. Nonetheless, the king in Jordan holds wide executive and legislative powers, he may dissolve the parliament and dismiss the government at any point (CIA, 2016; Constitutionnet.org, 2016; EIU, 2012; Freedom House, 2013).

The house of parliament includes two chambers: The Upper Senate (Arabic: مجلس الأعيان, English: *Majlis Al-‘Ayan*) in addition to The Lower House of Representatives (Arabic: مجلس النواب, English: *Majlis Al-Nuwab*) (ARLEM, 2016). And while all 65 members of the Upper Senate – often former veteran politicians or have previously held a position in the government or in the House of Representatives— are appointed by the king, the 130 members of the House of Representatives are elected over a representational nationwide party list for a 4-year election cycle which again, the king has the authority to dissolve and dismiss at any point. To achieve a just and equal House of Representatives in Jordan, a system of minimum quotas is applied where 15 seats are reserved for women (though 20 won in the 2016 elections), 9 seats for Christians, 3 seats for the Circassians and Chechens and 3 seats for the Bedouins; one for Northern desert Bedouins, one for Central desert Bedouins and one for Southern desert Bedouins (Azzeh, 2016b; Husseini, 2010). See figure below.

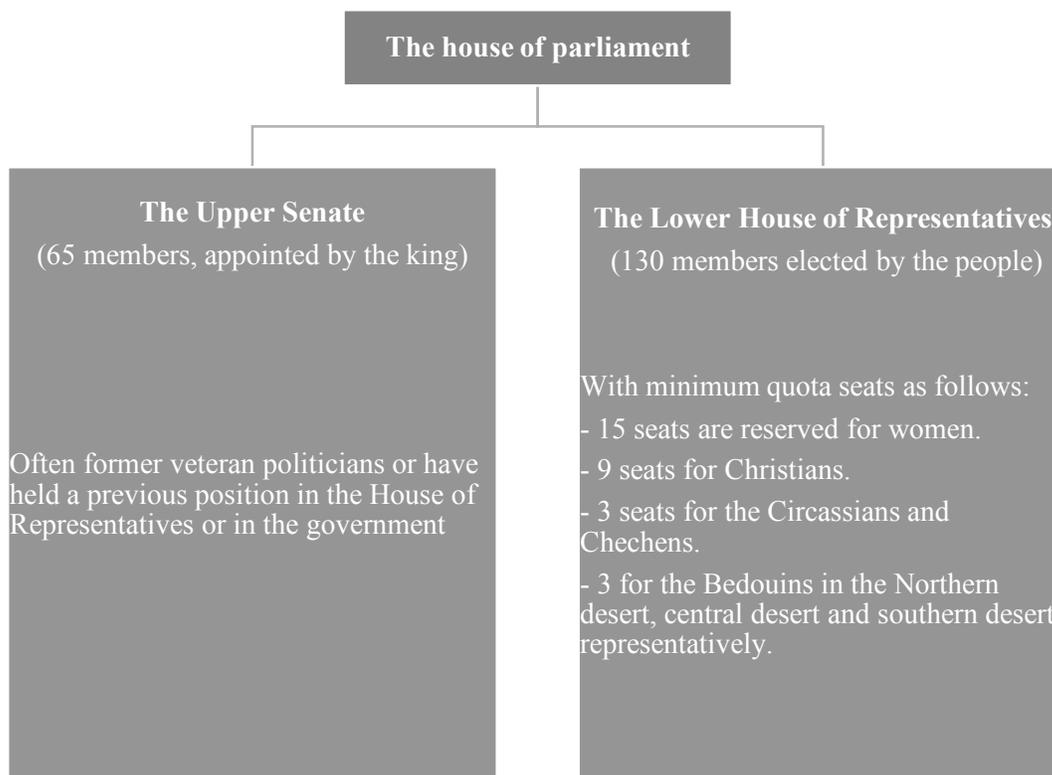


Figure 7 The hierarchal structure of Jordan's house of parliament. Source: Author.

Jordanians enjoy the freedom to join any of its almost 50 political parties representing a wide array of ideologies including the political left, pan-Arabist, Islamist and Secularists. Political parties in Jordan may not be established on any religious base and fall under the authority of the Interior Affairs Ministry.

Drafted by late king Talal in 1952, the today 65 years old constitution of Jordan is still the ultimate political reference for the country (Freedom House, 2012). It has been amended a number of times, the last one earlier in 2016 (Obeidat, 2016).

In terms of foreign relations, the country adopts a pro-western policy and maintains close relations with countries such as the United Kingdom and the United States (Swaidan and Nica,

2002), together with Egypt, Jordan is the one of only two Arab nations that signed the peace treaty with Israel (Washington Agencies, 2009), still, Jordan recognises the Palestinian statehood and advocates it as part of the Israeli-Palestinian dual-state solution where Jordan acts as a guardian through the Hashemite family's custody over the holy sites in Jerusalem to protect both the Muslims and Christians visiting these sites since the early 20th century as reinforced by the Jordan-Israel peace treaty (Azulay, 2009; Zanon, 2015). Jordan is also part of the European Neighbourhood Policy (ENP) and enjoys an '*advanced status*' at the European union (The Jordan Times, 2010). Due to Jordan's critical position in the Middle East, its army is strongly supported from countries such as the United Kingdom, United States, and France particularly in order to enhance its capacity to react rapidly to any threats to the homeland security (Tucker, 2010). In return, Jordan ranks third internationally in participation in U.N. peacekeeping missions by having approximately 50,000 troops serving in them worldwide (UN Peacekeeping, 2016). In addition, its military force joined international coalitions including the ones against the Islamic State of Iraq and the Levant (ISIS) led by the United States (The Jordan Times, 2014b). In terms of law enforcement, Jordan ranked 37th worldwide and 3rd in the Middle East according to the 2016 World Internal Security and Police Index, in addition, Jordan was the leading Arab country to include females in its police force (Faraj, 2012).

Today, Jordan is thought of as one of the safest Arab countries in the Middle East which has succeeded to avoid instability and long-term terrorism (The Daily beast, 2016). Midst surrounding turmoil, the country maintained its hospitality and continued to welcome immigrant and refugees from almost all surrounded conflicted areas since as early as 1948 with an outstanding 2.1 million Palestinian and 1.4 million Syrian refugees residing the country today in

addition to the thousands of Shi'a Muslims as well as Iraqi Christians fleeing the Islamic State. (The Jordan Times, 2016c; The National: World, 2016). Jordan continues to welcome its asylum seekers, however, the large influxes of refugees place substantial strains on the country's infrastructure and national resources (UNHCR, 2016b). The refugee discussion will be picked up later in the demography section.

4.4. Demographics and socio-cultural characteristics:

With a total area of 35,637 square mi (92, 300 square km) and population of 9,710,752 according to the latest census taken in 2015, 30% of which are non-citizens including illegal immigrants and refugees from various nationalities (DOS, 2016; UN Statistic Division, 2016). According to the census, the largest share of Jordanians come from Arabic origins, which make up to 98% of the total population where the remaining 2% is generally attributed to the three specific groups, Circassians, Chechens and Arminian minorities (CIA, 2016; The Jordan Times, 2016c). As a result of the population increase, Jordan has become more settled and urban with almost 4 million inhabitants in the capital Amman in comparison to the early 1920's when almost half of the population were nomads which today make up to only 6% of the total population (Anfinset, 2016; DOS, 2016; Eilon and Alon, 2007). The life expectancy rate of the Jordanian population is 74.35 years and the leading cause of death is cardiovascular diseases followed by cancer (CIA, 2016; K Malkawi, 2015). The Jordanian population is very much educated, the literacy rate until 2015 was 95.4% and the UNESCO ranked the Jordanian educational system 18th out of 94 nations for providing gender equality in education (CIA, 2016; GAN and OBG, 2014; UNESCO, 2012). Moreover, according to the 2016 estimations, the age structure of Jordan is **0-14**

years: 35.04% (male 1,470,865/female 1,397,057); **15-24 years:** 20.12% (male 842,202/female 804,557); **25-54 years:** 36.44% (male 1,491,855/female 1,491,302); **55-64 years:** 4.46% (male 177,720/female 187,181); **65 years and over:** 3.94% (male 151,071/female 171,574) (IndexMundi, 2016).

Today, the demographics of Jordan are strongly connected to immigrants and refugees. In 2015, Jordan was home to just over 2 million Palestinians, the majority of which have become passport holding Jordanian citizens (UNRWA, 2016h). And while the first wave of Palestinian refugees arrived to the kingdom after the 1948 Arab-Israeli war, the second wave started arriving after the 1967 Six Day War. The third wave however was a mix of Palestinians and returning Jordanians post the 1990's Gulf war. At the beginning of the Palestinian situation, Jordan gave citizenship to the majority of refugees. This is not the case today as citizenship is only given to certain cases, in fact, thousands of citizenships were revoked after the capture of Israeli state for the West Bank to thwart any attempt for permanent settlement in Jordan and refugees were instead issued yellow cards to guarantee their rights just as Jordanian citizens. Almost half a million of Palestinian refugees live in UNRWA refugee camps in Jordan (Abu Toameh, 2009; UNRWA, 2016f, 2016h).

In addition to Palestinian refugees, Jordan has been home for 700,000-1,000,000 Iraqi refugees since 2003 following the Iraqi war, and although most of which have returned, Jordan is still accommodating Christian and Shi'a Muslim Iraqis whom escaped the Islamic State threats and settled temporarily or permanently in the kingdom (Fafu and UNFPO, 2009; IRIN news, 2013; Leyne, 2007). Immigrants in Jordan include a 15,000 Lebanese whom arrived post the 2006 Lebanon war.

In light of recent events, the Syrian crisis had the most impact on the total number of immigrants and refugees in the kingdom today. With just over 1.4 million Syrian refugees fleeing to Jordan since 2010, less than half of are legally registered (The Jordan Times, 2016c; UNHCR, 2016a). The kingdom continues to accept refugees despite the considerable pressure refugees are placing on the Jordanian community, more particularly from the non-registered non-camp residents as they compete with the locals over job opportunities, natural resources in addition to other state provided services as well as the strain on the national infrastructure (UNHCR, 2014).

In addition to the Syrian, Iraqi and Lebanese refugees, the country accommodates several thousand refugees from other nationalities including Libyans, Yemenis and Sudanese whom have also sought asylum in Jordan in order to escape violence and instability in their respective countries (UNHCR, 2014). In conclusion, the 2015 Jordanian census reported that 1,265,000 Syrians; 636,270 Egyptians; 643,182 Palestinians; 130,911 Iraqis; 31,163 Yemenis; 22,700 Libyans, and 197,385 from other nationalities reside within the borders of the kingdom (The Jordan Times, 2016c).

In terms of the socio-cultural characteristics, the ethnic composition of the country is 98% Arabs, 1% Circassians and 1% Armenians which consequently made the official language Arabic. However, though without any official status, English is widely spoken across the country and is considered the '*de facto*' language for trading and business in addition to being a co-official language in the education sector where the majority of university classes are taught in English and almost all public and private schools include the language along with the standard Arabic within their curriculums. French is elective in some private schools (Ammon, 2006).

The relatively small, almost landlocked, semi-arid country with a population of just over 9.5 million (DOS, 2016) has a unique religious structure. With the majority of 92% Sunni-Muslims making Islam the dominant religion, the coexistence with the indigenous Christian minority is much apparent as the country is still a habitat for some of the most ancient Christian communities in the world, Christians whom resided Jordan after the crucifixion of Jesus Christ early in the first century AD (The National: World, 2016) which make a total of 4% of the overall population down from a 20% back in the 1930's due to the high rate of immigration of Muslims into Jordan and even higher migration rate of Christians to the west (Los Angeles Times, 2016). However, despite their marginal percentage, Christians in Jordan are well integrated into the society and enjoy a high level of religious freedom (Miller, 2010). As discussed in the political structure section, they are allotted 9 out of 130 seats in the parliament which means that Christians are over-represented in the body, many Christians in Jordan hold important ministerial portfolios, ambassadorial appointments and high military rank positions (Minorityrights.org, 2016). In addition, unlike many surrounding Arab countries, all Christian religious ceremonies are publicly celebrated in Jordan.

4.5. Economy:

Categorized as a relatively high human development country with an upper-middle income economy (Becker and El-Said, 2013), the Jordanian economy has been attractive to foreign investors. The country is a vital touristic destination, in addition to its archaeological and historical sites, the country is famous for religious and medical tourism alongside the recreational tourism (Jordan News Agency (Petra), 2016), nonetheless, the lack of natural resources and the

refugee and immigration influxes have been crippling factors for the economic growth of the country (WINEP, 2016).

According to the World Bank, Jordan is classified as an upper-middle income country.

Nonetheless, about 15% of its population (as of 2010) lives under the nation's poverty line (The World Bank, 2016). The country's economy is considered to be well diversified, between finance and trade, transportation and communication, public utilities and construction, mining and manufacturing. Despite plans to expand the private sector, the state remains the dominant force in Jordan's economy (WINEP, 2016). Still, the country receives considerable development assistance (761 USD total as of 2009) which, according to the government, the majority of is allocated as grants, of which almost always half is direct budget support (OECD, 2011).

Jordan has a relatively strong currency, the Jordanian Dinar, which is pegged to the IMF's special drawing rights (SDRs) (Currency Encyclopedia, 2016) equals 1.41 USD, the country joined the World Trade Organization and signed many trade agreements with countries such as the United States, Turkey and Canada (Republic of Turkey Ministry Of Foreign Affairs, 2011). In addition, Jordan enjoys advanced status with the EU (The Jordan Times, 2010) which encouraged greater access to export Jordanian products to European markets. However, due to the aforementioned dependency on high energy and food subsidies in addition to the considerably large public-sector workforce, the country still suffers from budget deficit. These are partially offset by international aid (Sharp, 2012).

The great recession in addition to the turmoil caused by the Arab spring impacted Jordan on many levels including trade, industry, construction and tourism and resulted in a depressed GDP (CIA, 2016). In 2016, the country's total foreign debt reached \$35.1 billion which represents

90.6% of Jordan's GDP. The large sum is immediately affected by the regional instability which caused a decrease in touristic activity and foreign investment in addition to increasing military expenditures. The debt is also increased due to the accumulated interests on loans, the collapse of trade with neighbouring countries, more specifically Syria and Iraq, and the increasing costs for hosting refugees, more specifically Syrian refugees which according to the World Bank have cost the country just more than \$2.5 billion a year (Malkawi, 2016; Sowell, 2016). Yet, these foreign aids cover only a small portion of these costs where 63% of the total sum is covered by Jordan itself (The Jordan Times, 2016a).

Jordan's true economic force is its skilled workers which is amongst the highest proportions in the region particularly in information technology and industry due to the relatively modern educational system the country enjoys. This has helped Jordan become a foreign investments magnet and enabled it to export workforce experts particularly to neighbouring Persian Gulf countries (Becker and El-Said, 2013).

In terms of industry, Jordan is considered to have a well-developed industrial sector which includes manufacturing, mining, in addition to construction and power (OBG, 2015). The primary industrial products include phosphate, potash, cement in addition to clothes and fertilizers. Yet, the most aspiring of these sectors is believed to be construction according to United States Secretary John Kerry's remarks at the *Middle East commercial centre leadership dinner* (2014). Jordan is considered to be a leading pharmaceuticals manufacturer in the MENA region (Obeidat, 2015). And lastly, the country's military industry is today a thriving one particularly after King Abdullah II's establishment of the King Abdullah Design and Development Bureau (KADDB) defence company which provides indigenous capabilities for the

supply of scientific and technical services to the Jordanian Armed Forces in order to enable it to become a global hub in security research and development (The Jordan Times, 2015).

The cornerstone of economy in Jordan is tourism, including recreational, religious and medical tourism, being a large source of employment, hard currency and as a result, economic growth, with the majority of tourists coming from Europe and other Arab countries (Alafi, 2014; Jordan News Agency (Petra), 2016). However, the sector has been affected severely by the regional turbulence, for example, tourism witnessed a 70% decrease post the Arab Spring (Pizzi, 2015).

According to the ministry of tourism and antiquities, Jordan is home to around 100,000 archaeological and tourists site (The Jordan Times, 2014c). Some well-preserved such as Petra (Arabic: البتراء Al-Batra') and Jerash (Arabic: جرش Jarash), the former being Jordan's most popular touristic attraction and the kingdom's icon. Jordan is part of the Holy Land and is home for several biblical attractions and pilgrimage activities including the baptism site (Arabic: المغطس, English: *Al-Maghtas*), Mount Nebo (Arabic: جبل نبو, English: *Jabal Nebo*), mentioned in the Hebrew bible as the location where Prophet Moses was granted a view of the Promised Land, Um Al Rasas (Arabic: أم الرصاص, English: *Um er-Rasas*), named a UNESCO world heritage site for its '*outstanding universal value*' in 2004, Madaba (Arabic: مادبا), home of the byzantine mosaic map of the Holy Land and Machaerus (Arabic: مكاور, English: *Mkawer*) which according to Flavius Josephus is the location of the imprisonment and execution of John the Baptist (Corbett, 2015; Freedman and Myers, 2000; Kuehn, 1992; UNESCO, 2016; Vilensky, 1978; Wright, 2008). Jordan also has a number of Islamic sites including shrines for numerous companions of the prophet Muhammad.

The unique topography of Jordan created sites for adventurous tourism, such as the hiking trails between its valleys and mountains. Moreover, seaside recreation and water activities are available whether at the shores of Dead Sea or Aqaba to the south (Howard and Taylor, 2015; Teller, 2002). Jordan is also famous for medical tourism; it has been the region's top medical destination according to the World Bank and fifth worldwide, with a majority of patients coming from surrounding disturbed countries including Syria Libya and Yemen, in addition to neighbouring gulf countries (Al-Emam, 2015). Jordan is also a fulcrum for natural treatment methods in both the Hot Springs of Ma'in (Arabic: حمامات ماعين, English: *Hammamat Ma'een*) and the Dead Sea which is often described as a 'natural spa' where the high salt concentration has been proven to be therapeutic for many skin diseases (Connell, 2011; OBG, 2007; Todd, 2011). The kingdom prides itself on its health services, which according to the BBC is some of the best in the region (BBC, 2016). Qualified medics, favourable investment climate and Jordan's stability has contributed to the success of this sector (Malkawi, 2015).

In terms of natural resources, Jordan is ranked the world's second poorest country in water resources per capita, moreover, the already scarce water resources are aggravated by the influx of Syrian refugees (Namrouqa, 2014). On the other hand, Phosphate mines to the south have made Jordan one of the largest producers and exporters of this mineral in the world (INN, 2016; JPMC(PLC), 2014; Rivlin, 2001).

Despite the fact Jordan is surrounded with oil countries such as Iraq and Saudi Arabia, the country's reserves of crude oil are non-commercial. According to The Economist, Jordan has the 5th largest oil-shale reserve in the world that could be commercially exploited in the central and northern regions west of the country (The Economist, 2014). The extraction of the oil shale has

been delayed due to the advanced level of technology it requires to extract and relatively higher costs (The Economist, 2013).

Jordan aims to benefit from its relatively considerable uranium reserve with two nuclear plants scheduled for completion by 2025 as part of kingdom's vision (Ghazal, 2016b; OECD/NEA and IAEA, 2014). Jordan also has a modest— in comparison to neighbouring countries — natural gas which after extraction covers 10% of Jordan's electricity needs (CIA, 2016; The Jordan Times, 2014a). An abundant yet under used natural resource that the kingdom is currently looking at harvesting is the solar energy. The kingdom receives 330 days of sunshine per year, in addition, the wind power is another potential resource as the wind speed can go up to 7m/s at some mountainous areas and the Ministry of Energy and Mineral Resources is currently looking into obtaining a minimum of 10% of Jordan's electrical consumption from renewable resources by 2020 (Balbo, 2011; EJRE, 2011; Ghazal, 2014; JRES, 2009).

4.6. Amman:

Amman (Arabic: **عمّان**) the capital of Jordan and its largest, most populous city with a population of just over 4 million and a land area of 1,680 square kilometres (684.7 sq. mi) (DOS, 2015a, 2015b; Maps of World, 2016; McCoy, 2003). Situated at north-central Jordan as the administrative centre of Amman governorate and considered the kingdom's economic, political and cultural centre.

Initially built on seven hills, the city today spans over 19 hills that join 27 districts with an altitudinal extension reaching to above 875 meters (Dumper and Stanley, 2007), administered by

the Greater Amman Municipality (GAM) which is headed by its mayor. The topography of the city made it consists of a series of steep hills and deep valleys, thus, the majority of the areas of Amman obtained their names either by the name of the hill (Arabic: جبل , English: *Jabal*) or valley (Arabic: وادي, English: *Valley*) they are located at, such as Jabal Lweibdih (*Al-Weibdih hill*) or Wadi Abdoun (*Abdoun valley*). The eastern half of the city is characterised with a historical and cultural identity, while the western half is known as the modern, economic centre of the city. Amman enjoys a relatively fast growing economy, and ranked as Beta- on the Global city index (GaWC, 2012). Accordingly, it is among the popular locations in the Arab world for multinational corporations' headquarters and investments alongside Doha and just behind Dubai (Dunia Frontier consultants, 2012).

In less than a decade, the population of Amman escalated from little more than a handful of dwellings in 1924 to over 4 million (Potter et al., 2009). In one hand, the rapid urban and physical geography growth of the city resulted in the heterogeneous social structure of contemporary Amman, while on the other hand, created numerous pressuring challenges including the stress on infrastructure such as the provision of urban water and privatisation; transportation and congestion; in addition to urban and regional development planning issues such as the lack of public areas and green urban spaces (Kadhim, 2016a). The following paragraphs discuss the two premises in more details.

4.6.1. The rapid growth of the city:

The exponential urban growth of Amman from the 1920s to the present was not limited to mere population increase, in his *Ever Growing Amman*, Al-Asad (2005) argues, it influenced the city's physical reach and emphasized its regional geopolitical importance. Abu-Dayyeh (2004) notes that at the time of the 1952 census, when the population of the city stood at 250,000, 29% settled in tents while 8% dwelled in natural caves. By the early 2000s, temporary or makeshift settlements mushroomed around the city, simultaneously, high-end ventures began to emerge. All of this contributed to the hybrid socio-spatial making of the city, Abu-Dayyeh argues, the city was divided between wealthy neighbourhoods, generally located in western Amman, and socio-economic quarters towards the eastern end of the city (2004).

As previously discussed in the historical overview section, the year 1200BC mark the origins of Amman as an urban settlement when the Ammonites captured *Rabbat Ammoun*, the hill that dominates the centre of the present-day capital (Kadhim and Rajjal, 1988). However, since then, the city went through milestone dates which contributed to its expansion and geopolitical formation, the following table summarizes the key dates, events, and estimated population while the figure after demonstrates the spatial cartographic urban sprawl of the city.

Dates	Events	Estimated population
1860s	Circassian tribes and Muslims escaping religious from Russia settled in Amman.	Few households.
1902	The construction of the Hijaz railway which linked Amman with Damascus (Syria) to the north, and Madina (Saudi Arabia) to the south.	Less than 300 families.
1907	The first municipal council of Amman was established	A little more than 300 families.
1921	Amman was declared as the capital of the state of Transjordan	Few thousands.
1921- 1947	Gradual spatial expansion	10,500 in 1930 and 45,000 in the early 1940's
1948	First Palestinian refugee influx wave	Just under 330,000
1967	Second Palestinian refugee influx wave	Just above 500,000
1973-1983 (The 'boom years')	Many Jordanians went working in oil-rich countries. Internal rural-urban migrations and the settlement of nomadic tribes in the urban city.	777,855 by the year 1979
1991-1994	The gulf war in 1991, which resulted in many Jordanian coming back. The first census was conducted in 1994.	1,307,017 by the year 1994.
2003-2004	The war in Iraq in 2003. The second census was conducted in 2004	5,100,891 by the year 2004.
2011-2015	The Arab spring, the turmoil in Libya, the Syrian crises and the turmoil in Yemen, all resulted in numerous immigrations to Jordan and Amman in specific.	9,710,752 according to the 2015 census.

Table 3 Jordan's population growth. Source: Author (based on Potter et al.'s 'Ever growing Amman' report).

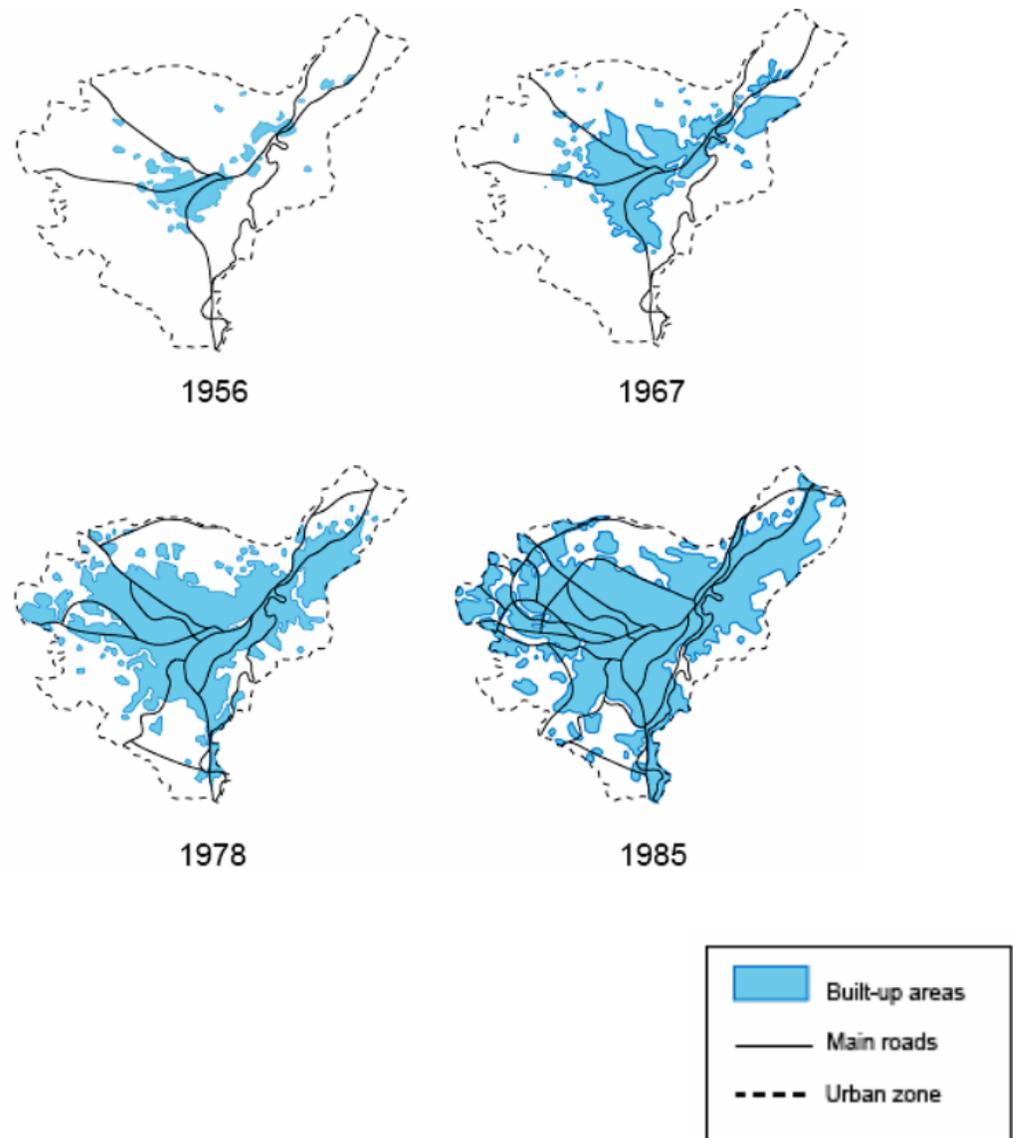


Figure 8 Amman urban sprawl 1956-1985 (from Greater Amman Municipality 1987 and Abu Dayyeh (2004))

Consequently, the social structure of the city became more complex. Ham and Greenway for example note that; *“residents talk openly of two Ammans, although in truth there are many. Eastern Amman (which includes Downtown) is home to the urbanized poor: it’s 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: 98).

The ‘*two Ammans*’ notion reflects the increasingly growing urban segregation between its two ends, while the western end is home for the wealthy socio-economic group, attracting high-end projects further westward from the city centre, with higher land prices and lower population densities (Hannoyer and Shami, 1996; Razzaz, 1996). In contrast, eastern Amman remained the habitat for lower-income groups and as the recipient of the new arrivals, refugees in particular. The historical centre dating to the early 1900s is surrounded by present-day downtown where land is cheaper and population density is extremely high. This social structure is reflected in the zoning and zoning regulations for planning and building purposes, the residential lands are thus divided into four categories from the largest to the smallest, A, B, C and D based on the minimum lot size criteria— understood as the maximum percentage of the plot that can be built upon—. Towards the west, type A is the most exclusive, with larger set-backs and more green space requirements in addition to smaller built-up area percentages, conversely, towards the east, type D is the most dominant, with smaller to non-existing set-backs and less green space requirements as well as bigger built-up area percentages, category B and C are dispersed throughout the city (Potter et al., 2007). This urban disparity is discussed in the following section.

4.6.2. The east-west Amman urban segregation:

Between informal settlements, middle-class neighbourhoods and the latest elite urban forms of private real estate development projects such as gated communities and high-end ventures, the spatial tension in Amman is becoming more apparent.

The impoverishment of the urban population has been increasing since the early 2000s despite the many governmental attempts to launch campaigns to reduce poverty pockets in addition to the social housing projects— often constructed on the outskirts of the city with a noticeable absence of health, education, religious or recreational services, which in return forces the inhabitants to cross long distances and spend far more on transportation to obtain the desired service—. On this note, the progressive separation between the ‘*rich*’ and the ‘*poor*’ in Amman was expanding and reflecting on its spatial distribution. Moreover, due to the fact eastern Amman is the initial settlement location for the migrants with lower income, it became a hotpot of multi-nationality ideologies, different sub-groups created discrete urban realities that became part of east Amman neighbourhood identity without particularly participating in its political management. The social contrast is immediately connected to the morphological urban configuration of the city and is cartographically evident in the sense that the eastern end is characterized by the informal settlements, slums and housing projects while correspondingly, the western end is characterized by the multi-level properties and high-end development enterprises (Ababsa, 2011, 2014; Ababsa and Daher, 2011).

Informal settlements grew significantly post the 1976 crisis partially when land was sold for many immigrants in exchange of nominal prices, as a result, more than half the informal settlement residents became land owners in the less developed area of eastern Amman. Today, the high rate of real-estate ownership is still growing mostly due to earlier transactions which may or may not be registered in the land registry as well as to former upgrade policies which included access to housing (Ababsa, 2011).

Not only is the east/west division apparent cartographically on the map of Amman, but is also manifested in the social structure and demographic make of the city and has been confirmed over the past few decades according to the censuses of population and housing conducted in the 1961, 1979, 1994, 2004 and until the most recent one conducted in 2015 which also suggests so (DOS, 2015a, 2015b, 2016).

The morphological structure and contrast within the city between its eastern and western parts is shown in the mass of small blocks closer to the city centre and the eastern end, more specifically near Palestinian camps, while the western end enjoys slightly larger blocks. The dominant housing types in western Amman is the traditional villas, with one or two floors (often with a courtyard) and accommodates a single family, or luxurious apartment buildings with an average of four levels, each level between 180-300 meter square in area and accommodating one single family. Where in eastern Amman, housing units are composed of collective modest apartment buildings, from four to eight levels high, many built during the oil boom in the 70s or post the gulf war in the 90s which make up more than half the constructed built-up environment in eastern Amman, or self-built small blocks of 1-2-bedroom housing unit often with metal sheet roofs with the possibility for future expansion depending on the growing direct or extended family needs – new family members by birth or extending the family by marriage— (Ababsa, 2011).

The urban segregation in Amman is reflected in the age indicators, women and active population indicators, poverty indicators and ways people generate income (Ababsa, 2011), however, this argument is picked up later in the spatial justice in Amman chapter. The municipality has been aware of this socio-spatial segregation and consequently, through the past thirty so years, has developed several upgrade policies and revitalization programmes which this research argues

have failed to address many urgent issues including spatial justice, the rehabilitation of derelict space or the introduction of more creative, alternative urbanism approaches. This argument is also picked up later in chapter seven.

4.6.3. Urban and regional planning of Amman:

The contemporary physical urban development of the city of Amman commenced in the 1938 when the British mayor proposed a land-use plan of the city (DLS, 1938). The plan was nothing but a policy for land parcelling and a transport routing within the built-up area with no mention to socioeconomic issues, following in 1956 (Adibi, 1956) and later in 1968 (Lorenz, 1968) two similar in context and scope attempts were developed, however, the latter introduced guidelines to control the city growth and development, particularly post the Arab-Israeli conflict one year earlier in 1967. The plan included three main topics; the urban area land-use distribution; transport and commercial policies for central Amman, and; overall- city transport.

In 1977, a key upgrade scheme was initiated as part of the comprehensive Amman-Balqa¹ region development (AURPG, 1979). The completed study was published in 1979, key recommendations were aimed to address spatial, social and economic problems in addition to introducing spatial growth and development guidelines for the 21st century. The plan involved two phases, while the first was a short-term, five-years plan, the second was a long-term, twenty-years plan, and for the first time in the capital's history, the two phases were completed in collaboration with the then National Social-Economic Department Plan, as an outcome, the

¹ Balqa is a city in Jordan that intersects along the northwest borders of Amman, historically, the two cities were frequently addressed simultaneously.

Urban Development Department was established which until this day is responsible for the upgrade and development of low-income urban housing alongside with other responsibilities.

The accomplishment of the 1979 plan did not go uninterrupted. In the early 1980s, the scheme was stopped. However, its findings and recommendations were incorporated in an updated study entitled *the Comprehensive Development Plan for Greater Amman 1985-2005*, a study initiated in 1983 and published in 1985 (Dar al Handasa, 1987). The plan was by far the most detailed study conducted on the prospects of Amman's development, designed to cater for its growth, with a vision for a controlled spatial pattern and economic development.

In the early 2006, Greater Amman Municipality set out to replace the 1985-2005 plan. But, the city has now more than doubled in population, experienced consecutive refugee waves, and as a result, sprawled into the peripheries which threatened the fiscal viability of the local government which had to increase expenditures in order to extend infrastructure and service into low-density areas. Moreover, the sudden increase coupled with an under-developed public transit system and further automobile ownership escalated the congestion problem in the city (Al Rawashdeh and Saleh, 2006; Kadhim and Rajjal, 1988; Potter et al., 2009). In addition, the unlucky wave of foreign investments coming mostly from oil-rich neighbouring countries which commenced earlier in 2003 (Abu-Ghazalah, 2008; Peters and Moore, 2009), the High Density, Mixed Use (HDMU) real estate development mushrooming haphazardly throughout the city with the absence of regulations to control them or a conventional Central Business District (CBD) to encompass them.

On May 3rd, 2006, His Majesty King Abdullah II wrote a letter to the mayor directing him to “*embark on a serious and comprehensive project of city planning in Amman*” (King Abdullah II

of Jordan, 2006) and the Amman 2025 comprehensive plan was born. In general, the plan aimed to address the projected four million new residents increase by 2025 while limiting infrastructure costs to the minimum; offered a compact city approach which emphasized the in-fill (intensification) of sparsely built areas; the densification of already developed areas (more specifically the HDMU areas); and limited perimeter expansion. Moreover, the plan set density targets for various zones more specifically at the city centre by limiting future growth within an ‘*urban envelope*’ and thus minimise infrastructure and roads costs; preserving agricultural lands and keep mining sites and quarries on the peripheries; protect the historic urban fabric of the city while allowing HDMU development projects, and; improve mobility throughout the metropolitan region (Beauregard and Marpillero-Colomina, 2011; GAM, 2008b).

Today, with Amman standing at just above 4 million dwellers exceeding the 2025 trajectories a decade earlier, the Amman Metropolitan Growth plan demands a critical revisit. However, this research takes forward the plan’s promise to be a *Beyond the Traditional Masterplan* to introduce alternative methods that bid to make the best use of underutilised, abandoned or vacant lands, as well as informal practices, and accommodate for the particular socio-cultural characteristics of the city and its changing everyday needs.

4.1. Conclusion:

This chapter provided an overview to the urban context of the study looking at the historical background, political structure, demographics and socio-cultural characteristics as well as the economy of Jordan in general and Amman in specific as part of the Middle East context. It demonstrated that the history of the kingdom along with its political structure contributed to

shaping its urban context, as while the historical composition moulded the country's multi-layered identity, its political makeup played a significant role in forming its unique geopolitics. The chapter highlighted that in light of recent circumstances— more specifically post the Arab Spring, Syrian crisis and regional turmoil— the kingdom needs to adopt more sustainable urban development policies.

The chapter emphasized that the socio-cultural profile of Jordan in general and Amman in specific is diverse and complex and asserted that the modernity of Amman is essential to accommodate for this complex socio-cultural structure, accordingly, more focus ought to be put to highlight the particularity of this context and the social production of its urban spaces as it is increasingly becoming more important on the regional and international scale. Moreover, the chapter highlighted that despite the fact that urban development is strongly connected to the promotion of social development, the analysis proved the opposite as generated spaces in Amman prioritized economic goals while the social development and cultural identity are pushed down the priority lists.

CHAPTER 5: BROWNFIELDS IN AMMAN

5.1. Introduction:

As part of the overall research goal to achieve greater spatial justice in Amman through the reclamation of brownfield sites by means of appropriating temporary urbanism methods, this chapter attempts to shed light on the first of the three interconnected themes: brownfields.

In the first section, and informed by the set of definitions introduced earlier in the literature review chapter in addition to the empirical fieldwork, the chapter emphasizes the lack of a systematic definition of the urban phenomenon in the context of the study. Moreover, looking at brownfield sites definitions in the different contexts in comparison to the ones in Amman, the chapter attempts to initiate a proposed appropriated one. In the second section, the chapter demonstrates the identified potential brownfield typologies emerging throughout the city of Amman and in light of their characteristics attempts to outline a typological guideline to these geographies. Informed by the methods and tools to identify potential brownfield sites and evaluate their development introduced earlier in the literature review chapter in addition to the empirical fieldwork, the chapter attempts to establish what identifies the investigated sites as brownfields. Lastly, in the third and fourth sections, and informed by the barriers and conversely the benefits to the reclamation of brownfield sites introduced in the literature review chapter and looking at the empirical fieldwork, the various barriers and benefits associated to the reclamation of brownfield sites in the context of Amman are identified.

Overall, and in line with the broader research aim, by looking at the case of Amman, the chapter bids to contribute to the larger global debate around the phenomenon more specifically from a

Middle Eastern, developing country outlook where the study argues the research on the topic is considerably insufficient.

5.2. The definition of brownfields in Amman:

The lack of a systematic definition for brownfield sites is not a problem exclusive to the case of Jordan. Looking at CLARINET and CABERNET discussions on the definitions of brownfields in European nations for example (Andres, 2012b; Bardos, 1999; CABERNET, 2007; CLARINET, 2002a; Grimski and Ferber, 2001; Oliver et al., 2004) the situation seems likely apparent in numerous countries such as Finland, Netherlands or Sweden where an official definition is completely absent or as in other countries where partial descriptions that emphasise particular characteristics of the wider definition are adopted such as Bulgaria, Denmark, Italy, Poland and Spain that stress contamination; Scotland and Ireland that stress dereliction; or Belgium that stresses the previous development activity of the site. On the other hand, countries such as France, Czech Republic Latvia and Austria embraced a more cohesive adaptations of the CABERNET definition similar to what this study attempts to undertake.

Moreover, located in a non-Western context, the process of defining brownfields in Amman was faced with another challenge, more specifically the language challenge as emphasized in the methodology chapter. According to Khrisat and Mohamad (2014), borrowing words from different languages minimizes the need to analyse the semantic and syntactic change of the word, furthermore, in addition to Arabization (Arabic: تعريب , English: *Ta'rib*) – understood as the process of localizing foreign texts or terms into Arabic equivalents (KESBI, 2016; Merriam Webster, 2017). In this process, Arabic characters are used to produce a similar in sound and

pronunciation word to the one from the original language in a manner that respects the general phonetic and linguistic guidelines — borrowing plays a significant role in enriching Arabic language with alternative words especially when interpreting meaning from different languages and translation is not an option which also according to Kesbi (2016) reduces the lexicographic deficiency noted in the Arabic dictionary.

According to Hussaini (2009), translation of terminologies in specific is where the language fails as the task of grasping the meaning(s) conveyed by the original term into an equal parallel word is challenging due to the complicated Arabic language grammars. Accordingly, although linguistic specialists were consulted for the purpose of translating the term, the study settled for Arabizing it instead. Arabizing seemed to be the better option as the literal translation of '*brown-fields*' is commonly used to refer to the fertility of land, i.e. brown soil rather than sand, and therefore conveys an opposite meaning to the original term. Alternatively, one focus group participants suggested the term '*grey-lands*', according to them, the colour grey symbolises the lack of vibrant vivid colours, therefore indicates death, contamination, dereliction or abandonment, moreover, the ambiguity of the colour being neither white or black reflects the ambiguity of the geographies it represents. However, '*greyfields*', as discussions emphasize, is a completely different term which unlike brownfields often does not require environmental remediation prior to site redevelopment, and generally refers to underutilised real estate or land such as obsolete or poorly maintained buildings including shopping malls and office buildings which due to demographic shift or other factors became less income generating (Merritt and Fisher, 2006). Therefore, to avoid confusion, the alternative term was not taken into consideration.

In light of the abundant literature on the definition of brownfields, coming up with one that takes into consideration the particular characteristics of brownfield sites in Amman was not the problem of the study, as established in the literature review chapter, the appropriated definition the study takes forward is an adapted CABERNET (2007) definition originally found in Ferber and Grimski's (2002) work which identifies brownfields as "*sites which have been affected by former uses of the site or surrounding land; are derelict or underused; are mainly in fully or partially developed urban areas; may have real or perceived contamination problems, and; require intervention to bring them back to beneficial use*". However, finding a term that conveys the totality of meanings found in the definition was the hardest task. A unified term needed to be established for this study for a variety of reasons; to allow all involved stakeholders to have a common understanding of what is being investigated; enable them to communicate clearly with less need for lengthy explanations, and; as this study argues, is a sine qua non for official bodies that wish to embrace it in their systems.

The necessity for a systematic term surfaced clearly throughout the conduct of the study since its early stages. The difficulty I faced having to explain the phenomenon prior to each interview, focus group or informal chat was both complex and time consuming. Therefore, in order for further future research on brownfields in the context of the study to happen, this study argues establishing a parallel term for brownfields is a research priority. However, as discussed earlier, and as a preliminary recommendation, the Arabized version of the term (Arabic: براونفيلد) might be the apt option for the time being. Also, it is important to note that in collaboration with the Languages Centre at the University of Jordan, a project to fashion a more appropriate term is being launched post the fulfilment of this study.

5.3. Identifying potential typologies of brownfields in Amman:

According to the definition of brownfields and looking at the Smart Growth Network (SGN) model and Thomas's GIS model in addition to the tools including Cost Benefit Analysis (CBA), Environmental Impact Analysis (EIA) and Multi Criteria Analysis (MCA) introduced earlier in the literature review chapter as methods and tools to identify potential brownfield sites and evaluate their redevelopment, five potential typologies of brownfields were identified in the context of Amman.

The identified potential sites were compared with the pre-defined characteristics of brownfields. However, it is important to note here that due to the limited financial resources and time constraints in addition to the presumably large number of potential sites, the selection process was problematic. The priority for site selection therefore followed the recommendations of the concerned authorities in addition to participants' local knowledge as the analysis will demonstrate. Moreover, although the SGN model was adopted in addition to Thomas's GIS, it was taken into consideration that the first was developed for American cities and contextual differences were taken into account. Accordingly, this study identifies a need for an evaluation model that accommodates the particularities of the Middle Eastern context, however, this remains a potential future research project.

The SGN – a network which was developed as a response to the growing local concern about the need for new ways of economic growth, environmental protection and refined community vitality improvement (Kurtović et al., 2014) – and in partnership with stakeholders including environmental protection agencies, historical conservation organisations, professional organizations, programmers, local and state authorities, was used to selecting potential

brownfield sites in terms of economic feasibility, social and economic benefits. In theory, the six-step method previously introduced in the literature review chapter was taken into consideration prior to the selection of each site. In addition, Thomas's GIS weighing and ranking criteria was also, in principle, taken into consideration without precisely following the value point system due to context variations.

Moreover, in addition to the two models, the selection of brownfield sites was rated based on three indicators, *the socio-economic index* which includes looking at population density and the value of real estate to identify how can the site contribute to the economic growth; *the spatial index of growth* which includes looking at the availability of utilities, transport and housing to indicate the vitality of the area; and lastly *the environmental index* which includes looking at the sources of potential contamination, soil permeability, and proximity to water sources and parks (Kurtović et al., 2014). Combined, the three indicators increased the validity and credibility of the process of identifying potential brownfield sites.

5.3.1. Identified brownfield typologies in Amman:

According to the Nvivo codes and resulting themes and patterns, five potential typologies of brownfield sites emerged in the context of the study. One prominent objective of this typological mapping is to unpack the rhetoric of these emerging geographies to the different stakeholders and identify what establishes them as potential brownfield sites. The following paragraphs briefly illustrate.

5.3.1.1. Residual planning outcomes:

As discussed earlier in the context chapter, the planning of Amman underwent several attempts to regulate the city. In addition to the population growth and the numerous immigration fluxes and resulting urban sprawl; the external influence throughout history since the early Ottoman and later British influences to the more recent global trends; the development of transportation, and; the several master-planning attempts, and in order for the urban planning of the city to adapt with these dynamics, extreme transformations occurred. However, in addition to the major mutations, marginal changes which resulted in marginal geographies are the foci for the emergence of this typology.

According to the head of the regulation department at GAM, the definition of a brownfield site partially applies to three types of geographic allocations. The *Fadlih* (English: land leftover, *فضلة*), the *Nutfih* (English: land bit, Arabic: *تُتْفَة*), and the *Arsah* (English: No known translation, roughly equivalent to intermediate space between properties, Arabic: *عَرْصَه*) it also applies to a fourth type called *Bour* (English: unfit for cultivation, Arabic: *بور*) however, the last type was not taken into consideration as it identifies as a rural brownfield and conversely, this research is solely investigating urban brownfield.

To further elaborate, a *Fadlih* which when taken back to its root word and according to the Arabic dictionary translates into: what remains from something (Arabic: *ما بقي من الشيء*) (Almaany Arabic Dictionary, 2017) and in the planning practice in Amman refers to the piece of land which results from the opening of a street. Note at the figure below, the red line represents the right of way, the leftover piece of land which resulted from the intersection of the right of way line and the property outline would be the *Fadlih* (outlined in the red circle). According to the head of the

regulation department, in most cases, the resulting shape is irregular and too small for the building regulations to apply on (i.e. setbacks and building percentages) therefore remains vacant and neglected.

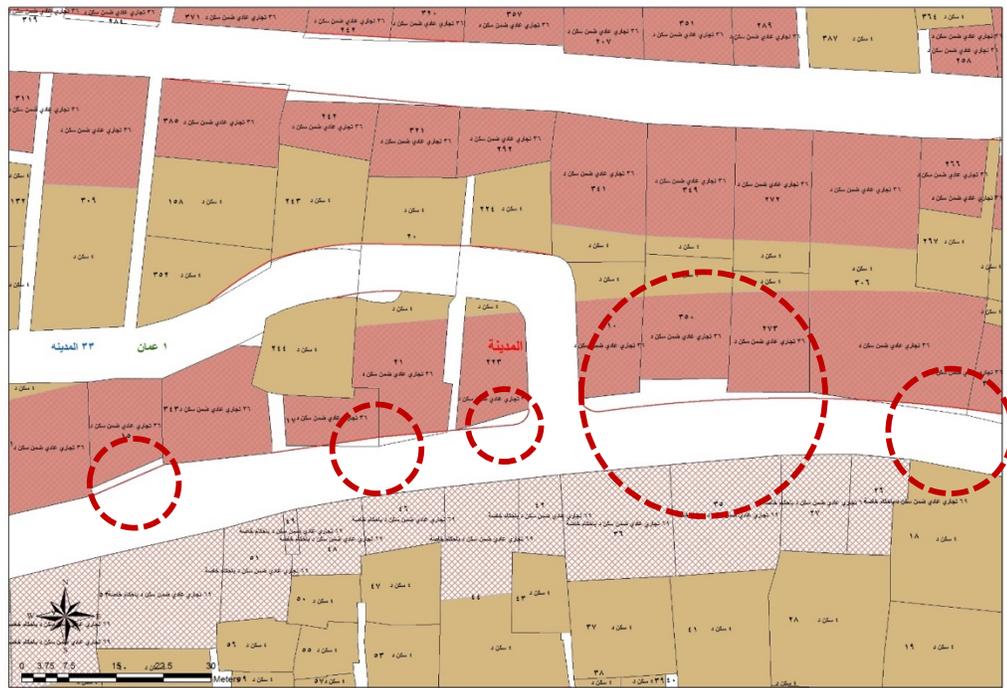


Figure 9 Land leftover land-use map. Source: GAM- GIS for the author (2016).

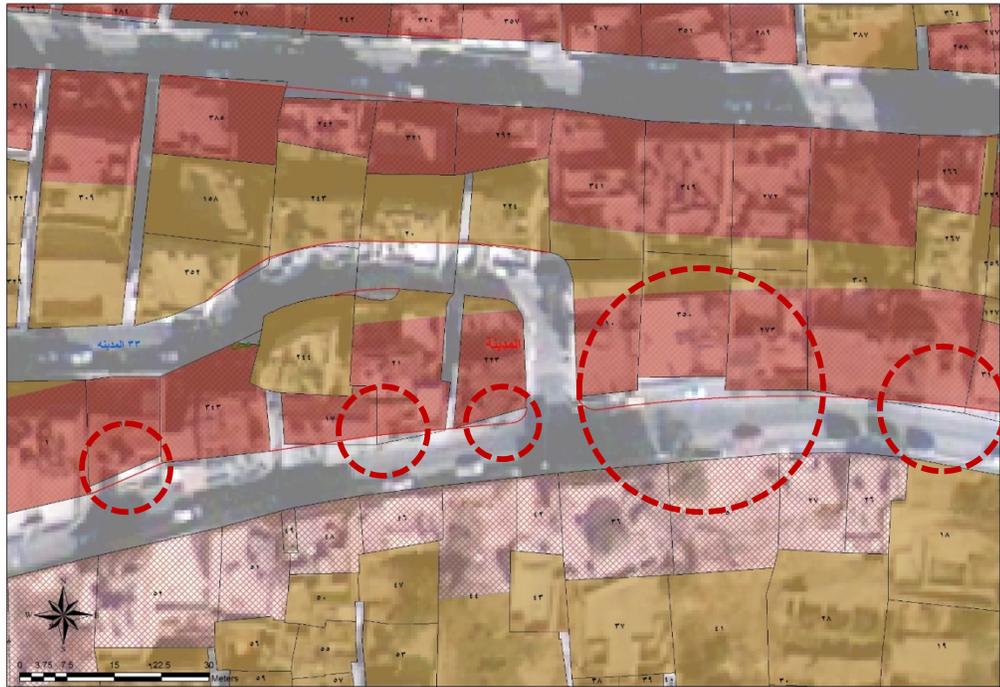


Figure 10 Land leftover land-use over aerial view map. Source: GAM- GIS for the author (2016).

On the other hand, a *Nutfih* which when taken back to its root word and according to the Arabic dictionary translates into: little of something (Arabic: شيء قليل من أي شيء) (Almaany Arabic Dictionary, 2017) and in the planning practice in Amman refers to the remaining land bit which results from the division or regulation of a previously owned land parcel. According to the head of the regulation department at GAM, the *Nutfih* is also often irregular in shape and too small for the building regulations to apply on. Note at the figure below the *Nutfih*'s outlined in blue, unlike the *Fadlih*'s, *Nutfih*'s are given separate lot numbers, also note *Nutfih*'s are given the same land-use (residential D in the case demonstrated) and are given special regulations such as lower prices, less setback requirements or increased building percentages to encourage adjacent land owner(s) to buy them.

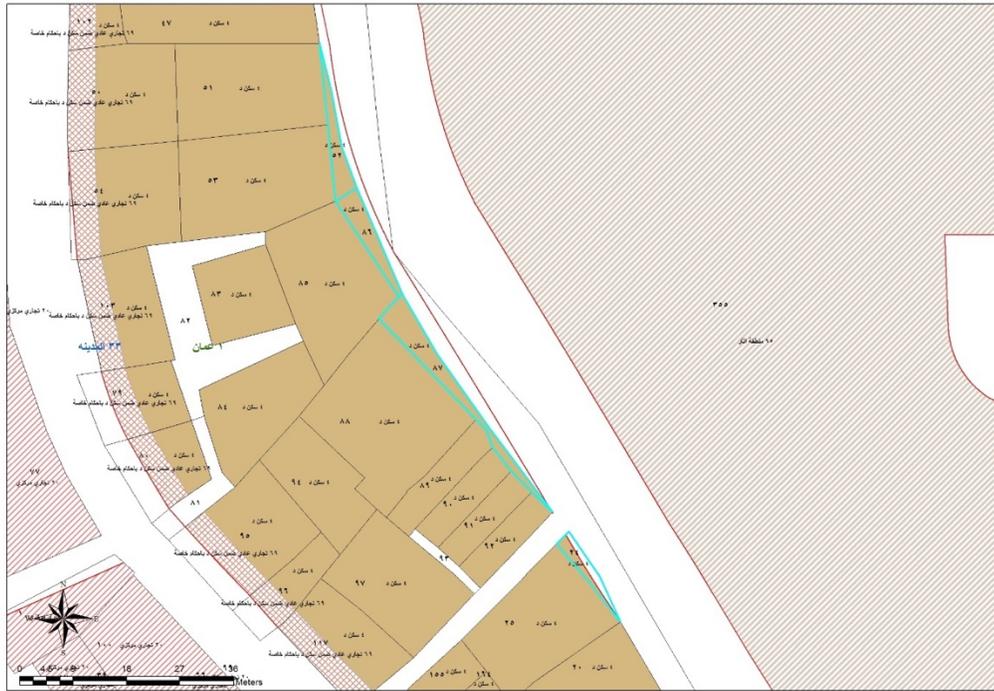


Figure 11 Land bit land-use map. Source: GAM- GIS for the author (2016).



Figure 12 Land bit land-use over aerial view map. Source: GAM- GIS for the author (2016).

The third and last marginal planning outcome, the *Arsah* which when taken back to its root word and according to the Arabic dictionary translates into: the wide space between properties where there is no building (Arabic: البقعة الواسعة بين الدور لا بناء فيها) (Almaany Arabic Dictionary, 2017) and in the planning practice in Amman refers to the land area found between two neighbouring parcels or two constructions in two adjoining parcels. No map was provided for this type as it was undetectable on the GAM GIS maps due to the setbacks and regulations to each land-use.

Interestingly, unlike the *Fadlih* and *Nutfih*, the term *Arasah* was found in regional planning regulations in Jordan in addition to neighbouring countries such as Syria and Saudi Arabia. According to the legal consultant interviewed for the study, landlord and tenants law no. (11) for the year 1994 amended by the law no. 2000/30 and law no. 2009/17 and law no. 2010/43 and amended law no. (22) for the year 2011 and law no. (14) for the year 2013 (DLS, 2017) states that; (A) for the owner of a rented *Arasah* for any purpose the right to clear it provided the following two conditions apply; (1) the tenants issued a legal building license; (2) that the owner has notified the tenant(s) through the notary not less than two months in advance. The tenant(s) afterwards have no right to return to the previously rented property and is only entitled to a compensation estimated by the concerned court. (B) If there exists any construction that the tenant(s) got permission from the landlord to build on the *Arasah* to be cleared – excluding kiosks, security rooms or the similar— they are not allowed to be removed unless they have been erect no less than ten years. As noted, this law similar to many other laws does not protect or support temporary users which this study argues is a primary barrier to establishing temporary urbanism practices in the context of the study. This will be picked up later in the temporary urbanism in Amman chapter.

From another legal point of view regarding the *Fadlih* and *Nutfih*, according to the head of the legal department, the property law, article (173) states that unless within the legal quarter (the maximum 25% percentage the government is allowed to deduct from any land to open streets or provide services or infrastructure) a property owner is compensated for the complete value of the land if the ‘*street right of way*’ deducts the whole property or leaves a *Fadlih* or *Nutfih* invalid for construction or use which in this case becomes property of the municipality (DLS, 2015). In line with this law, the municipality currently owns abundant similar geographies which are unfit for traditional use and construction which is problematic not only as these sites cease to participate in the economic growth, but also became an extra burden on the governmental authorities as they are serviced with infrastructure and road network for example but fail to generate revenue to balance the acquired services. This is another place where the study attempts to propose temporary urbanism, however, this will be picked up later in the temporary urbanism in Amman chapter.

Moreover, the *Fadlih* and *Nutfih* are also problematic to potential property owners for a variety of reason, at least the two revealed through the investigations, firstly, according to local participants and confirmed by local news, several incidents where buyers would forcibly buy the *Fadlih* or *Nutfih* as a prerequisite to buy the adjacent property were reported and published in local newspapers (Al-Said, 2015). However, according to the head of the legal department, there is no law supporting this accusation. According to Rum News Agency, the reported case is currently under investigation at the complaints department of the Board of Grievances (Al-Said, 2015), moreover, according to the locals statements, this is a recurring situation that often goes unnoticed due to the marginal difference to the property size that the buyer pays for

unknowingly. Secondly, according to local participants, there are *Fadlih* and *Nutfih* hunters that buy these pieces of land as part of a deceptive scheme, the hunters are interested in *Fadlih* and *Nutfih* for two main reasons, firstly as mentioned earlier, they are often given special regulations and special prices therefore are more affordable, secondly, due to their location between the property and street especially adjacent to un-owned land, the hunters await until the adjacent property is purchased and occupied to start a series of unpleasant activities such as piling waste or limiting street access which would force the new owner to either buy the *Fadlih* or *Nutfih* for a price much higher than the hunter bought it for or sell their own new property for a price much cheaper than what they bought it for.

Below are few images of *Fadlih*'s, *Nutfih*'s and *Arsah*'s scattered throughout the city. Note their deteriorated physical conditions.



Figure 13: Examples of Fadlih's, Nutfih and Arsah's_1. Source: Author (2015)



Figure 14: Examples of Fadlih's, Nutfih and Arsah's_2. Source: Author (2015)



Figure 15: Examples of Fadlih's, Nutfih and Arsah's_3. Source: Author (2015)



Figure 16 Examples of Fadlih's, Nutfih and Arsah's_4. Source: Author (2015)

5.3.1.2. *Discontinued mines and quarries:*

With the enactment of the Small Business Relief and Brownfield Revitalisation Act (also known as the '*brownfield law*'), the definition of brownfields was expanded to include mine-scarred lands making these properties eligible for the benefits of the brownfields program. EPA defines mine-scarred lands as "*lands, associated waters, and surrounding water sheds where extraction, beneficiation (crushing or separating), or processing of ores and minerals (including coal) has occurred*" (EPA, 2004: 2).

According to USEPA (2005), mine sites have a variety of potential uses and their post-mining clean-up for redevelopment provides an opportunity to turn them into lands that have beneficial uses. However, similar to the situation in Jordan, complex economic, social and environmental

issue face communities planning to redevelop them including finding resources to characterise and remediate sites with potential significant environmental issues; addressing state and local regulatory requirements, and; working through redevelopment issues with the local community and stakeholders.

To help address these challenges, the USEPA through its Brownfield and Land Revitalisation Technology Support Centre, prepared a primer on Mine Site Clean-up for Brownfield Redevelopment which this study suggests adopting to provide information about the clean-up aspect of mine site redevelopment, including new and innovative approaches to more efficiently characterise and clean up those sites. The use of these approaches to streamline characterisation and remediation of mine sites offers the potential for redevelopment at a lower cost and within a shorter timeframe (EPA, 2005).

Meanwhile, in terms of the guidelines for rehabilitating mined and quarried land in Jordan, according to the assistant manager of the Environmental Inspection directorate in addition to the assistant manager of the Monitoring and Assessment directorate at the Ministry of Environment (MoE), the management of mines and quarries post-activity in Jordan is extremely modest. The environmental impact assessment does not exceed the role of being a formality or a routine procedure, and despite having environmental rehabilitation guidelines, the mine/quarry owners prefers to pay the very little bail condition of half a Jordanian Dinar² per meter square of waste. Moreover, a confidential source mentioned one case where the owner went with the forestation option, however, the rubble used to fill the site was not corresponding to the required specifications which resulted in landslides which affected the adjacent streets and constructions.

² Equivalent to 55 pennies as converted on May 16th 2017.

In another case the source also mentioned, the land was rehabilitated for recreational purposes, however, after few years, the owner filed to change the land use from industrial into residential D and after providing the required documents and studies, the soil test showed the site is not suitable for traditional construction, despite that, the owner eventually attained the residential D land use change permission provided special building techniques are used. Unfortunately, as the source mentioned, the site was sold and construction commenced using traditional methods which led to the collapse of large parts of the site in addition to the new established construction, the case is currently is in the court of law.

For example, see below figure image of a discontinued quarry which according to the head of the Mines and Quarries directorate was outside the boundaries of Amman, however, due to the exponential urban sprawl has become part of the city. The surrounding neighbourhoods are endangered of landslides and suffer from constant dust which is causing severe pulmonary problems especially to elderly and children whom are also endangered of falling into the steep cliffs, yet, nothing is being done about it according to the statements of the local area residents.



Figure 17 Quarry site within the urban setting in Amman. Source: author (2015)

Note at the figure below a quarry site discontinued since the early 2000s, located within an urban setting and has been given a green space land use as the post-mining end use. Today, more than a decade post its closure, the site still awaits treatment.



Figure 18 Discontinued quarry site aerial view map. Source: GAM- GIS for the author (2016).

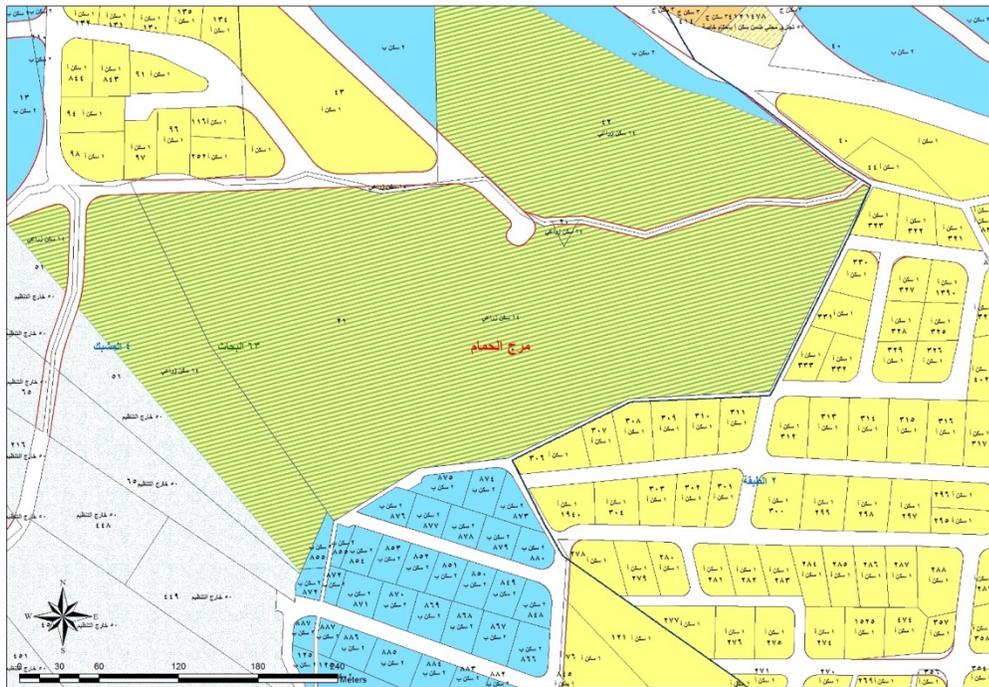


Figure 19 Discontinued quarry site land use map. Source: GAM- GIS for the author (2016).

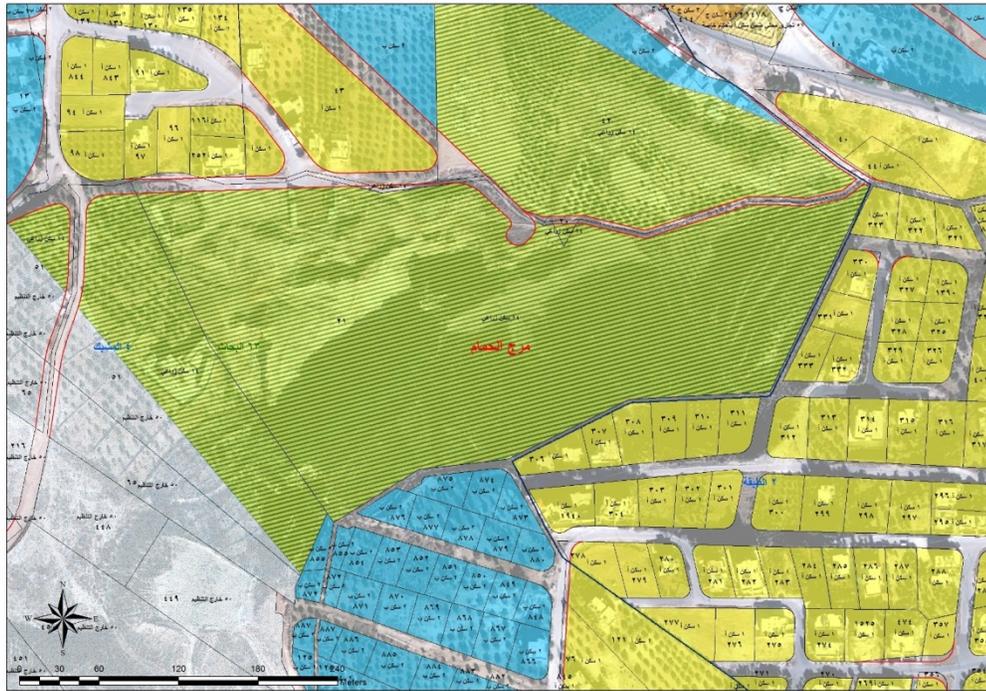


Figure 20 Discontinued quarry site land use over aerial view map. Source: GAM- GIS for the author (2016).

End land use in the mining industry is increasingly becoming a key consideration guiding the rehabilitation and closure planning and the need to develop comprehensive land use plan prior to conceptualising closure objectives and associated rehabilitation measures is also gaining momentum. Towards reinstating post-mining land capabilities to the pre-mining landscape and towards ensuring that mining operations consider ways of reinstating functional end land use that passively contribute towards the future biophysical and societal demands of people living in Amman or in proximity to the disturbed environment, mine closure planning (Kotze, 2013) which the study argues is missing in Amman must be considered, a mine closure planning that provides broad future land use objective(s) for the site, and a plan that describes the final and future land use proposals and arrangements (MPRDA, 2014).

5.3.1.3. *Unfinished mega-projects:*

The economic boom in the early 2000s had considerable effects on the urban transformation of Amman, large-scale property development ventures poured into the country and novelty planning methods such as gated communities and high-rise skyscrapers were introduced to the urban fabric of the city. Similar patterns of urban change emerged in neighbouring countries such as Beirut, Cairo, Dubai, Qatar and Damascus –prior to the Syrian crisis— (Daher, 2013), thus, this section focuses on a typology which is the manifestation of a particular outcome of the economic thrive and shortly following crisis in the context of Amman.

As emphasised earlier in the context chapter, the socio-economic and political characteristics of Amman encouraged foreign investors to extensively operate in it. Consequently, numerous oil-capital projects from Arab Gulf countries mushroomed throughout the city. The term ‘*Arab Mega project*’ was first introduced by Barthel (2010: 5) to describe large-scale real estate development which he considered as vectors of contemporary Arab town planning and the circulated images of the back then proposals for the majority of mega projects in Amman mimicked images of similar western development projects (Adham, 2005). Moreover, the projects promised the provision of better services for the area; creating a competitive business environment that supports start-ups and entrepreneurs, and; create first-class tourism attractions (Daher, 2013).

However, in addition to other identified effects of the “*cutting-edge urbanism*” (Daher, 2011: 275) in Amman such as the excessive privatisation; the abrupt increase in property values; the pressure on the already struggling infrastructure system including transportation, water and power supply; the circulation obstructing urban flagship projects created, as well as; the social impacts such as emphasizing the already apparent urban segregation through the promise to

create a lifestyle that accommodates the contemporary needs for the elite in the centre of Amman and pushing lower-income groups to the city peripheries (Daher, 2013). This study therefore identifies another potential brownfield typology which is abandoned unfinished mega projects structures.

According to the head of the Special Project Sector (SPS) department at GAM, in order to keep up with the rapid change, benefit from what seemed to be an exceptional opportunity and compete with neighbouring countries to attract potential investments, poorly- planned extreme measures were implemented. For example, to speed the process, in many cases building permissions were obtained without the provision of all necessary documents such as soil tests, drainage analysis or environmental impact assessment. Moreover, the proposed projects were given abundant facilitations such as minimal—to none—setback requirements, additional floors, higher building percentages, and less open/ green space requirements, facilitations that according to the head of SPS, GAM today regrets. The following paragraphs demonstrate the three most controversial mega projects in Amman.

- **The Jordan Gate (Amman Gate) project:**

The Jordan Gate (also referred to as the Amman Gate) project which belongs to Bahraini - Kuwaiti developers for example commenced in 2005, has been suspended in 2009 post the global economic crisis and until this day remains on pause. The project faced two main accidents during its construction, a fire and collapse incident when fire broke in the eighth floor of the North tower in August 2006, fortunately, nobody was injured, however, one month later in September 2006, three floors of the same tower collapsed killing four workers and injuring 15 (Kheetan, 2009). In the second incident, a crane

collapsed in May 2009 after being overloaded. Weighing 30 tons and hanging 200 meters high, the falling crane injured one Egyptian worker, moreover, for the following three days, residents living near the collapse area were evacuated to nearby hotels (Jordan Times, 2009). Another added complexity to the project is that the shorter tower was supposed to become a Hilton hotel, however, according to a confidential resource, in light of the lengthy halt and completion date uncertainty, the company withdrew their investment which put the project at a serious financial dilemma. Note below the figure for the project proposal versus the actual situation.



Figure 21 Jordan Gate (Amman Gate) project proposal. Source: Skyscrapercity.com (2006)



Figure 22 The current situation of the Jordan Gate (Amman Gate) project. Source: Jordan Times (2016)

According to local resident living in the towers area, the site was previously a public garden which children, youth and elderly today much miss. Moreover, according to the statements of locals from different locations in the city, the project sits in a very vital area in Amman where circulation is already congested, the addition of the towers created a bottle neck affect which adds to the traffic jam. In the words of A.H. (male, 48, local resident) “... *to be honest, I am glad this project is on hold. Can you imagine the traffic jam at 8am when thousands of employees are rushing to their offices in the towers or at 6 pm when the same thousands (dream of) going back home?... I feel sad for the families living in the area. Can you imagine how are they going to reach their jobs or get their kids to school every morning?*” (Fieldwork diary, 2015).

According to the Jordan Times (Namrouqa, 2016), the \$400 million project was supposed to commence within days of signing an agreement between GAM and the involved stakeholders in May 2016 with a new completion due date in 2018, no further data was obtained.

As a response from the local community, several undergraduate and postgraduate architecture and urban planning students in different universities are encouraged to look for redevelopment alternatives as their graduation projects or as their post-graduate research projects. One proposal in particular by Hannah Salameh Design Studios entitled *Jordan Gate Park* went viral through social media that governmental authorities actually replied to people's claims. The proposal aimed to address the energy and water shortage problems in Jordan through the passive adaptation of the towers by several proposals including; removing 25,000 glass panels and replacing them with photovoltaic cells that collect solar energy thus solving the glare problem the locals and drivers currently suffer from; using the vertical circulation shafts to cultivate wind power though installing wind turbines in the 180m high shafts; transforming the towers into vertical urban farms rented to local farmers to grow either local product or non-local, imported products in the controlled-environment farms; restoring the old park on the ground floor for the surrounding local community; harvesting rain in the already constructed underground water tanks and using the collected water to irrigate the proposed vertical farms; using the already constructed four floors of underground parking to reduce the congestion problem, moreover; 10,000 panels of the previously removed 25,000 glass panels will be used as partitions at the farmers market which the proposal suggests at the first underground floor open and connected to the restored ground floor garden, the farmers market would

minimize transportation and shipping costs which means cheaper products for the consumer; in addition; the first underground floor is also transformed into an eco-friendly gym that in return produces power thus creating a self-sustained system that uses the produced energy to service the building including the provision of power. The remaining 15,000 panels the proposal suggests are used to build 300 bus stops throughout the city of Amman. The proposal suggests additional possibilities such as creating a rooftop that allows people to see Amman from what is today the highest point in its skyline and opening a restaurant that uses the harvested products from the vertical farms in its kitchens in addition to proposing activities such as bungee jumping or zip-lining between the two towers which would transform the project from a derelict construction to a functional dynamic one.

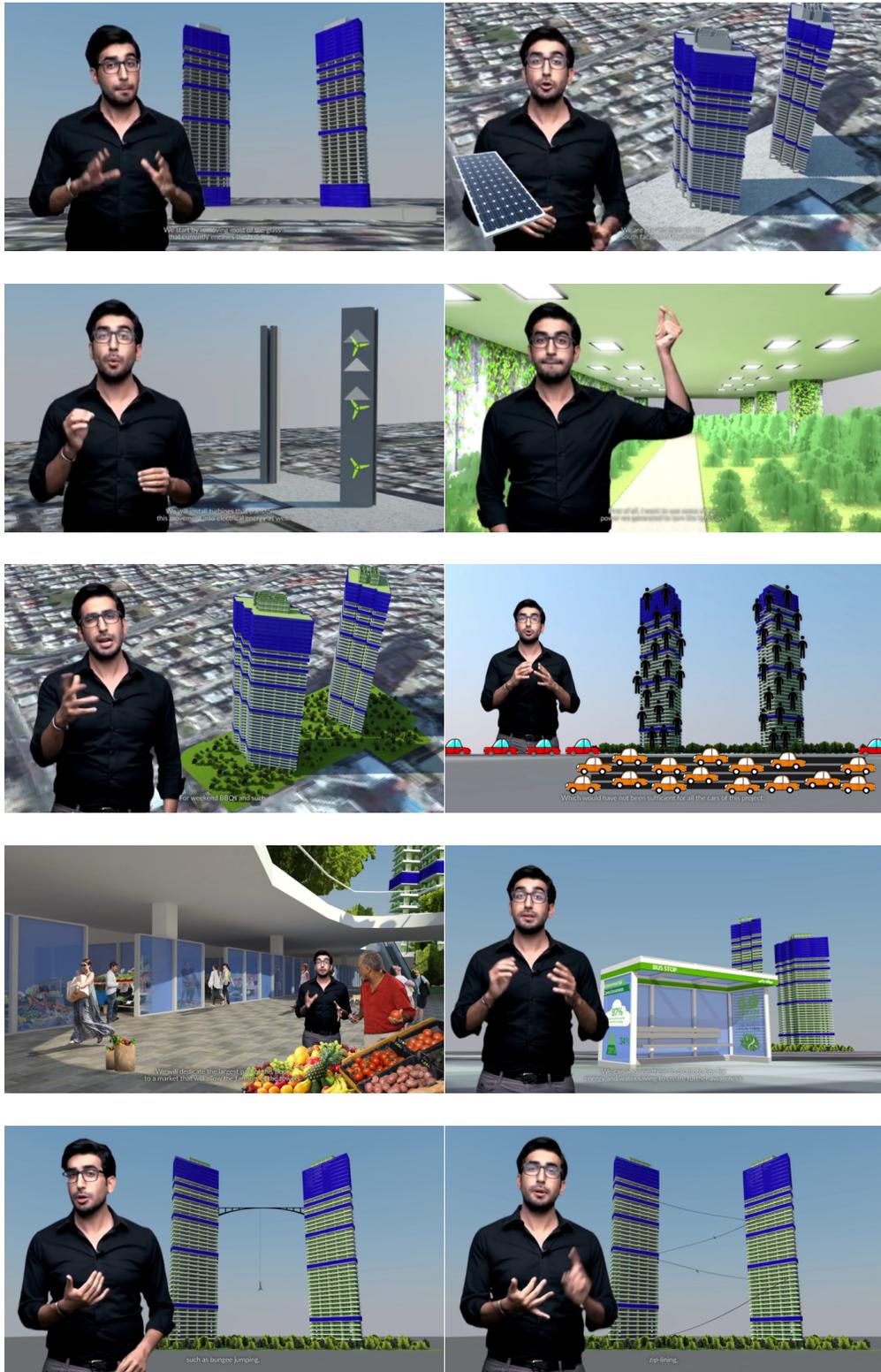


Figure 23 The Jordan Gate Park proposal. Source: Hanna Salameh Design (2016)

The viral spread of the proposal video and following radio and TV interviews provoked the governmental authorities whom described the '*critical*' proposal as being infeasible and unrealistic. This study will not go into further details, however, the proposal was highlighted to emphasize the importance of public participation in the decision-making process and highlight the endless creative possibilities that they can pinpoint. This will be later picked up in chapter seven, achieving a more spatially just Amman.

- **Sanaya Amman (Limitless towers) project:**

The second example for derelict mega projects this study looks at is the Sanaya Amman (also known as Limitless towers). Located in Wadi Abdoun, also commenced in the year 2005, however, its construction stopped post the excavation phase leaving the site with 20+ meter deep hole. With a vision to become the largest Human Capital and Talent Management in the Middle East and North Africa (MENA) region (Sanaya.net, 2006), the venture is currently postponed due to current market conditions (Limitless.com, 2016). See below the proposal renders versus the current situation of the project site.



Figure 24 Sanaya Amman (Limitless towers) proposal render. Source; Consolidated Consultants (2014)



Figure 25 Sanaya Amman (Limitless towers) hole in 2009. Source: Project: Manifesto, Holes on hold competition Maiss El-Razem (2011)

Although the latter image has been captured in 2009, it still reflects the current conditions of the site, moreover, this image was selected specifically as it explains the circumstances where a 10-years-old boy who was playing in the rain water pool drowned and, sadly, passed away. No news was published on the accident, however, the local children commemorated their friend *Mus'ab* (Arabic: مصعب) on the strips of metal sheets surrounding the site (see below image. The text reads: May your soul rest in peace *Mus'ab*). Post *Mus'ab's* accident, the hole was filled with sand and gravel. See figure below.



Figure 26 May your soul rest in peace *Mus'ab*, *Sanaya Amman (Limitless towers) project*. Source: *The Living Voids thesis*. Amr, Mazahreh and Muhtaseb. UJ (2011)



Figure 27 Sanaya Amman (Limitless towers) hole post filling it with sand and gravel. Source: Project: Manifesto, Holes on hold competition (2011)

According to the head of the SPS department, the project failed due to the lack of preliminary studies, the site is located in Wadi Abdoun, and as the name suggests –and as demonstrated in the context chapter— the Wadi (English for valley) is below street level from one side, therefore, excavations were impossible unless drainage is taken care of as it was surely to collect rain water which was exactly what happened.

- **The Living Wall project:**

The third and last example of derelict unfinished mega projects this study investigates in Amman is the Living Wall project, a 134,000 meter-square mixed-use complex which also commenced in 2006 but put on hold midst construction. See below images of the design proposal and current situation.



Figure 28 The Living Wall design proposal. Foster+Partners (2006)



Figure 29 The current situation of the Living Wall project site. Source: Project: Manifesto, Holes on hold competition (2011)

According to the head of the SPS department, unfinished projects including the living wall are, in addition to being failed and have already cost the government millions of Jordanian dinars, a burden to the government. They are hazardous to the surrounding

neighbourhoods and are threatening the adjacent street networks, moreover, are a waste of land and building materials. Therefore, as a desperate measure, the government is providing further facilitations for investors to redevelop such projects. Regarding the Living Wall project in specific, in addition to the extra facilitations, a land-use alteration is being considered for a Saudi investor who is interested in the project under his condition to develop it into a hospital although less than few hundred meters away, the building marked in the red circle is Jordan's hospital. This would violate the Jordanian building regulation medical services buffer area guidelines, yet, the offer is still being discussed and might eventually be considered.

5.3.1.4. Contaminated and hazardous sites:

Under the general brownfield definition, contaminated and hazardous sites are widely recognised. Similarly, in Jordan, there are numerous types of sites that identify as contaminated or hazardous. However, through the conduct of the study, the following three types were the most prominent.

- **Near historical and archaeological sites:**

In Amman as in other Jordanian cities as emphasized in the context chapter, many historical and archaeological sites are integrated within the urban fabric.

According to the head of the Comprehensive Master Plan (CMP) department, land parcels that are immediately adjacent to historical or archaeological sites within the urban city are referred to as prohibited areas, prohibited in the sense that no construction or development is allowed in these sites. The areas are often deteriorated due to neglect and abandonment, the head of CMP notes that although the land use codes and building regulations do not

allow for construction in those areas, their redevelopment as public spaces or through using temporary structures is a favoured idea. See below example of a prohibited site near Amman citadel (Arabic: جبل عمان, English: *Jabal Amman*) in Downtown Amman. Note the hatched in brown diagonal lines area surrounding the historical site.



Figure 30 Prohibited area site aerial view map. Source: GAM- GIS for the author (2016).

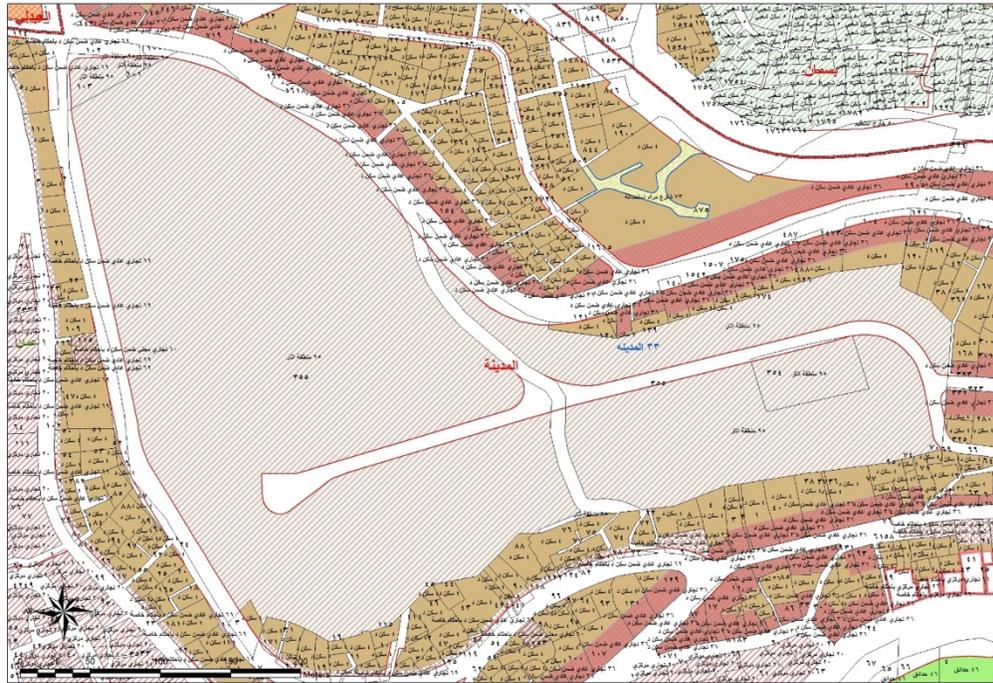


Figure 31 Prohibited area site land use map. Source: GAM- GIS for the author (2016).

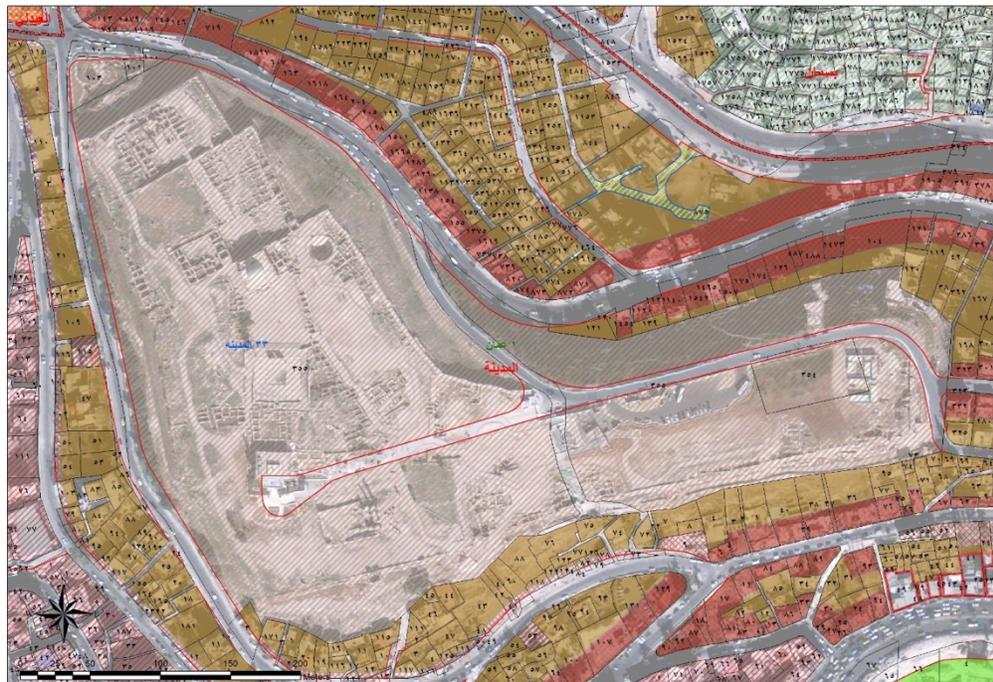


Figure 32 Prohibited area site land use over aerial view map. Source: GAM- GIS for the author (2016).

- **Landfills and scrap yards:**

Often located at the outskirts of the city, landfills and scrap yard sites in many cases become part of the city during its expansion. According to the head of CMP department and as the example below demonstrates, similar sites are often located outside the boundaries of the municipality regulation, therefore, remain out of its control. However, as the example below also demonstrates, the new regulation aims to remove such sites down the line –transformed into a highway in the example below and highlighted in the red circle—.

The situation is often problematic as the residents of the area and the occupants of scrap sites would have already constructed dwellings or established workshops or garages in the area and according to officers' statements, are not very collaborative and are often aggressive. In the words of the head of the CMP department *“this is a completely understood and justified behaviour, we are taking away their homes and source of income. If I was in their shoes I would probably do the same. But like it or not, everything is going to be demolished”*. (Fieldwork diary, 2015)

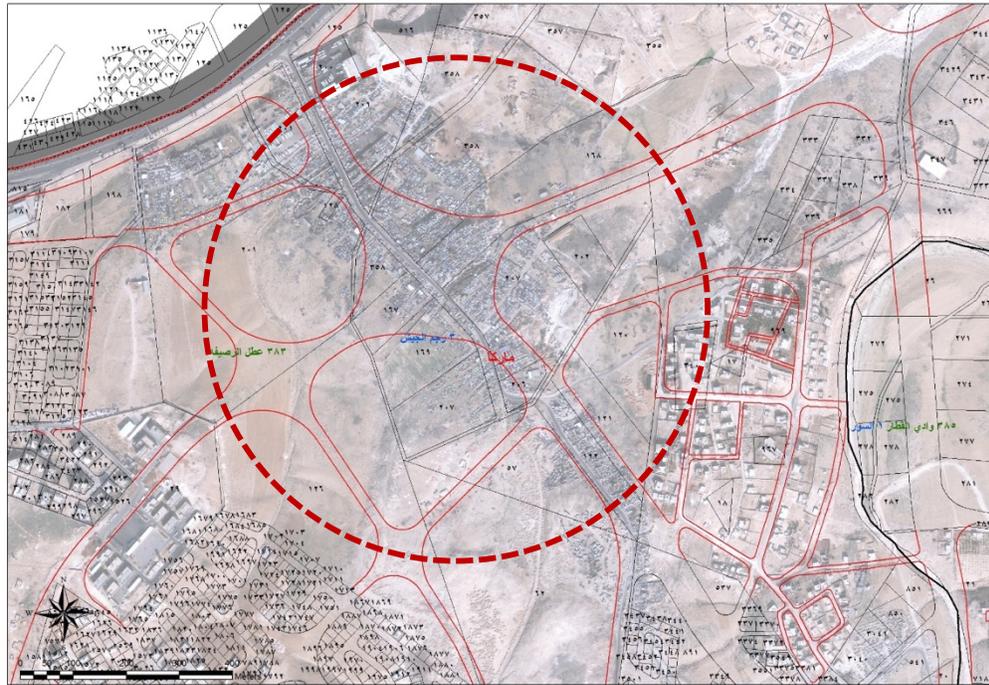


Figure 33 Scrap yard site aerial view map. Source: GAM- GIS for the author (2016).

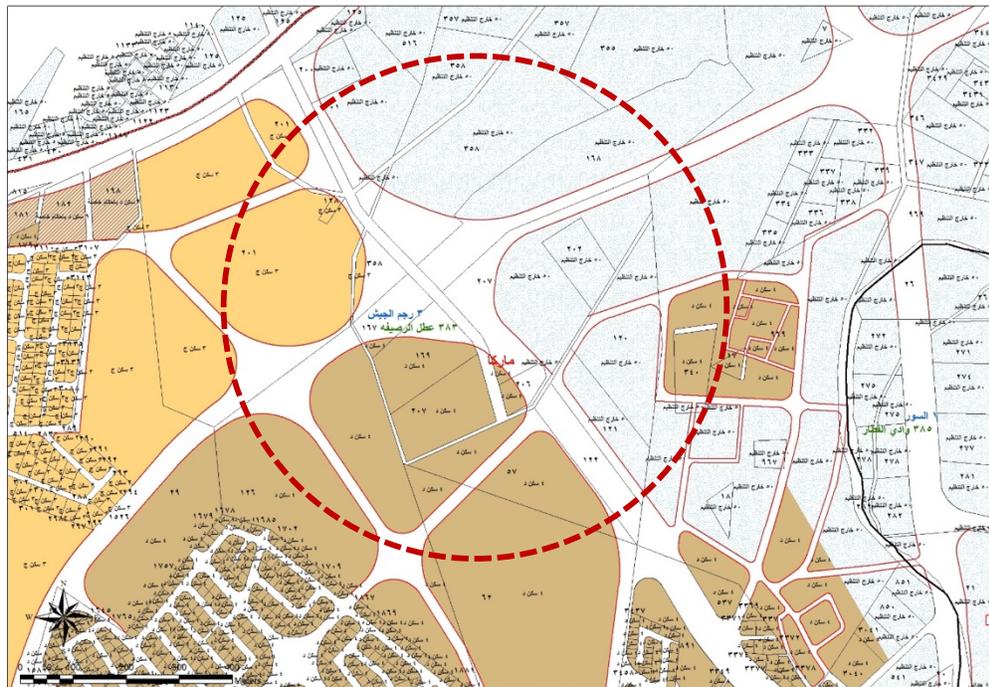


Figure 34 Scrap yard site land use map. Source: GAM- GIS for the author (2016).

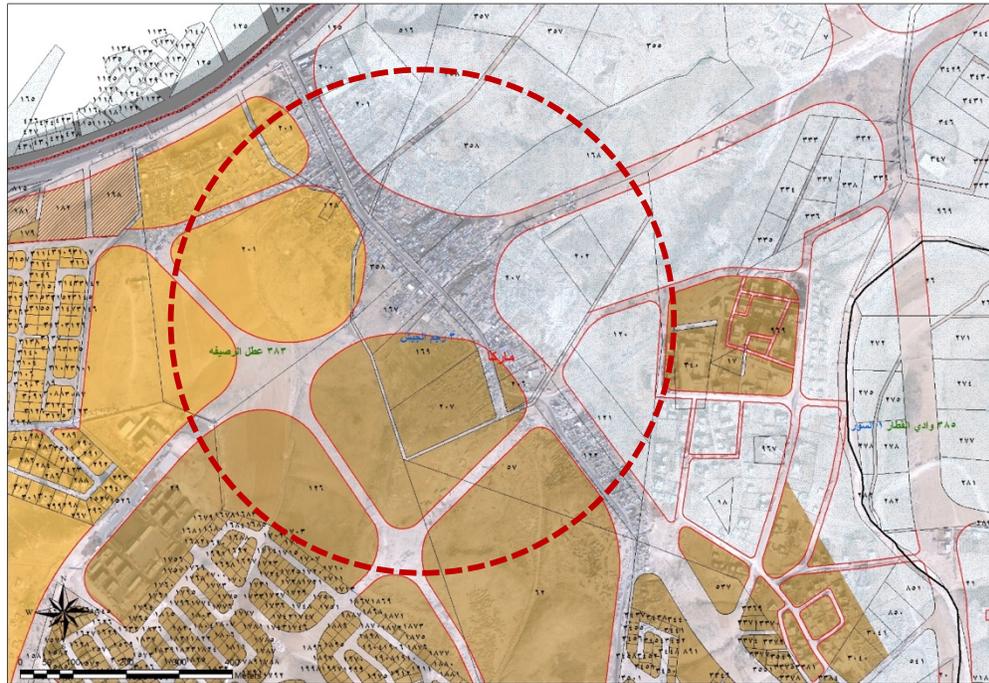


Figure 35 Scrap yard site land use over aerial view map. Source: GAM- GIS for the author (2016).

- **Near high voltage electrical lines and towers.**

Another typology that falls under the contaminated and hazardous sites category and suggested by the head of the CMP department was the land parcels located adjacent to high voltage towers and along the strip parallel to the electrical line between the towers. Such properties are given special regulations, for example, the prices are extremely cheap, the setback requirements are reduced and the building percentages are higher, however, constructions are only allowed to be one floor high –in order not to affect or get affected by the electric current—. According to the statement of a local family in one near high voltage tower neighbourhood, living near the tower caused the father of the family to suffer from cardiac problems, he currently has a pacemaker, moreover, the house in

addition to neighbours' houses suffer from current inconsistency which ruined many of their electrical devices. See at the example below, high voltage towers are circled in red (note their shadows).

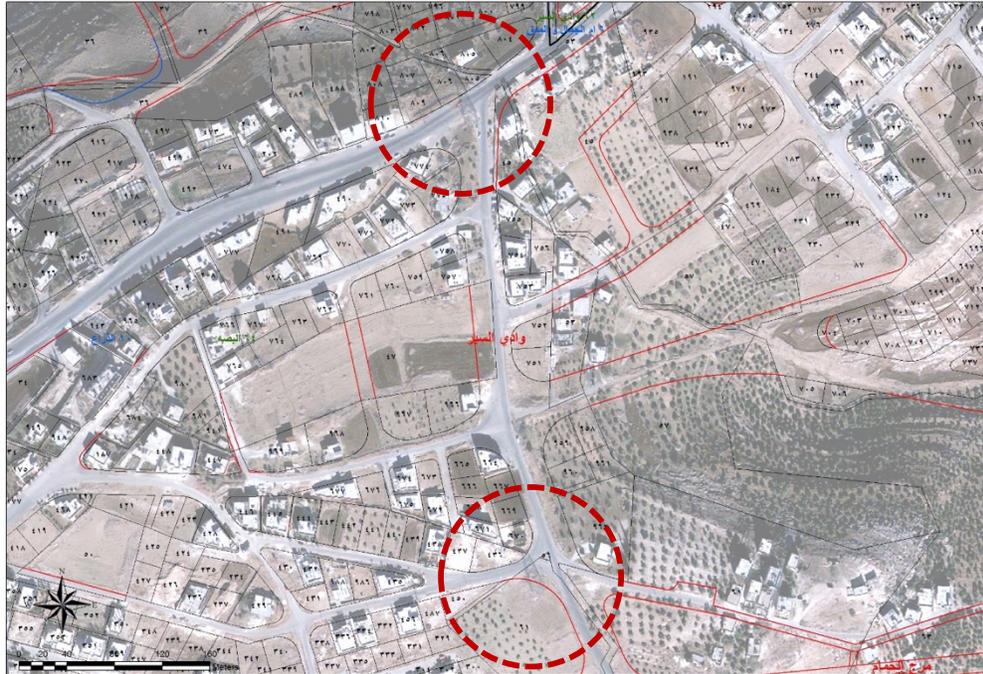


Figure 36 Near high voltage site aerial view map. Source: GAM- GIS for the author (2016).

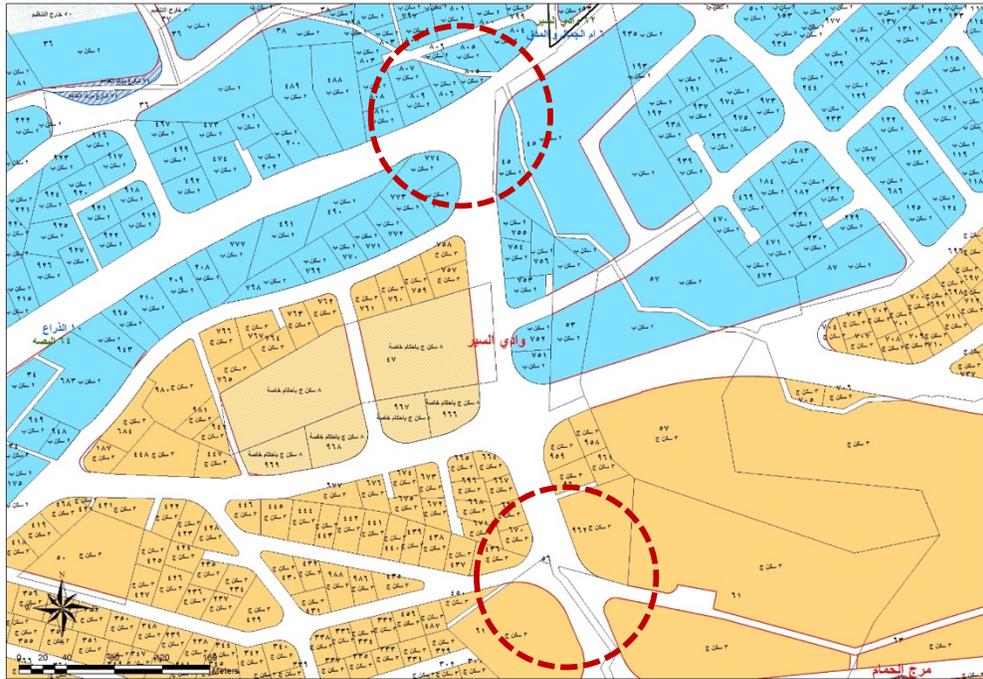


Figure 37 Near high voltage site land use map. Source: GAM- GIS for the author (2016).

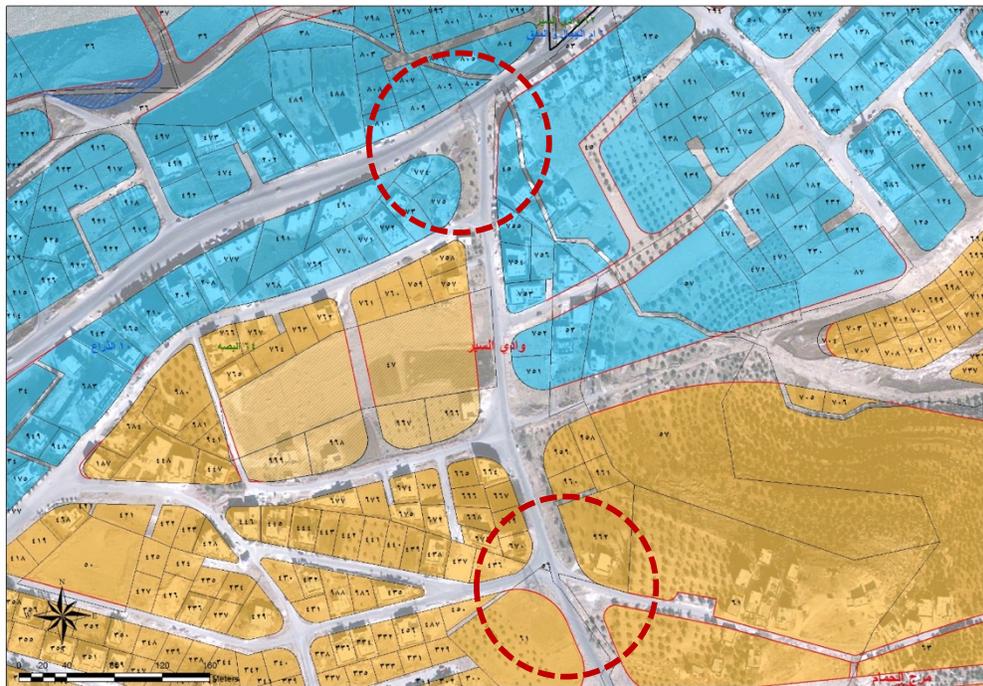


Figure 38 Near high voltage site land use over aerial view map. Source: GAM- GIS for the author (2016).

In general, in terms of the contaminated and hazardous sites potential brownfield typology, much of the investigations yielded in no significant results. For example, interviews with the assistant managers of the Waste Management and Hazardous Substances directorate (WMHS) –including the Solid Waste Management (SWM) section, the Hazardous Waste Management (HWM) section and the dump site division at MoE only uncovered the severe lack of a developed waste management method or clean-up strategy, a situation this study also aims to address. Moreover, as emphasized earlier, other types of contaminated and hazardous sites exist throughout the country, however, due to the time constraints and limited financial resources, this study was only able to investigate few which it argues will pave the way for broader, more extensive future research to explore the urban phenomenon in more details.

5.3.1.5. Miscellaneous abandoned sites and buildings:

Whether due to demographic shifts or the constant transformation of the city, abandoned and neglected sites and buildings are dispersed throughout Amman. The following paragraphs shed the light on three famous examples.

- **The King Abdullah park**

Established in the 1980s as a recreational urban space with an integrated amusement park that includes a variety of rides, cafes and restaurants, outdoor spaces and plazas in addition to a skating rink and a cable car, the park (Arabic: حدائق الملك عبدالله, English: *Hada'eq Al-Malik Abdullah*) was actively thriving in the period 1986-1999 until according to S.K. (male, 37, local participant) became Amman's "red light district". While interviewed officials failed to explain what went wrong with this urban space. The

statements of local participants attempt to elaborate K.L. (male, 56, former investor) for example tells he was a tenant for five shops in King Abdullah park, however, once infamous shops started opening and extending work hours to post-midnight, sometimes until next morning, families and schools started visiting the park less. In his words: “*I blame GAM for not being meticulous about the tenants and the type of business they intend to open... in a place designed for clean family fun where do bars and nightclubs belong?*” (Fieldwork diary, 2016).

The park was evacuated and shut down completely by GAM in 2012 after shop owners have been warned since 2008. According to JO24 (2012), a local news agency, the park has been closed after the four-years verbal notice deadline for shop owners with expired profession licences and/or violations. Moreover, the news pointed out GAM is seeking alternative rehabilitation and redevelopment options for the 50-acre park which no longer serves the public and has become a disreputable place and a source of disturbance.



Figure 39 King Abdullah abandoned park. Source: Cityseeker (2016)

The poor planning decisions exceed the building provision problem. In the words of A.M (Male, 53, urban planner) *“how does the municipality expect people to cross the highways surrounding the park from three sides in order to reach it? How does the land use suddenly transform from recreational to commercial? This is what happens when profit generating is government’s number one concern”* (Fieldwork diary, 2016).

- **The Housing Bank Complex**

The second example this study introduces to derelict projects in Amman is its iconic Housing Bank Complex (Arabic: مجمع بنك الإسكان, English: *Mujamma’ bank Al-Iskan*).



Figure 40 Housing Bank Complex-Amman. Source: photobucket.com (2016)

Established in the early 1980s, the complex consisted of retail shops, offices and restaurants and was thriving until the 1990s. Another phenomenon concerned authorities were not able to explain. According to the head of the CMP, perhaps it was the demographic shifts, the urban transformations of the city or the competing high-end shopping malls mushrooming throughout Amman. However, according to Al-Ghad newspaper (Al-Sheikh, 2011), post an acquisition change to a Libyan investor in 2001, the complex was bought for 11 million Jordanian Dinar which forced tenants to pay higher rents or close their shops considering the new considerably lower profit margin. As a result, the parking has been closed, the building has been stripped from banners and signs or any other indication of life inside the building, the closed shops are used informally as

storages and there was no adequate maintenance to the building in general which was becoming derelict day by day.

In a failed attempt to rehabilitate and revitalise the complex, a 7 million Jordanian Dinar budget was allocated. However, according to a previous tenant, the rehabilitation was limited to surrounding the complex with a fence which made the interior darker and the situation worse. He added that the 7 millions could have fixed the situation, however, the absence of governmental censorship and legal accountability on investors and developers is the reason the redevelopment failed. In the words of N.A (male, 42, another previous tenant as the Housing Bank Complex) “*the complex is today a symbol of economic recession, it lost its glamour and became without identity... the Iskan Bank Complex was once every Ammani family weekend destination, today unfortunately, if people don’t pass by it during their everyday commute, it would be completely absent*” (Fieldwork diary, 2016).

- **The suicide building.**

The third and last derelict building example this study presents in Amman is another unfinished project locally referred to as the suicide building.

The building has been featured many times in local newspaper pages and online, most recently last May, 2016 in the Jordan Times (2016a) with a story on a collective suicide attempt by five unemployed young men. Without going into details, the five men decided to end their lives which according to one is “*living because death hasn’t remembered us yet*” or to another who is “*still alive not for the lack of trying*”. Luckily, no suicide occurred that day as the young men changed their minds once the officer who went to save them promised them decent jobs.

Below are images of recurring suicide attempts from the aforementioned building from local news pages.



Figure 41 Various suicide attempts from the suicide building. Source: Various local news pages (2016)



Figure 42 Local caricature about the suicide building³. Source: Al-Ghad Newspaper (2009)

According to local participants' statements, the building's strategic location near the Internal Affairs Ministry and a local news agency made it the 'suiciders' go-to choice. In the words of U.M (female, 61, local participant) *"don't be afraid for the life of the ones who come here to 'attempt' suicide, they come here because they know someone will see them and give them what they want and save them. Be afraid for the lives taken in darkness and isolation where no one can give them a decent job or wed them to their loved one or whatever that is they want but can't get... give this building to those*

³ In English, the text reads: If you would like crisps and juice I can bring you that...!! but political reforms and lowering pricing and the nonsense you are asking for: NO WAY!! If you like that then okay! .. otherwise: GO AHEAD JUMP AND STOP BOTHERING US.

unemployed, at least you will be solving their problem and preventing the suiciders from going all the way up without being noticed” (Fieldwork, 2016).

There are many other example of derelict, vacant or abandoned sites in Amman, however, as emphasized earlier, due to time constraints and the lack of financial resource, the study will stop at the aforementioned examples. It is important here to note that the study identifies a crucial need for a base-map for the amounts and locations of potential brownfield sites in Amman, in fact, having discussed a mapping project with the head of the GIS department in GAM displayed a genuine interest, however, this remains another potential future research project.

5.4. Barriers to brownfield reclamation in Amman:

Considering not only the examined literature but also the analysis of the five identified potential brownfield sites typologies in Amman, the following sections attempts to identify both the associated barriers and benefits to each type in addition to the overall urban phenomenon.

The first barrier this study brings to the table is the lack of a systematic definition which the study described earlier as a primary obstacle to the reclamation of brownfield sites. Not only does having a unified term to describe the urban phenomenon will ensure all involved stakeholders understand what is being investigated, the study notes it is also crucial to have one for the planning regulatory framework to adopt. In the words of M.K (male, 66, architecture and urban planning professor and practitioner) *“we need to act fast! If Jordan wishes to take forward any brownfield reclamation policies or programs, we need to formally introduce the term to the practice in totality from undergraduate and postgraduate modules, to the planning officials, to*

every stakeholder involved in the decision-making around these spaces... Most importantly, the term slash definition slash concept must somehow become in the laws, you know why? Because this is the only way Jordanians will consider it. If it becomes legal.” (Fieldwork, 2015).

Understood as the excessively complicated administrative procedure (Webster, 2017), bureaucracy is the second barrier this study identifies, the inflexibility of planning procedures and their time consuming processes makes it more difficult for landlords and developers, temporary users in specific, however, this point will be picked up later in the temporary urbanism in Amman chapter. The needless bureaucratic systems, policies and practices, in addition to bureaucracy related costs in planning regulatory frameworks is again not a problem exclusive to Jordan. In fact, several studies call for reducing administrative burdens by addressing unnecessary bureaucracy and red tape and stress that reducing administrative burdens results in smarter regulations (European Commission, 2012; Garbe et al., 2012). Thus, in order to facilitate the reclamation of brownfields in Amman, this study argues the bureaucratic challenges must be addressed.

In North America and Europe for example, there has been a growing interest from urban researchers and policy makers in the redevelopment and remediation of brownfields to renew urban areas for the purpose of improving the quality in life since the late 1990s (Sounderpandian et al., 2005; USEPA, 1997a). A similar approach in Amman the study argues is therefore long overdue.

For example, with regards to the discontinued mines and quarries, according to a confidential resource, although in Jordan the MoE can order the assessment and remediation of a contaminated site, follow-up and the actual implementation of the order is where the process

fails. In the source's words *"if you know someone who knows someone who knows someone, your case can stay in the court for decades until sometimes eventually dismissed... I think the problem lies in our collective awareness, we don't have one! Our priorities and concerns are individual and everyone cares for no one but their own"* (Fieldwork diary, 2015). De souse (2006) confirms this problem and adds that the barriers for brownfield redevelopment mainly come from policy and planning problems including liability uncertainty; regulatory complexity; insufficient information about the locations and conditions of brownfields and confusion regarding clean-up levels.

Another common barrier to brownfield sites development in Amman is the high clean-up costs. When compared to greenfields, the development of brownfields is not favoured to landlords or developers. Consequently, the government faces the challenge of how to encourage them to peruse such opportunities in spite of the added cost and financial risk associated with the environmental liability which according to Wang et al. (2011) necessities the mediation by local governments to bring the current landowners and potential developers to the negotiating table. In the words of M.J (male, 31, entrepreneur) *"trust me the benefit is mutual, we will be taking good care of the location, because then, we will look at it as it's our own, I mean no one wants to damage their own brand, right? ... Can you imagine the number of young start-ups like me that can benefit from having a location to kick-start their businesses? Considering the crazy prices of land in Amman, this is nearly impossible"* (Fieldwork diary, 2015).

Unlike the investigated cases in USA and Europe, according to fieldwork findings, the governmental authorities in Jordan do not implement any policies or programs that offer financial assistance packages to landlords, developers or other private sector stakeholders whom often

refrain from similar sites fearing it would be too expensive, time consuming or challenging to profitably develop (Sounderpandian et al., 2005). This study therefore suggests the concerned stakeholders must consider providing financial aid such as grants, loans, tax incremental financing, technical support, acquisition assistance or insulation from liability as encouraging facilitations to promote the reclamation of brownfield sites.

In addition to the systematic barriers identified above and the lack of governmental arrangements around the management of brownfield sites in Amman, this study argues the lack of public participation in the decision-making process is another paramount barrier to their reclamation. In addition to being an obstacle to achieving spatial justice which will be picked up later in the achieving greater spatial justice in Amman chapter, the absence of public participation in the management of urban spaces is obstructing brownfield sites from realizing their potential possibilities. The insight and perspective in addition to the local knowledge of city dwellers can be very informing to decision makers, however, as investigations revealed, they are not being considered as an actively participating stakeholder group. In the words of A.A. (female, 42, local participant) *“do we have the right to say anything anyway? Even if we do, would it be considered? I doubt... see this big office building over there, do you think me or anyone in the neighbourhood were told it was being built? We woke up one day to find a construction site with a strip of banners surrounding it. Now we don't know where to park our cars or where our kids can play... Our building is surrounded now by three taller buildings, and we no longer have access to sun, even worse, try stepping on my balcony or open a window in my house. You'll see what the people next to us are having for dinner”* (Fieldwork, 2015). According to the EPA Public Participation Guide (2016), public participation is necessary. It results in better outcomes

and better governance; makes easily implemented decisions that reflect public interests and values and are better understood by the public, moreover; public participation enables communities to develop long-term capacity to solve and manage challenging social issues. In addition, as highlighted earlier in the unfinished mega- projects potential brownfield typology, the knowledge of the locals and the (actual and potential) everyday user may very much inform the decision makers to come up with more efficient solutions that take into consideration the realistic needs of Ammanis.

5.5. Potential benefits to brownfield reclamation in Amman:

As emphasized in the literature review chapter, it is widely recognised that the reclamation of brownfield sites yields in substantial environmental, social and economic benefits including the clean-up of contaminated lands; the increase of property value; the expansion of the tax base; creation of jobs, and; promotion of a revitalised and positive image of urban life (Wang et al., 2011). The recycling of brownfield sites increases environmental quality, revitalises neighbourhoods, and financially benefits the public and private sectors. Moreover, the reuse of brownfield sites offers an opportunity to address a variety of issues through a single activity (Andrew, 1996; Strother, 2000). This study argues brownfield redevelopment in Amman would yield in similar results.

In addition to brownfield reclamation and reuse offering the obvious benefits of improving environmental qualities and thus minimising public health threats. Discussions argue that by redeveloping disturbed land, brownfields reuse helps slow the consumption of undeveloped greenfields as reusing brownfield sites makes it possible for developers to utilize existing

infrastructure and facilities thus making it more sustainable (Andrew, 1996; Eisen, 1996; Strother, 2000). Moreover, in terms of sustainability, brownfield redevelopment is strongly connected to higher environmental standards of green buildings including the U.S Green Building Council Leadership in Energy and Environmental Design (LEED) (USGBC, 2017) where applicants are rewarded with extra points when considering brownfield sites for their development projects. The LEED system is already adopted at the Jordan Green Building Council, however, sans the brownfield criteria. This study therefore suggests taking forward the USGBC- LEED brownfield redevelopment item would be a good place to start introducing brownfield policies since the system is already widely acknowledged in Jordan and introducing the term would emphasize its importance.

According to Kadhim (2016b), the lack of public green spaces and recreational urban spaces is a widely recognised problem in Amman. He argues that despite the city's attempt to address the shortage through the succession of planning recommendation since the 1979 Planning Regulation and later in the 1988 Development Plan and more recently in the 2008 Metropolitan Growth Strategy, little has been achieved. In an interview with Kadhim, the idea I introduced of making the deficit in public green spaces and/or recreational urban spaces through the reclamation of brownfield sites was highly endorsed, moreover, a proposal to present the idea to an international funding agency is currently being studied. The lack of public green spaces and recreational urban spaces is a problem mostly residential neighbourhoods in Amman suffer from, although few city-level parks opened recently, the extreme shortage still affects the quality of Ammanis' lives. In the words of H.S (female, 28, architect and urban planner and volunteer at the Garden of Freedom project) "*as soon as we came to the site, children, young girls and boys and even old*

people came to help. Moms made us tea and everybody chipped in for meals. In eastern Amman, dwellers desperately need similar spaces. Kids often play in the street or in abandoned constructions, they need a place to practice their right to play without their mothers being worried sick whether their kid will be injured today or not, young girls and boys need a place to socialise without having to worry about the bill, and in general, the social composition of Amman needs to be restored. People no longer interact because they no longer see each other and this is our fault as architects and urban planners. We no longer create spaces for them to be the social creatures they are” (Fieldwork, 2016).



Figure 43 Gardens of Freedom project_ Site prior to development. Source: Facebook- Gardens of Freedom (2015)



Figure 44 Gardens of Freedom project_ Local people showing up to help. Source: Facebook- Gardens of Freedom (2015)



Figure 45 Gardens of Freedom project_ Children help planting the site Source: Facebook- Gardens of Freedom (2015)

Howland (2007) argues the redevelopment of brownfield has four main objectives; clean-up; smart growth; neighbourhood revitalisation, and; economic development. Accordingly, in addition to the aforementioned environmental, sustainable development and social benefits the reclamation of brownfield sites may add to the context of Amman, the study argues the redevelopment of derelict and abandoned properties may encourage economic recovery. The economic development can be measured by two main indicators; jobs and investments.

According to the statements of the entrepreneurs and start-up businesses focus group participants, reclaiming brownfield sites including marginal land parcels within the urban context, abandoned sites or projects can help kick-start many small-budget projects and create both jobs and investments. In the words of M.K (female, 30, entrepreneur) *“Jordan is a talent pool of young creative minds. Our biggest, or probably only, problem is money. Providing us with a free space to experiment our projects takes a big weight off our shoulders”* (Fieldwork diary, 2016). The experimental nature of start-up businesses means the chances a project may succeed or fail are equal, however, in the age of alternative economies, entrepreneurs are more adventurous. In the words of M.S (female, 26, co-owner of a start-up business) and L.K (female, 26, M.S’s business partner and co-owner) *“we are already gambling everything here, before we started our project, we were thousands of JOD’s in dept. The business environment in Jordan is for the big guys... it is crazy that you need to already have money to start making money, I mean it doesn’t make sense!... and the bureaucracy, don’t get me started on bureaucracy, if you are thinking of a seasonal project, say a juice kiosk for summer time, start getting your permits the summer before”* (Fieldwork diary, 2016). Accordingly, this study argues the reclamation of brownfield sites in Amman will considerably contribute to creating a business-friendly environment which

encourages novice investments and creates opportunities as part of the broader spatially just city. This topic will be picked up again in the temporary urbanism in Amman chapter.

Furthermore, the data suggests the reclamation of brownfield sites in Amman would contribute to neighbourhood revitalisation whether by advancing neighbourhood properties; increasing public participation in the decision-making around brownfield sites and the management of urban space in general; or through the practise of temporary urbanism which will be discussed in the next chapter. Moreover, the data also suggests the reclamation of brownfield sites in Amman would contribute to achieving greater spatial justice which will also be discussed in following chapters.

5.6. Conclusion:

Informed by the literature discussions and the empirical fieldwork and within the wider research question, this chapter presented the phenomenon of urban brownfields in the context of Amman. It highlighted the lack of a systematic definition to describe the spatial geographies under research and suggested ways to address this issue.

Employing methods and tools to identify potential brownfield sites including the SGN and the Thomas's GIS model in addition to the CBA, EIA, and MCA, the study identified five potential brownfield typologies in the context of the study and demonstrated each case by describing the circumstances which led to its emergence and showcasing examples. Moreover, informed by the data analysis, the study highlighted both the barriers and benefits associated to their reclamation. The chapter concluded that in spite of brownfield sites in Amman having direct and indirect benefits, they differ in the ways they influence the community and citizen's quality of life in

different ways from the different stakeholders' perspectives. The analysis outlined that the transformation of derelict land can bring much benefits which impacts the infrastructure, economy, community and environment of Amman in a way or another. Moreover, the obtained results bid to inform developers, planners and concerned governmental authorities involved in the decision-making process with the advantages and disadvantages to brownfield redevelopment which would contribute to adequately place them within the urban development priorities, policies and agendas.

CHAPTER 6: TEMPORARY URBANISM IN AMMAN

6.1. Introduction:

Building on the previous chapter which has established that following the economic crisis and as a result of the social, cultural and political transformations throughout the contemporary history of Amman, its urban fabric remains filled with large amount of ‘voids’ (Colomb, 2012) and underutilized sites which some of have gradually been occupied by a variety of individual, group or entrepreneur ‘*temporary*’ users. Firstly, by showcasing distinctive patterns of temporary urbanization (including formal and informal uses, spaces and practices) throughout the city, this chapter attempts to continue the investigations on the second theme of this study’s theoretical framework, temporary urbanism, and explore how and why the new forms of social and cultural expressions have been evolving. Secondly, taking into consideration discussions outlined in the literature review in addition to the conducted empirical fieldwork, the chapter sheds the light on some of the barriers the phenomenon is facing whether form policy-makers or real estate developers that put pressure on the already experimental use which has been going through various transformations, commodification, resistance and displacement. Conversely, the chapter afterwards sheds the light of the potential benefits of temporary urbanism in the context of Amman as traced and identified within the articulations of temporary users in addition the variety of stakeholder groups participating in the investigations around the urban phenomenon in order to inform the overall research inquiry on how to achieve a more spatially just city in the following chapter.

This chapter argues that temporary uses of space in Amman could be harnessed in the economic growth and urban development policies in addition to the official city marketing discourse of

contemporary Amman through a policy shift aimed towards the promotion of the city as a ‘*creative city*’ with an ‘*alternative economy*’ supporting environment. Moreover, this chapter bids to contribute to the wider current debate in critical urban research about temporary urbanism and the implications of policy shifts towards the promotion of its practices across the globe by shedding the light on an under researched Middle Eastern case.

6.2. Temporary urbanism in Amman:

A young generation of architects and urban theorists began to research the rapid evolution of temporary urbanism to underpin its implications on the urban development of contemporary cities as demonstrated in the literature review chapter. While some emphasized the challenges they pose for conventional planning (Oswalt et al., 2005; Stadtentwicklung, 2007), others highlighted the lessons they offer for new forms of flexible ‘*open source*’ urbanism (Andres, 2011; Misselwitz et al., 2007). Temporary use practices have been described as a flexible mode of production of open (or loose) urban space which differs from conventional-state space or market-led development space (Franck and Stevens, 2013; Groth and Corijn, 2005), practices that might change the way planners, designers and managers think about the production of open urban space in an era when finance for urban development is lacking (Colomb, 2012). Moreover, numerous authors combined their analysis of temporary use under the wider evolution of land use in shrinking cities where planners are challenged with depopulation and increased site and/or building vacancy (Baur et al., 2006; Oswalt et al., 2005; Oswalt and Rieniets, 2006). However, in Amman, scholars have paid less attention to the temporary use and the ways it integrates with urban policies and the processes of place making. The practice has been gaining increasing

interest and popularity recently which this study argues raises important questions for critical urban research in the country, for example, what do policy makers in Amman have for temporary uses and temporary users? Are temporary users to remain “*nothing more than gap-fillers until market demand permits a return to regulated urban planning*” (Misselwitz et al., 2007: 104)? Moreover, how is the tension between the actual property value and its potential commercial value with regards to the temporary use added value generated through public access to space, the socio-cultural experiment and the promotion of the previously underutilized space being addressed? And, what is the trajectory for these spaces within the broader political economy of urban transformation? These questions and others more might not be all undertaken within this study, however, as this study argues, it may provoke scholars to start looking at the phenomenon in the context of the study in future research.

According to Studio Urban Catalysts (SUC); “*Temporary uses are generally not considered to be part of normal cycles of urban development. If a building or area becomes vacant, it is expected to be re-planned, built over and used as soon as possible. Temporary uses are often associated with crisis, a lack of vision and chaos. But, despite all preconceptions, examples like the vital scene of Berlin’s nomadic clubs or temporary events proves that temporary uses can become an extremely successful, inclusive and innovative part of contemporary urban culture*” (SUC, 2003: 4). Similarly, in Amman, temporary uses emerged throughout the city post several events including the lack of vision in the previously mentioned 1979 Planning Regulation, the 1988 Development Plan and the most recent 2008 Metropolitan Growth Strategy in addition to the economic crisis and the surrounding political turmoil including the ongoing Palestinian situation and the Syrian crisis.

Consequently, empty sites and wastelands still puncture the city's landscape not only in the urban fringe but also in central areas. These 'urban vacuums'— as this study refers to— might look vacant on land use master plans however in reality are surely alive. Many have been used on temporary basis by a variety of actors and transformed into markets, open air social spaces that alternate between being political salons to music jamming studios, community parks, or alternative living projects. For several years, these sites –and their temporary uses—were neglected by local policy-makers and left out of the official future urban development plans. Looking at the research findings, they were perceived as irrelevant, marginal or not economically useful in place marketing and interurban competition. According to the head of the Social Programs and Activities (SPA) department, the people of Amman are definitely ready to embrace temporary urbanism more officially, the practice has been ongoing informally but successfully for decades as the uses come organically from the realistic needs of Ammanis. Moreover, the spaces often function very well as they are organized by the users themselves in the best way that both the temporary users and the potential future user/ customers can benefit from. However, such spaces fail once governmental or institutional officials interfere with the process, in the words of E.D (female, 41, temporary use owner and founder) *“the government only comes to our projects to collect money. You would think the opposite, they are here to provide us with services, facilities or the similar. But no, they come to collect some sort of tax, it bothers them that we don't pay rent I guess. But do they know how much we are already giving them? We are transforming a decayed space into a thriving one, we are chipping in the economic growth, and we are creating businesses and job opportunities. Doesn't all that count?”* (Fieldwork diary, 2015). This will be later picked up in the barriers to temporary urbanism in Amman section.

More recently, the creative, unplanned, multifaceted, and dynamic diversity of temporary uses in Amman has been gaining increasing interest. On the one hand, small projects have been gaining the attention of the younger local community, NGOs, internationally funded projects, and some private companies, new images and narrations promoting the places, activities, and people are being circulated through mainstream and social media. However, on the other hand, larger projects have been gaining an unwanted authoritative interest which aims to regulate the temporary spaces but in most cases results in failed outcomes, the examples below will further demonstrate.

6.2.1. Examples of temporary uses and practices in Amman:

The proliferation of temporary uses indicates that cultural innovation is a phenomenon of cities ‘*in crisis*’ whether it be deindustrialization, low growth or shrinkage (Bader and Scharenberg, 2010). Accordingly, Amman has indeed been a rich ground for various forms of formal and informal activities taking place in its ‘*in between*’ spaces. Temporary uses understood here as uses that are “*planned from the outset to be impermanent*” and “*seek to derive unique qualities from the idea of temporality*” (Haydn and Temel, 2006: 17) covering a diverse set of activities including cultural, artistic, leisure, trade, entertainment, sports or social interactions also mushrooming throughout the city (Stadtentwicklung, 2007).

According to SUC (SUC, 2003), temporary users fall under one of five categories; (1) *start-ups*, including new businesses, inventors, or patent holders whose aim is to fully integrate into mainstream urban economy; (2) *migrants*, including persons who are temporarily not integrated in stable social networks or employment structure; (3) *system refugees*, including individuals or

groups who make a deliberate, i.e. ideologically motivated choice to ‘*withdraw*’ into an alternative universe; (4) *drop-outs*, including homeless people and illegal immigrants, and; (5) *part-time activists*, including those having a regular position and income in society, but wanting to enrich their lives with experiences outside the established order. In addition, according to Groth and Corjin (2005: 506) the majority of these actors come from “*outside the official, institutionalized domain of urban planning and urban politics*”. While some of the identified activities run commercially –as part of the formal or shadow economy—, others either run for non-profit or in circuits outside the monetary exchange (Colomb, 2012). The diversity of the uses reflects the heterogeneity of its initiators who may be artists, entrepreneurs, “*culturepreneurs*” (Lange, 2006), community groups, voluntary workers or political activists in search of a space of autonomy. Some temporary uses are leisure-oriented, while by contrast, others are the product of a search for a cultural experimentation. In some cases, temporary uses have created spaces of ‘*insurgent urbanism*’ (Sandercock, 1997) and social innovation, or more recently for projects aiming at the integration of marginalized population and emphasizing their role in the production of space.

Similar to what SUC suggests, the appropriation of underutilized urban space in Amman is very often done in a bottom-up, grass-root manner with little financial investment, minimal intervention and recycling of existing structure(s) (2003). Moreover, obtaining the permission to use vacant spaces involves negotiations between interested user(s) and the owner(s) whom often seek to improve the value of their property or minimize its maintenance costs (Stadtentwicklung, 2007: 22). Accordingly, and in light of fieldwork investigations, the following temporary spaces/ uses/ practices were identified in Amman. It is important to note here that due to time constraints,

financial limitations and research determinants, not all temporary spaces/ uses/ practices have been mapped despite the fact this research asserts the need to, this remains a potential future project. The study identifies six types of temporary uses and practices throughout the city, (1) flea markets; (2) bazar-like Souqs; (3) random temporary structures including street vendors, sheds, tents, stalls and kiosks; (4) vacant, underutilized cliffs (also known as overlookings or Matalls); (5) gypsy nomad tents (locally referred to as Kharabeesh), and; (6) refugee camps. And while the identified types may similarly exist in different contexts, the study argues they feature different types of distinctive temporary urbanism, accordingly, the chapter attempts to address each type within the particularities of the Ammani context. The paragraphs below demonstrate the identified types with examples which the study argues are most prominent and may establish more detailed inclusive mapping in future research.

6.2.1.1. Flea markets:

The first type of temporary urbanism this study identifies in the context of Amman is flea markets, the following section demonstrates the two largest and most controversial cases in the city, the Friday market (the old location and the new location) and the Tuesday market.

- **Friday market old site (Al-Abdali market).**

The first example of flea markets this study sheds the light on is the old location of Friday market, also known as Al-Abdali market. An outdoor market first opened in 1988 selling second-hand shoes and clothes in addition to a wide collection of fruits and vegetables for affordable prices every Friday located in Al-Abdali area in central Amman until GAM decided to relocate the market and operate it from its new location in Ras Al-Ain on October 10th, 2014 (Freij, 2014c).

According to the statements of both vendors and customers, the new location is inconvenient for either and discouraged many families from visiting the market. In the words of A.M (male, 28, vendor at Friday market) *“perhaps the previous location was not that organized, but everyone was able to find their way. Yes, our stalls sometimes extended to cover parts of the sidewalks, but no one walked on it anyway! It was surrounding the market and we looked at it as our own little fence, people shopped within the market, not around it. Anyway, GAM could have told us to push our stalls few centimetres inward but no, they decide to relocate us in the middle of nowhere and give us those tiny yellow squares... Am sure this is not why we are being relocated, mark my words when a flashy shopping mall suddenly appears in Abdali”* (Fieldwork diary, 2015).

According to the assistant manager of the Departmental Plans and Programs (DPP) at the MoP, the decision was made in collaboration with GAM to reduce traffic congestion, protect walking pedestrians and improve public health. Moreover, the new location is provided with three parking lots in addition to other services and facilities. There was a media campaign to promote the new site, and the market is now also open from Thursday to Saturday. However, according to vendors, the new location is near downtown Amman and many street hawkers take over stalls allocated for the previous Abdali vendors, moreover, the vendors argue that GAM’s claims that relocating the market would minimize traffic congestion are faulty as Downtown Amman is an extremely crowded area that already suffers from a traffic problem.

In the words of A.H (male, 31, vendor at Friday market) *“how do you expect a location that has 400 spaces to accommodate more than 1200 stalls? That is triple the number if you know your math. Many of us lost their businesses and the others had to adjust theirs*

to fit the new size which cost them lots of loses, also, the parking they promised us is not enough for the customers and vendors, it is barely enough for less than half of us... GAM said they did this to stop some vendors from renting more than one stall, I know some Jordanian vendors who own 10, some even have 20 and they rent them to guest non-Jordanian workers despite the fact the market is for Jordanians and Jordanians only, but we had a system and we were happy with it” (Field work diary, 2015).



Figure 46 The previous Friday market (Abdali market)- Amman_1. Source: The Jordan Times (2014)



Figure 47 The previous Friday market (Abdali market)- Amman_2. Source: The Jordan Times (2014)

According to the Jordan Times (Freij, 2014b), the Public Security Department spokesperson said, around 100 street vendors clashed with anti-riot personnel protesting against the decision to relocate the Abdali Friday market to its new location in Ras Al-Ain. The riots where seven vendors were arrested, was a continuation of a protest which commenced Friday as a response to GAM's removal of street stalls from Al-Abdali to transform the weakly flea market into a parking lot. In the words of M.R (male, 34, vendor at Friday market) *"as part of our civil rights as Jordanians, we thought we had the right to peacefully protest. Our plan was to sit-in until our demands are met, but to our surprise, gendarmes hit us with tear gas and seven of us were arrested, now some of the protestors did throw Molotov cocktails, but in disturbance, you cannot control everyone and this is unfortunately what happened. What was supposed to be a peaceful civil protest mutated into riots... our demands were for GAM to go back on their decision and allow us to return to Abdali, but instead, their bulldozers viciously pulled our stalls from their roots"* (Fieldwork diary, 2015). In general, according to vendors and customers' statements, the majority is disappointed with GAM's irrational decision, most of the businesses have been affected negatively and are dissatisfied with the new venue which unlike they were promised, is considerably smaller with less parking spaces.



Figure 48 Abdali Friday market post protest/riots_1. Source; The Jordan Times (2014)



Figure 49 Abdali Friday market post protest/riots_2. Source; The Jordan Times (2014)

- **The new Friday market (Ras Al-Ain).**

Shortly after the relocation of Friday flea market in October 2014, the space was temporarily closed for organisational and technical problems less than two months from its opening (Freij, 2014a). According to the same news, the deputy director for Districts and Environmental Affairs (DEA) confirmed that the new location will be provided with medical services, better lighting in addition to security patrols which will ensure that only Jordanians showcase their goods. In his words “*this market is for Jordanians who face financial hardship*”. Moreover, he argued that another space at the same location will be available once the number of vendors exceeds the available space. However, according to vendors’ statements, these are empty promises similar to the ones made earlier. In the words of O.M. (male, 50, vendor at Friday market) “*and how on earth are they going to provide another space in the same location? Unless they demolish the buildings around, or kick some other businesses elsewhere like they did to us, they would do that in a heartbeat. A mistake never fixes another mistake, when are our officials going to learn that? We were happy and content with Abdali. Today, we lost our customers, we can’t fit our goods in the provided spaces, and we just do not feel we belong to this place. We have been displaced*” (Fieldwork diary, 2015). Similarly, in the words of A.S (male, 41, vendor at Friday market) “*who told you we needed security patrols? These is our businesses, we have an unspoken code to take care of each other’s stalls before our own. And these are our customers that we care about, some of have become family and we do note if Friday comes and they are not here to pick their weekly grocery shopping or check out the new merchandise. Doesn’t the government get it? Abdali was our place, when you say Abdali, people immediately think of Friday flea market. It is no longer ‘Friday’ market if it*

operates during other week days, Friday market is another part of Ammanis' collective memory that is slowly being erased. You know that saying? If it is not broken, don't fix it. This sums up exactly the situation of Al-Abdali, it wasn't broken, in fact, it was going too well, and once the government decided to 'fix' it, it 'broke' it" (Fieldwork diary, 2015).



Figure 50 the new Ras Al-Ain Friday market. Source: The Jordan Times (2014)



Figure 51 the new stalls at Ras Al-Ain Friday market. Source: Al-Ghad news (2014)

In general, both vendors and customers are not satisfied with the new location. According to some statements, the fact that the market is surrounded by walls had many negative impacts including that it made the market feel more like a camp, new anti-social behaviours started emerging in the enclosed site after market hours and during week days which although GAM allowed the market to work in remained empty either due to difficult accessibility and lack of parking spaces as residents and people working in the area occupy the parking lot during week days in addition to the busy streets and difficult accessibility from the different parts of the city, or due to the fact that working in Friday market is a second job for most vendors that have another job during weekdays. Please note official weekend days in Jordan are Fridays, due to the day's religious attachment and the official Friday prayers, and Saturdays which are less official and sometimes replaced by Sundays in Christian oriented institutions or discarded completely in 6-days working companies. The new enclosure suffers from other problems that did not exist in Al-Abdali market including drainage problems, lighting problems, the organisation of space between the stalls in addition to the regularly required maintenance for gates and sanitary units in order to ensure public safety, problems which according to both vendors and customers GAM brought to itself by the abrupt, understudied proposal.

Moreover, as predicted by the majority of vendors, GAM's attempts to regulate the space did not result in the desired outcomes, the stalls often expand across more than one allocated space which often causes the vendors troubles with officials and the periodical inspections. See image below.



Figure 52 Merchandise exceeding allocated stalls space at Ras Al-Ain Friday market. Source: Nesan News (2015)

- **Tuesday Muqabalain market.**

The second example of flea markets and another controversial temporary space and example of shadow economy in Amman is the Muqabalain Tuesday market which according to Roya News (2017) was also recently closed on January 10th 2017. One vendor argued that *“if you want to stop a market then go ahead, but give us an alternative at least. More than 50 people live from my stall only including my own family, the guys that sell me the goods and their families, the guys that deliver the goods and their families, my partner and his family and the two boys that work at the stall and their families. How are all those going to eat now? ... just like that, over a day and a night, there is no more market! Citizens who buy a kilo of potatoes for 60 Piaster here now have*

to go buy it for 1 Jordanian Dinar⁴ in shops” in another informal chat the vendor stated that “I have been in the flea market business since 1986, am an old man now. If GAM decides to close such markets, then where do they expect us to go? We demand the market stays, but we are powerless and our voices are never heard” (Fieldwork diary, 2015) while another vender argued that “we ran away from Abdali to face the same problem here. This market has been relocated 3-4 times before without a warning. We wake up to find municipality officials removing our stalls like we found them for free and we just have to deal with it” (Fieldwork diary, 2015). Moreover, another vendor also argued that “our continuous claims and requests did not help us convince GAM to go back on its decision. We were told that the municipality is looking for a replacement, how long is this going to take and what are we going to do meanwhile is still unknown” (Fieldwork diary, 2015). According to the Roya News report, the market has been removed after one week of notice from the municipality to more than 700 vendors as its acquisition has been transformed into the National Security Corporation and needs to be delivered to the new owner free from constructions or goods. However, customers also shared vendors’ views, in one informal chat for example, the statement of the customer was that “after the removal of the market the area will extremely suffer, dwellers of this neighbourhood periodically shop here and this market covers our everyday needs at convenient prices. Where else can you find fruits and vegetables sold for half the price you buy them for in shops, scratch that, where else would you find a jacket for 1 or 2 Jordanian Dinars? And by the way, we are talking about brands here” (Fieldwork diary, 2015). According to the

⁴ Jordanian Dinar (JOD) is the currency of Jordan. One Jordanian Dinar equals 100 Piasters.

Roya report, GAM is currently looking for a site that must be spacious to accommodate for the 700+ vendors, * has enough parking space for both vendors and customers, provided with services and facilities, and far from traffic in order not to cause or add to congestion. The GAM official also added the new site will be provided with censorship regarding perishable goods such as meat and dairy products which need particular display or preservation methods therefore will probably not be allowed in the new market.



Figure 53 Tuesday Muqabalain market_1. Source: Alanbat News (2016)



Figure 54 Tuesday Muqabalain market_2. Source: Alanbat News (2016)

According to Rum News (2017), a sit-in took place on January 9th, 2017 where a group of the Tuesday market vendors, while chanting loyalty and allegiance slogans to Jordan and the Royal Family, demanded the removal of the Mayor of Amman, Mr. Aqil Biltaji, claiming he is unfit for his position as he did not handle the acquisition transaction well. In the words of one of the protestors *“today we protest in disapproval of GAM’s Tuesday Muqabalain market abolishment decision. After we have been relocated twice, you would think the third time we would get an appropriate space, the well-equipped space we were promised, in a sigh of relief and after the loses we suffered, we thought we can finally go back to our businesses and feed our children. Few months after we settle in, we get a notice to evacuate the space within days as the new owner, the Social Security Corporation, demanded their property”* (Rum News, 2017). Another protesting vendor similarly argued that *“the decision was not unforeseen, GAM had a three-months warning and could have found us a space within that time instead of throwing us into nowhere. Some of us are selling their goods on streets and sidewalks across Amman, others are just waiting for the new location and god knows how are they making a living, the Tuesday market is the only source of income for most of us, finding even if a temporary space to accommodate at least 500 of us should have been a priority to GAM, we are talking about thousands of families here, this is a serious public demand”* (Rum News, 2017). Moreover, in the words of another protesting vendor *“our sit-in today is to send a message to decision makers, to the officials, that we are the people of this country, we want a decent life, we want to eat and feed our families with dignity from the sweat of our labour, we know the situation is bad, but we are satisfied. However, we don’t want to reach a point where we have to beg for our most primal needs. We are decent people,*

doing decent jobs and therefore deserve a decent living, our kids wait for us at the end of every day and look up to us and we want to keep it that way, we want Jordan to stay thriving under the patronage of his Royal Highness King Abdullah II and the Royal Family, we trust his majesty's comprehensive look that takes into consideration all Jordanians, we see him in every speech and at every parliament discussion accentuating the need to create jobs and opportunities for Jordanians that the Hashemites always confirmed are their most valuable asset. We are the army of Abu Hussain and we will forever declare loyalty and allegiance to the Hashemites, but we want to live, we are not asking for more, we just want to live, may god perpetuate the grace of security and safety in Jordan” (Rum News, 2017).

To sum up, the demands of the majority of protesting vendors were to stay at the current location meanwhile until a replacement space is secured at least during the harsh winter period and during the current difficult times due to the substantial rising living costs and fuel prices in addition to other everyday expenses. The transition afterwards to the new location the protesting vendors assert would be smooth, easy, and following to the instructions of GAM and to its satisfaction. The space is now derelict and no further investigations were conducted.



Figure 55 The now derelict Tuesday Muqabalain market_1. Source: Muqabalain today Facebook page (2017)



Figure 56 The now derelict Tuesday Muqabalain market_2. Source: Muqabalain today Facebook page (2017)

As the examples demonstrate, the solutions proposed are traditional, systematic, and non-realistic, this will be picked up later in the barriers to temporary urbanism section.

Moreover, as the examples also demonstrated, this category of temporary practices and users are powerless, oppressed and marginalized, they are easily displaced and relocated.

This is also picked up later in the barriers section.

6.2.1.2. *Bazar-like Souqs:*

The second type of temporary urbanism identified in Amman are bazar-like Souqs. Similar to flea markets, this section introduces two very popular examples which the study argues better describe the urban phenomenon.

- **Souq Jara.**

Unlike the flea markets examples above, Souqs or Souks (Arabic : سوق) understood as open-air markets in Middle Eastern and North African countries context (The free dictionary, 2017) including Souq Jara (and Souq el-Sodfih which is demonstrated in the example below) are erect in gentrified neighbourhoods rather than lower-income neighbourhoods; displays different type of goods including handcrafts, street food, start-up businesses such as recycled vintage clothes, sketching stalls, or funky designed shirts stalls, in addition to music or story telling displays rather than second-hand clothes and shoes or bulk-priced fruits and vegetables as in the previous flea market typology, moreover, according to the study findings, Souqs ; target a different category of consumers and customers including the younger generation, foreigners and the ‘*hipster*’ community in Amman.

Located in Rainbow street near downtown Amman, the seasonal Souq Jara taking place yearly from March until September every other Friday has been visited many times by members of the Royal family and governmental officials to support a project or initiative or to join in a certain activity the Souq is organising. Moreover, the Souq has become a touristic destination for visitors seeking to learn more about the Jordanian art and culture.



Figure 57 Souq Jara-Amman_1. Source: Souq Jara Facebook page (2017)



Figure 58 Souq Jara-Amman. Source: Souq Jara Facebook page (2017)

Once the season ends, the stalls are disassembled and stored until the following year.



Figure 59 Souq Jara at the end of the season. Source: Souq Jara Facebook page (2017)

As the discussions above argue, this type of temporary spaces in Amman has managed to promote not only the space but also the cultural identity of the city, they contribute to the economic growth of Amman and create a start-up business friendly environment. In statements of both vendors and customers, one foreign tourist argued that *“you get to see a real piece of Jordan in this bazar-like market where local artisans share their wares, trinkets, bits and bobs and what not. You can understand the culture of this country and how people interact while grabbing a bite of Jordanian food and listening to Jordanian music. I know they are playing ‘Hotel California’ now, but they did play some folk music before... You get to the nerves of the city when you visit Souq Jara, and once you hit the end, the great Citadel view and Hercules temple are right there waiting for you, marvellous”* (Fieldwork diary, 2015). Another local visitor similarly argued that *“Souq Jara is a nice way to spend the weekend, we don’t have a lot of spaces where you can hang out for free, enjoy the music and nice weather in a pedestrian friendly environment. Amman is crowded and very expensive to enjoy, Souq Jara is an outlet for us young boys and girls but it becomes packed really quick, it is now one of Amman’s ‘cool’ destinations that’s why I guess we need more places like this”*. Vendors share similar thoughts to foreign and local costumers but shed light on some of the problems they face, for example, R.M (female, 28, vendor at Souq Jara) argues that *“indeed we like it here at Jara, we get the chance to share our products with the people, we get to experiment if our ideas will make it in the real business world, but to get a stall at Jara is a risk, they are very expensive for start-ups like us, I’ve been to many European countries and saw local markets, they don’t pay as much as we do, sometimes, they get to do it for free! But again, everything is more expensive in Jordan. I think the government should reconsider the*

ways they look at us, start-up businesses I mean, we need their support and they need our services, tourists love us, we promote our culture to them and they can see the country through our products, our 'cultural productions' if I may use the term I just learned from you. And locals also love us, they wait for us every year and they interact and collaborate with us to make it work... they create a vibrant atmosphere, they maintain security and order, they even help us clean... I think they do that because we don't have enough outdoor spaces, perhaps the market transforms into a recreational space somehow" (Fieldwork diary, 2015).

This Souq was established by the Jabal Amman Resident's Association (JARA), therefore, according to the study findings, is an example for community empowerment and the role of public participation in decision-making. As the example demonstrated, temporary practices function very well in Amman once the needs of users and visitors are catered for and once the locals are involved in its design and implementation. The practice still faces many barriers, however, this will be picked up later in the barriers to temporary urbanism section.

- **Souq el-Sodfih.**

The second example of bazar-like markets is Souq el-Sodfih (Arabic: صدفة. ما يحدث عرضًا دون اتفاق أو موعد. English: coincidence. What happens casually without agreement or appointment) (Al-Maani Dictionary, 2017). Located in Jabal Al-Lweibdih, one of Amman's oldest districts, currently gentrified and referred to as "*the hip place to be*" (BeAmman, 2015a), famous for its art galleries, workshops and artefact shops, home to many start-ups, hipster restaurants and artsy crowds, Souq el-Sodfih and in collaboration with a number of NGOs, start-up local artists and charities, offers a temporary space for

local Ammanis to support many causes and express social solidarity. Similar to Souq Jara, the Souq is in a gentrified area, displays artistic products and is aimed for the contemporary crowd, furthermore, and another reason why this market was considered for the study is the fact that this market promotes social and cultural activities, has an embedded political agenda, and is assembled on an underutilised site.



Figure 60 Souq el-Sodfih, Amman. Source: 7iber.com (2015)

The Souq features a story teller, workshops including an origami workshop, local foods provided by local initiatives and charities, upcycled products including food, crochet and ornaments which proceeds mostly go back to the charities and NGOs. In the words of R.Z

(male, 32, founder of an NGO) “*we need platforms such as Souq el-Sodfih to interact with people, we only exist online and in our homes most of the times, me and my team for example operate the NGO from my house. We need spaces to showcase our products or the products of the communities we are looking after, its illogic to rent because we are here to raise money for some underprivileged group and spending our earnings on rent and such defeats our purpose*” (Fieldwork diary, 2015). Similarly, the majority of participants in Souq el-Sodfih argue that the space creates a unique socio-cultural experience and emphasizes community empowerment, for example, in the words of O.M (female, 27, charity founder) “*Souq el-Sodfih is not your conventional market, it is a statement, it is a think-tank, it is a talent pool, I mean, look around, it shows the creativity of Ammanis and the ways they can make something from almost nothing. We realise we live in a third world country with very limited resources, but we have big ideas. Giving us a space to explore these ideas, to transform them into realities and to be able to share them with the world is what I think Souq el-Sodfih is*” (Fieldwork diary, 2015).

Unlike Souq Jara, Souq el-Sodfih is informally organized, there are no stalls to rent, the organisers and participants collaborate to regulate the space which is upgraded using DIY urbanism methods as part of a broader agenda to promote similar methods to rehabilitate derelict spaces across Amman. Which, according to the statements of participants, was not well-accepted by governmental officials which considered the act as a vandalism attempt. In the words of S.S (female, 41, co-organiser at Souq el-Sodfih) “*I was personally interrogated by a policeman, I think one of the residents in the neighbourhood thought we were doing something illegal or trying to abuse the site... I was both happy and disappointed, happy that people care about their space and don't want it harmed but*

also disappointed by the lack of awareness to concepts such as site recycling or site upgrade which in my opinion would go very well with Jordan because in this method you can do so much using so little... Perhaps it's time to embrace similar approaches” (Fieldwork diary, 2015). Similarly, the majority of organisers argued that bureaucracy was the number one barrier faced prior to and during running the market, however, they asserted that the intimate experience and the exceptional synergy was well worth it.



Figure 61 Example for DIY urbanism in Souq el-Sodfih. Source: Afnan blog-WordPress (2016)

6.2.1.3. Street vendors, sheds, tents, stalls and kiosks:

The third identified temporary urbanism practice in Amman this study highlights is the variety of random structures and uses including street vendors, sheds, tents, stalls and kiosks spreading across the city for different purposes. The following examples further demonstrate.

- **Street vendors (Bastas).**

Street vendors, locally referred to as *Bastas* (*plural of Basta*) which according to the Arabic dictionary is the flat plane space where a ladder can revolve and change direction (Arabic: بسطة، مساحة مسطحة منبسطة يدور عندها السلم ويغير اتجاهه) (alMaany dictionary, 2017), spread across Amman and sell an array of goods from books, stationary, toys, clothes, second-hand furniture to fake watches and sunglasses, bastas are another informal temporary practice which the government has been keen to eliminate. From the officials' perspective and according to the head of the regulation department at GAM; *“no basta is licenced in Amman. They have a negative impact on shopkeepers' businesses, they disrupt traffic, they deform the image of the city and are not good for the general public health... despite the many bastas removal campaigns and regular field inspections, street vendors still somehow manage to surface, sometimes they are back less than half an hour after we leave... even worse, within the illegal practice there are concealed illegal actions, in many cases vendors would seize more than one stall and rent to others, one vendor we just learned about owns 20 something stalls across Amman”* (Fieldwork diary, 2015).



Figure 62 Bastas in downtown Amman. Source: AmmonNews (2013)

GAM's anti-stall campaigns are a lost battle indeed, according to the mayor of Amman, without exaggeration, the campaigns have become a decision of the state as it affects the lives of hundreds of thousands of Jordanians. Considering the issue as a matter of the state indicates the seriousness of the phenomenon including its causes, magnitude, the fates of people involved in it, the expected results for its suppression, if it could be realistically suppressed in the first place, and the costs for this battle.

Many studies have been conducted on the phenomenon in anthropological studies around poverty and community development in the context of Amman where hundreds of vendors seeking to end their distress away from failed poverty combat programs were interviewed (Abu Khalil, 2014). According to the studies, in Jordanian economics literature, working on bastas falls under the informal or self-recruitment sector, a sector

which has been witnessing an extensive inflation and has become a substantial part of the country's national income despite the fact it is considered a failed manifestation of the development process when official public and private sectors were unsuccessful to absorb the exponentially growing working force (Al-Annabi, 2016). According to Al-Annabi (2016), the unemployed in Amman resorted to creating self-opportunities, thus, this sector informally became a resilience strategy for the poor to combat poverty.

In Jordan, the phenomenon has been acknowledged too little too late, according to Abu-Khalil (2014), in previous studies and reports estimates including the Jordanian Social and Economic Council in collaboration with the MoP study published in 2012, informal economy sector was estimated as representing 44% of the overall labour force. The study lacks a systematic definition for the urban phenomenon which adds to its complexity, however, it remains essential to establish the discussion between the different stakeholders.

From an outsider look, bastas seem random in distribution and spread, conversely, the in-depth insider look reveals the practice enjoys a high-level of punctuality which with time has developed its own traditions and customs. According to the investigations, some families have been working in bastas for three generations, moreover, in a study about the economics of bastas, it was demonstrated that bastas are more like small establishments that depend on feasibility studies which although unwritten are controlled (Abu Khalil, 2014). The same study argued that in many cases, confiscations, seizure, fines and similar costs are already calculated within the basta economics.

According to the study findings, bastas have become a socio-economic in addition to being an urban phenomenon in Amman, workers in bastas enjoy a high level of flexibility

and resilience to any spatial or structural changes, administrative or security decisions. GAM's long history in fighting bastas should be enough for it to realise the impossibility of suppressing the phenomenon. Since mid-70s, GAM has non-stop participated in anti-stall campaigns which reached unprecedented levels of cruelty and rigor yet was never able to stand in the face of the phenomenon. In the few cases when street vendors decided to leave the practice, they were almost immediately replaced by others, and when campaigns were extremely tough, some street vendors developed methods where they sell their merchandise low-key, verbally, without physically displaying it. The goods would be hidden somewhere nearby to avoid its confiscation or discard.

According to street vendors' statements, similar to the case of Friday market, they are promised a replacement which the majority believe would be another failed attempt. In the words of O.L (male, 48, street vendor) *"perhaps the majority, if not every, proposal the municipality executed failed. They think any empty space can be a flea market, I urge the municipality to consider us and the customers when they are looking for a location, this can save them a fortune by the way because what they are looking for is completely different and sometimes the exact opposite of what we are looking for. I have been in this business for decades, my father passed me this basta since I was 16 and I witnessed many conflicts between us and the municipality. We go for an option and they go for another, of course we end up going to the location they chose but few month and the whole thing collapses. I wish the municipality would admit its own experience and learn from its mistakes and from our knowledge, trust me we know what we want and we know what works for us and what doesn't"* (Fieldwork diary, 2016). Similarly, another street seller confirmed that many basta markets are an example of successful community development

stories, in the words of A.S (male, 56, street vendor) “... *for two decades this market has been working like a clock, we self-organised a supervision committee that manages and coordinates the work, the same committee has been in charge of the market since and we trust its experience... plus, you can't put us away from the heart of the city, we exist for the passer-by, for the tens of hundreds travelling to and from their jobs, for the people on their daily commute, if you remote us, you will kill us and you will end up beating up a dead man*” (Fieldwork diary, 2016).

- **Seasonal sheds and/or tents:**

Often associated with the time of year, unlike bastas, seasonal sheds and/or tents generally display fruits and vegetables and according to the study findings have an overlooked economic impact. According to the study findings, four sectors work in seasonal sheds/tents; (1) farmers who work in ‘*urban agriculture*’ around the capital and grow vines including various types of cucumber in uninhabited fertile soil sites in Amman’s peripheries; (2) seasonal fruit and vegetables farmers from other cities in Jordan, more specifically in grape, fig and fig-cactus season, in this type, most of the vendors come from the farmers immediate families; (3) seasonal legumes and herbs farmers often women coming from the Jordan valley area, and lastly; (4) the yearly watermelon and cantaloupe sheds/ tents. Therefore, this study argues, the practice must be discussed taking into consideration the fates of the totality of network associated to it from the vendors and their dependants to the farmers in their locations and their dependants and all others in between.



Figure 63 Watermelon shed in Amman. Source: Al-Ghad News (2016)

From some official point of view, the prime justification for campaigns against these temporary structures is the urban scene which, according to the majority of their statements, temporary structure deforms and transforms in into visually unpleasant, however, the vendors argue oppositely. In the words of A.D (male, 37, tent vendor) *“we make sure our goods are displayed beautifully, I spray my watermelons and clean them until they are shiny and appealing to the customer, I take pride in my watermelons, this is number one, and number two, I want to sell my products at the end of the day”* (Fieldwork diary, 2016).

On the other hand, from temporary users point of view, their utmost demand is justice, in the words of O.A. (male, 33, tent vendor) *“I recall after an incident where we were raid and the officials left with whatever spoils they were able to save for themselves, a bunch*

of us started cursing, but there was this kid, I can swear he was not 12 years old yet, he worked as a porter, he started crying because he realised he is now out of job. He was shouting, how can I go back home now? Are the three- four dinars I make too much? I have hungry baby brothers and sisters. On spot, we collected some thirty-forty something dinars and gave them to the kid, he left while still crying and we never saw him again... we demand justice, these spaces might look marginal to the government but they are crucial to us” (Fieldwork diary, 2016). Similarly, other temporary users asserted the significance of these spaces and highlighted the bias and inequality practiced against particular ones. In the words of G.M (female, 36, social activist) “if the government wishes to keep the security and safety in Jordan, they need to relax their policies and start listening to the people and involve them in their decisions. All these users demand is flexibility and spatial justice. You can’t look at non-traditional methods with a traditional lens. Besides, the government also needs to reconsider their dual standards. What is socially and ethically accepted must be the same for both lower-income temporary users and privileged social community development programs. This is not the case in Amman unfortunately, internationally- funded or Royal NGO’s or upper-class supported initiatives or programs get many facilitations and are promoted as innovative and avant-garde while the real creativity and innovation is found in the everyday practices and solutions these temporary users come up with. This is both unethical and biased” (Fieldwork diary, 2016).



Figure 64 A vandalised shed in one of the municipalities campaigns. Source: Al-Sawt News (2013)

In addition to seasonal fruits and vegetables, sheds and/or tents temporary structures also include coffee kiosks often erect on the side of roads from metal sheets or loose bricks and selling hot beverages including tea and coffee, tobacco, in addition to a small assortment of food supplies. Similar to the cases of flea markets, bastas, seasonal fruit and vegetable sheds/ tents, the practice has been threatened by the officials and many campaigns to sweep the temporary structures have been extensively executed.



Figure 65 A coffee kiosk in Amman. Source: Al-Ghad News (2015)

According to the director of the Random Seizure and Removal (RSR) department, only unlicensed kiosks are targeted in the removal campaigns and post several warnings. He also noted that some of the kiosks have expanded their services to rent chairs and tables for people to set in the spaces they ‘*violate*’ which results in ‘*negative*’ social manifestations. According to his statement, in many times, owners forcefully resist the public security campaigns by stoning the vehicles or creating human shields which often results in casualties in both sides. Conversely, from the kiosk owners point of view and according to their statements, the spaces they chose to erect their structures are already vacant and underutilised, therefore, they are not ‘*violating*’ them, moreover, the social interaction they create are in no way ‘*negative*’, on the contrary, they argue that the spaces they provide for a friction of the price of expensive restaurants and coffee shops are an outlet for Ammanis to enjoy their Amman.



Figure 66 Coffee kiosk post a removal campaign. Source: Al-Ghad News (2014)

Similar to the previously mentioned temporary practices, coffee kiosks provide an alternative economic source in the currently challenging circumstances and according to kiosk owners can contribute to the overall economic growth, in the words of A.K (male, 28, kiosk owner) *“I wish the government would collaborate with us instead of overlooking us. The problem isn’t solved once the kiosk is removed, personally speaking, I would put my kiosk up again if they remove it a thousand times... none of us would mind if the municipality for example imposes certain requirements such as having a parking space to not obstruct traffic, or come up with some sort of permit system for small businesses like ours, we’ll be more than happy to commit to these specifications if they would guarantee our rights... I mean we not having provisions is not fair for shopkeepers, but also its not fair for us to pay considerable amounts of money for a relatively small business. We need to meet somewhere in the middle.”* (Fieldwork diary, 2016).

In related news, post the Ministry of Public Work (MoPW) 48-hour warnings to forcibly remove hundreds of kiosks on the highway from Amman to the Dead Sea in preparation for the World Economic Conference 2015 held in the area, kiosk owners threatened to escalate the situation and highlighted its paradoxical qualities (Al-Edwan, 2015). With the help of public security forces and using tear gas, MoPW demolished tens of kiosks before going back on their decision to avoid further complications. The fundamental demand of kiosk owners was for the Ministry, the Investment Authority and the Dead Sea Development Foundation to go back on their demolition decision and allow them to set up ‘civilised’ kiosks according to the specifications they call for. There was no response from the MoPW, the Investment Authority or the Dead Sea Development Foundation which supported the kiosk owners claims that the ‘uncivilised appearance’ and the way kiosks ‘deforms’ the urban scene excuse officials hold is false and is nothing but a cover for unrevealed intentions. Moreover, according to the same news, interviewed kiosk owners pointed out that the authorities concerned with the development of the area pays attention solely to large-scale touristic ventures at the expense of lower-income groups which remain overlooked. In the words of M.A (male, 28, kiosk owner) “*it’s been over a year now and as you can see nothing has changed. We were promised new unified kiosk that look ‘civilised’, by the way I have no idea what they mean when they say that word, you tell me, do I look ‘uncivilised’ to you?... Anyway, as always, an empty promise that will never become a reality... they don’t care about the image of the city as much as they care about their pockets. They can steal more from big projects, but they can’t steal from us, we won’t let them, that’s why our kiosks will remain an easy target for them every time they want to catch a bigger fish*” (Fieldwork diary, 2016).

According to the director of the Random Seizure and Removal (RSR) department, the municipality is working to regulate and control many temporary structures through the issue of temporary permits according to terms and instructions determined by a committee which will be later formed in cooperation with concerned authorities, the licenced kiosks will then be monitored periodically to make sure they comply with the conditions specified in the licence. No further investigation was conducted.

6.2.1.4. *Vacant- underutilised cliffs (Overlookings or Matallat):*

Overlookings or Matallat (plural of Matall in local Ammani dialect. Arabic: *أطلّ على الشيء: مطلّ* (أشرف عليه) translated into English means what overlooks something, are a unique Ammani spatial configuration resulting from its challenging topography. As emphasised in the context chapter, the topographic making of Amman mainly consists of hills and valleys the reason why overlooking geographies (Matallat) were created.

According to the study findings, there are three prevalent Matalls in Amman, Jabal Al-Lweibdih Matall, Jordan Street Matall and Abu Nsair Matall (*see below images*).



Figure 67 Al-Lweibdih Matall. Source: Al-Ghad News (2015)



Figure 68 Jordan Street Matall. Source: Al-Ghad News (2015)



Figure 69 Abu-Nsair Matall. Source: Al-Ghad News (2016)

M.O (male, 22, frequent user of Abu Nsair Matall) notes Matalls are popular amongst youth for both morning and evening activities including drinking coffee and tea in the early morning or a game of cards or shisha in the evening in addition to a variety of uses and activities including picnicking or barbequing in weekends, or just ‘*chilling*’. Matall visitors either park their cars and enjoy the view, rent chairs and tables from the previously mentioned coffee kiosks, bring their own blankets to rest on, or sit on the edge of the cliff. Different age groups visit Matalls including teenagers, youth and the elderly and different categories use the space including lovers, families, and friends for different social interactions. Moreover, as highlighted in the context chapter, due to Amman’s temperate climate, outdoor spaces such as Matalls are convenient around most the time of the year.

According to T.A (female, 37, sociology specialist), every phenomenon has its pros and cons, similarly, Matalls are an outlet recreational space to some and foci to antisocial activities to others. She notes that having such spaces is both a ‘*demand*’ and ‘*right*’ to citizens of Amman and that the state should take more serious measures to provide free open spaces away from any form of investment or revenue generating goals. In her words “*if the state puts its hands on Matalls the people will explode, they will have to pay entry fees, service tax and god knows what other expenses... an almost free fun often costing less than half a JOD per cup of coffee would then cost them not less than 5 JOD’s per person. Ammanis can’t afford this on daily basis! They have other obligatory costs to worry about... people created these spaces to escape the everyday burdens of life, the stress of work, the shortage of money, and personal worries to a place where they can breathe fresh air, gaze into the distance and shake off frustration thus create nicer memories of their lives. Taking Matalls from Ammanis would suck the joy left in their lives*”

(Fieldwork diary, 2016). From a psychological point of view, the consulted psychological specialist M.M (male, 46, psychology specialist) explains that meditation is a necessary humanistic need to rest and relax which throwing one's sight into the far distance can closely achieve. The further the distance and the longer it stretches without physical barriers, the better the outcomes. He confirms that historically, elevated spaces were chosen for practising breathing and meditation in order to unleash emotions such as love, joy, sorrow or anger. They were also considered spaces of emotional and spiritual worship. In his words "*the vehicular congestion and the building density are adding to the pressure Ammanis suffer from which is why they seek spaces such as Matallat to restore their balance and calm. Matalls visitors are people that are running away from traditions, restrictions and inconveniences and sometimes from other people either to sit alone with their thought or with the people closest to their hearts. I consider such spaces as resorts to psychological comfort away from worries where everyone is entitled to practice their individual comfort and freedom rituals, it might be screaming, puffing cigarettes, crying, gazing into the distant, or simply taking a nap*" (Fieldwork diary, 2016).

On another note, similar to every other temporary use/ space/ practice identified in this study in Amman, Matalls are witnessing similar struggles. In December 2016, PM Dima Tahboub accused the Ministry of Internal Affairs of failing to handle what she referred to as the '*park view*' phenomenon where youth gather in Matalls and '*disturb*' the residents of the areas (Garaa News, 2016). In the same news Tahboub argued that in Matalls, youth gather in their vehicles, consume alcohol until intoxicated, then dance and scream which causes great inconvenience to the surrounding public. Similarly, Jabal Al-Lweibdih's mukhtar (Arabic: مختار, English: figurehead or mayor equivalent on the neighbourhood level) and resident since the early 1940s Omar Fa'ori

notes that the historical area is mostly a quiet residential neighbourhood that accommodates Amman's indigenous families but in the past few years has been witnessing an increasing interest due to the mushrooming museums and galleries in addition to the artesian cafés and restaurants that spread across the area which in his opinion brought visitors attention to Jabal Al-Lweibdih's Matall. In the interview, Fa'ori argues that the Matall is a problematic area that needs to be addressed. *"The cliff overlooking Jabal Amman and Jabal Al-Ashrafeyih has recently become an infamous spot where people get drunk, bring their amours, smoke shisha in the Matall which can easily start fires, they play the radio and music on their cars stereos loudly which made many residents complain to me being the mukhtar of the area. Some complained to the police and others even posted on the National Security Facebook page. I filed a complaint to our local security centre, they collaborated with us and conducted campaigns to stop this phenomenon. But by the time the police leave, people start gathering again. Sometimes the patrol would circle the area for 6-7 hours, still, they pop up again in no time as soon as the patrol leaves"* (Fieldwork diary, 2016). According to Fa'ori, the problem is not in the youth 'hanging' in the area and enjoying the view which he stresses is a beautiful view since it's the view of Amman, but when they step into the personal freedom of Lweibdih dwellers, is where it becomes problematic. In his opinion, the 'problem' can be addressed if the National Security force would 'collaborate' with the dwellers of Jabal Al-Lweibdih by weekly inspecting the area for example to stop the temporary users of visiting the place or that GAM would build a fence to surround the Matall and prevent anyone from accessing it in the first place, because in his opinion, today's loud music and excessive drinking might tomorrow transform into drug dealing or worse and this is the best way to redress the situation.

In an informal chat with a dweller of the area, he argues that despite the fact he lived in his house in Lweibdih since 1936, he currently hates it because of its proximity to the Matall. In his words: *“I have daughters, when one of them comes to visit me I swear I hesitate a hundred times before I send her back home. Am always afraid someone will harass her, and as simple as that I might commit an honour crime⁵ and no one can blame me! ... they are all notorious bad boys, tattooed and with stabs and knife marks on their faces, they are boozers and just bad news. They are not people like us, have a look and see, they are disgusting. Do you want my daughters to hear curse words? Because they curse all the time. I called the police many times, they used to evacuate the space once they get a complaint, but they come back again and I guess the police is bored from our frequent complaints that they stopped responding... go get drunk somewhere else, not in front of my house, there are many bars and nightclubs in Amman for those people, go there and leave us alone”* (Fieldwork diary, 2016)

Again, as the example demonstrated, temporary users are the weaker category in the debate, their perspective is not taken into consideration despite the fact they are the users of the space, they are displaced easily by a simple complaint, and are automatically thought of as infamous, decadent, and disrespectful of others personal freedoms.

⁵ Honour crime or shame killing understood as the homicide of a family member by another family member as a result of the perpetrator’s belief the victim has brought shame or dishonour upon the family, or has violated a community or religion principal such as refusing to enter an arranged marriage, being in a relationship despite family disapproval, having intercourse outside marriage, becoming a rape victim, dressing in ways deemed inappropriate, engage in non-heterosexual relations or renounce their faith (AlJazeera, 2010; BBC, 2014; CNN, 2011; Human Rights Watch, 2001; Merriam-Webster, 2017b; Watson, 2012).

6.2.1.5. *Gypsy nomad tents (Kharabeesh):*

Another type of temporary uses this study introduces in the context of Amman are inhabited temporary structures. Spreading across vacant lands throughout the city, Nomads tent-like structures often occupied by Gypsies are the first form. Historically, Europeans accused gypsies of hammering the nails into the cross of Christ, the British accused them of transferring epidemics, arson and spreading rodents, while in other countries, they were also accused of burning forests and sorcery, gypsies were enslaved in modern Romania and various countries in the former Eastern European Communist Governments deprived them from exchanging gypsy culture and banned them from speaking their own language, to sum up, gypsies had a long history of expel and elimination attempts (Al-Nazlawi, 2015). Similarly, in Jordan, the misunderstood and historically despised nomad gypsies living in tents-like structures locally known as *Kharabeesh* –plural of *Kharboush*, inferior to tents and made from burlap and worn rags. The *kharboush* protects against heat but does not stand up to rain and wind which is why Jordanian gypsies moved to the warmer Jordan valley in winter times. *Kharboush* was a habitat for the poor (Dictionary, 2017)— in vacant lands or on the fringe have been facing similar struggles and have been a marginalized sector of the Jordanian society. In the words of an interviewed gypsy chief (B.N, male, 58, gypsy tribe chief) “*We live in Kharabeesh because we are the children of no place and no time, we are the children of the wind and the sun. All the land is our land. We carry our music and our joy and settle where we feel like it. We are all temporary visitors in the vast lands of God, today we are here, tomorrow we might not be. But we find hate from the people and we are always threatened of being kicked out or getting thrown into a scruffy slum unless we belong to the customs and traditions of the communities we chose to plant the pillars of our Kharabeesh nearby. We are outcasts to the structured community, our bad history chases us and*

gives us a bad reputation, our ancestors might have fought and stole, but who didn't in those times? It is not fair to assume all gypsies are bad news! ... we are not another form of diaspora, we chose this life style and we just want our right in space, a space where we can dance and play our music peacefully" (Fieldwork diary, 2016).

Nawar, arabic for 'tramps' a derogatory term that technically means 'fire-worshiper', *ghajjar* meaning 'gypsy' and *Dom* both a word meaning 'gypsy man' and the name given to Indo-Aryan ethnic group associated with Jordan gypsies are three of many labels used to classify Jordan's gypsy population often mistaken with Arab Beduin tribes, they are a group of people known for their semi-nomadic lifestyle, most of them have taken on a modern, Arab identity and are now passport and ID holding Jordanian citizens as a response to centuries of discrimination and, in turn, self concealment. However, despite their Arabization, Jordan gypsies have definitively maintained a hermetic existence, one that may have very well kept them in the shadows and placed them on the edge of society (Dehnert, 2016).



Figure 70 Gypsy tents in vacant lands in Amman. Source: Alice in Amman (2013)

Similar to previously identified temporary users, prejudice is practiced against Jordanian gypsies. In the words of G.L (female, 21, Jordanian gypsy) *“a gypsy will never reach high-up job positions, people look at us as ill-mannered and uneducated, our way of life also contribute to our outcast. We are perceived as homeless wandering people with ill-defined roots. How can we then demand our ‘spatial right’ you talk about? The traditional mind-set is creating this societal discrimination which deprives us many of our rights including education, better jobs and space... although our Kharabeesh are a place where justice and equality that your ‘civic society’ lacks prevail, that’s why a lot of ‘high-class people’ visit us secretly and spend their nights amongst us ‘nawar’ but on the very next morning they deny our existence”* (Fieldwork diary, 2016). The gypsy lifestyle is not easy to shed, and despite the odds being against the small percentage of 80,000 gypsies (Nahhas, 2015), they have always adopted a temporary lifestyle which they believe are entitled to equal to the more permanent structure dwellers that in their opinion are not

different to. However, Jordanian gypsies are convinced that their community needs and demanded right will not be attended to even if they put pressure on authorities simply due to the social stigma of gypsies which pushes them on the fringe of societies. T.A (female, 37, sociology specialist) similarly argues that in like minority groups situations, when governmental authorities fail to meet their demands and needs, Civil Society Organizations (CSO) step in. However, unfortunately, until this day she argues, there are no CSOs in Jordan that work with the marginalised gypsy community.

Also, similar to the previously identified temporary uses and practices, gypsy nomad temporary structures have been a target for anti-gypsy campaigns. The campaigns often come as a result to Ministry of Social Development (MSD) instructions to GAM to conduct the appropriate administrative measures on beggars and hawkers whom violate the Anti-Begging Committee decisions with the help of police and National Security. According to Ammon News (Al-Dabbas, 2014), wherever gypsy Kharabeesh exist, beggars and hawkers are close harassing passer-by's and passengers in their vehicles to extort money. The decision to deport gypsy Kharabeesh comes as a result to extensive presence of beggars and hawkers whom violate the orders and instructions of the Anti-Begging Committee and assault its representatives in addition to the many citizens' complaints, their impact on the general appearance of the area, as well as the health and environmental nuisances and visual pollution they cause (Assawsana News, 2016). The campaigns consequently clean the location of these 'messy' temporary structures and put them under surveillance around the clock to prevent their return.

6.2.1.6. *Refugee camps:*

The second type of human inhabited temporary uses in Jordan which this study will briefly touch on due to the variety of complex associated political, economic and socio-cultural considerations are refugee camps. As highlighted in the context chapter, the country was hit with numerous immigration fluxes, the most prominent being the Palestinian and Syrian. According to UNRWA, there are more than 2 million registered Palestinian refugees displaced following the 1948 Arab-Israeli war and as a result of the 1967 war and subsequent hostilities in Jordan in ten official camps including Amman New Camp (Arabic: مخيم عمان الجديد, English: *Mukhayyam Amman Al-Jadeed*), Baqa'a Camp (Arabic: مخيم البقعة, English: *Mukhayyam Al-Baqa'a*), Husn Camp (Arabic: مخيم الحصن, English: *Mukhayyam Al-Husn*), Irbid Camp (Arabic: مخيم إربد, English: *Mukhayyam Irbid*), Jabal el-Hussain Camp (Arabic: مخيم جبل الحسين, English: *Mukhayyam Jabal Al-Hussain*), Jerash Camp (Arabic: مخيم جرش, English: *Mukhayyam Jerash*), Marka Camp (Arabic: مخيم ماركا, English: *Mukhayyam Marka*), Souf Camp (Arabic: مخيم سوف, English: *Mukhayyam Souf*), Talbieh Camp (Arabic: مخيم الطالبية, English: *Mukhayyam Al-Talbieh*), and Zarqa Camp (Arabic: مخيم الزرقاء, English: *Mukhayyam Al-Zarqa*), in addition to three unofficial camps including Madaba Camp (Arabic: مخيم مادبا, English: *Mukhayyam Madaba*), Prince Hasan (Nasser) Camp (Arabic: مخيم الأمير حسن, English: *Mukhayyam Al-Amir Hasan; Mukhayyam Al-Nasser*), and Sukhneh Camp (Arabic: مخيم السخنة, English: *Mukhayyam Al-Sukhneh*) which are established by the Jordanian government by the Jordanian Hashemite Charity Organization (JHCO) but not recognised by UNRWA (Al Abed, 2014), nonetheless, the majority live alongside other Jordanians in cities, towns and villages. Refugee camps across the country accommodate for nearly 370,000 Palestinian refugees (UNRWA, 2015).

In addition to Palestinian refugee camps, Jordan is home to numerous Syrian refugee camps. According to the UNHCR, 1.4 million refugees escaped the Syrian Civil War to Jordan, 655,000 of which are registered. Similar to Palestinian refugees, while the majority live amongst Jordanians in cities, towns and villages, the five Syrian refugee camps across Jordan including the Zaatari Refugee Camp (Arabic: مخيم الزعتري, English: *Mukhayyam Al-Zaatari*), Rukban Refugee Camp (Arabic: مخيم ركبان, English: *Mukhayyam Rukban*), Marajeeb Al-Fhood Refugee Camp (Arabic: مخيم مرجيب الفهود, English: *Mukhayyam Marajeeb Al-Fhood*), Azraq Refugee Camp (Arabic: مخيم الأزرق, English: *Mukhayyam Al-Azraq*), and Hadalat Refugee Camp (Arabic: مخيم الهدالات, English: *Mukhayyam Al-Hadalat*) (three official and two unofficial) accommodate the rest (UNHCR, 2017).

According to UNRWA (2016a), the majority of the temporary camps have grown into urban-like quarters surrounded by areas of high population density or in the periphery of the city. The temporary constructions found in Palestinian and Syrian camps across Amman more specifically in camps labelled as ‘*emergency*’ or ‘*temporary*’ camps (UNRWA, 2016b) vary between tents and temporary prefabricated shelters (caravans) provided by UNRWA which also accommodate temporary schools, health centres, community-based rehabilitation centres and camp service offices. The camps are often very overcrowded and added temporary constructions including kiosks and stalls add to their disorganisation. Moreover, in addition to health problems, poor infrastructure, poverty and unemployment, the camps suffer the absence of green areas and open spaces and many of the temporary shelters are in a bad state of repair and in need of extensive rehabilitation (UNRWA, 2016a).

This typology of temporary urbanism in Jordan has been witnessing many transformations. Many of the Palestinian refugee camps which initially accommodated tents later replaced by UNRWA with stronger tents to withstand the harsh weather and when the crisis did not seem to be coming to an end soon were upgraded to prefabricated shelters and caravans, over the years, and after the escalation in military operations in the area, the refugees replaced many of these temporary dwellings with more durable concrete structures or mud shelters which UNRWA provided roofing material especially for roofs made of corrugated zinc or asbestos sheets which can cause many diseases including cancer, and consequently, the camps transformed into more like urban quarters (UNRWA, 2016c, 2016d, 2016e, 2016g).

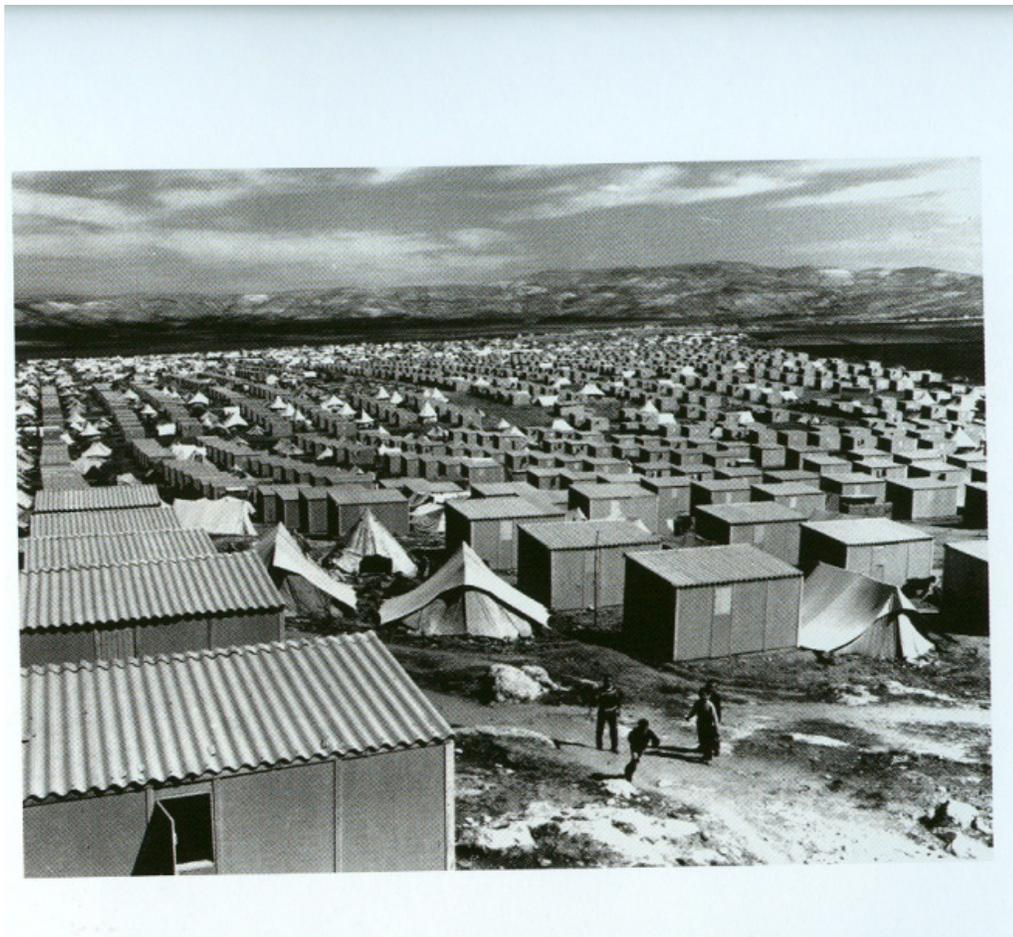


Figure 71 Baqa'a camp in 1960. Source: *Body on the Line* (2009)



Figure 72 Marka camp with more permanent brick and concrete structures. Source: UNRWA (2013)

On the other hand, the more recent Syrian refugee camps are still accommodating more temporary structures including tents and prefabricated shelters and caravans but are slowly transforming into more permanent settlements. In Zaatari camp for example, the refugees built market-like structures along the main street where goods including fruits and vegetables, basic household equipment and clothes can be purchased in addition to temporary cafes where shisha can be smoked (Kimmelman, 2014). Moreover, unlike refugee camps administered by humanitarian organisations and similar to Palestinian refugee camps, Syrian refugee camps are gradually moving away from top-down models and with the sponsorship of UNRWA and the JHCO are slowly transforming into ‘*self-provisioning*’ ‘*self-conglomerations*’ as refugees are

provided with various forms of cash-based assistance and encouraged to address their needs (Kimmelman, 2014).

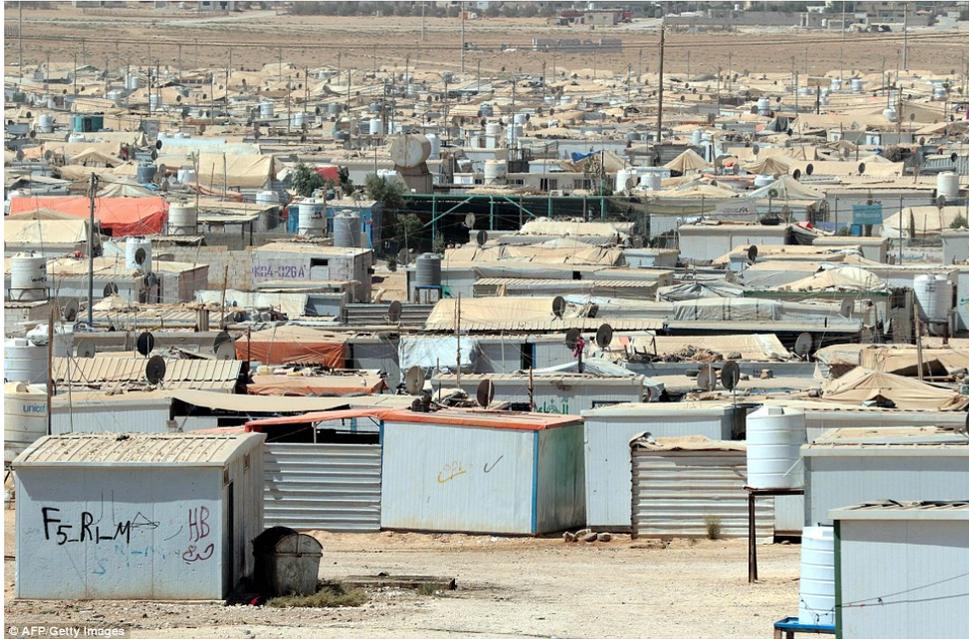


Figure 73 Temporary dwellings in Zaatari camp. Source: Daily Mail (2016)



Figure 74 Temporary school at Zaatari camp. Source: Daily Mail (2016)

Abundant research exists on refugee camps in Jordan, however, as mentioned earlier, this study will not go any further due to the political, economic and socio-cultural complexities and high sensibility of the topic. Now that potential temporary urbanism typologies in Amman have been identified, and looking at both the literature review in addition to the empirical fieldwork, the following sections will demonstrate the barriers the practice is facing and the potential benefits it might bring to the context of the study.

6.2.2. Barriers to temporary urbanism in Amman:

In spite of the intensity of the temporary urbanism phenomenon in Amman as examined so far, the practice is still faced with many barriers some of, in comparison to literature discussions and according to the fieldwork findings, are shared with the barriers to brownfield reclamation introduced in the previous chapter including bureaucracy and bureaucracy related procedures and costs; the lack of a systematic definition for the informal practice; the lack of or even absence of regulatory arrangements around its management, and; the lack of public participation in the decision-making process around temporary spaces, uses and practices. Moreover, in addition to obstacles shared with brownfield reclamation, the study identifies further obstacles shared with the international context alongside particular obstacles caused by the contextual particularity of Amman.

Identified as a '*low-cost*', '*participatory*' and '*economically beneficial*' method of managing urban change, temporary use is increasingly being deployed in urban planning practices.

Internationally, strategic employment of temporary uses of land has been identified as a low-cost, low-risk method of urban regeneration where projects can find a way around formal planning

processes and '*adaptively*' experiment with urban space adjusting and changing as necessary (Perković, 2013). Accordingly, traditional planning, and the numerous obstructions it poses, is the first barrier to temporary urbanism this study identifies in the context of Amman. A considerable number of discussions confirm temporary uses are successful methods to find opportunities in situations of uncertainty and crises (Andres, 2012a; Bishop and Williams, 2012; Graham, 2012; Hadyn and Temel, 2006; Havemann and Schild, 2007; SUC, 2003). Formal planning practice can strategically deploy temporary projects to achieve long-term planning objectives and discussions argue this can be easily achieved through dedicated processes, staff and relaxed regulations.

According to the study findings, utilizing the full potential of temporary urbanism requires an understanding of the interactions between temporary projects and the traditional planning systems. As the examples above demonstrated, temporary uses in Amman vary in duration, purpose, location and user categories, but share the premise that they are not meant to be permanent; there is usually no formal change of ownership; large investments to the site; or change to the land-use plan, and; interaction with formal planning is minimal. Traditional planning in Amman fails to anticipate temporariness and lacks the tools to appropriate processes in place. Therefore, where a temporary use is successfully established, some element of legislative tolerance is usually in place.

As Jordan should move to greater tactical deployment of temporary use, the lessons from the established successful models may be crucial for understanding what barriers its planning system may pose, how temporary uses could be better incorporated into the existing planning system, and what support it may offer. According to the study findings, through the application and

enforcement of non-traditional constructive policy mechanisms, planning legislations in Amman can support, encourage, promote and regulate the creative use of space where the informal practice fails to self-regulate instead of the current hindering and complication they cause to an already ambiguous exercise. Temporary use projects can be initiated with minimum formal planning support, however, having to comply with formal planning processes is a significant hurdle. Traditional planning in Amman does not make provisions for short-term urbanism, imposing costly and time consuming processes that are incommensurate with the short duration and low cost of the temporary use. Obstacles formal planning imposes on temporary use include the application for change of use; the building safety requirements, and; the arbitrary decision-making (Perković, 2013; Shaw and Sivam, 2015).

The lack of temporary urbanism agencies that act as instruments to initiate the practice; have experience with the technical aspects of its implementation; can organise and utilise the practice, and; manage to insert it in the existing planning procedures (Andres, 2012a; SpaceMakers, 2009; Steele, 2010; Thompson, 2012) is another barrier this study identifies and argues is associated to the lack of organisational arrangements surrounding the management of temporary practices introduced above. According to the study findings, the lack of temporary urbanism agencies can result in unrealistic proposals that emphasize unnecessary needs; prejudice, injustice and bias against temporary users; the lack of financial support in addition to a set of challenges that currently face informal economy in Jordan highlighted by participants which the study predicts will face temporary practices including the low wages and salaries in addition to the lack of social or professional security insurance. Moreover, the lack of legal protection for the contracts and transactions; high operation costs and registration fees; the limited financial resources and

access to concessional finance in addition to the lack of professional care agencies. However, according to the study findings, many of these obstacles can be exceeded in collaboration with concerned authorities by providing benefits including access to finance; reduced restrictions; providing grants; access to information at no cost; providing training and technical support and capacity building for individuals and groups; providing feasibility studies; providing memberships to associations and official bodies in order to benefit from some of their advantages including access to certain markets; the protection of employees and business owners; exemptions from taxes; fees and registration costs; the allocation of private economic zones; in addition to the establishment of unions to organize the work. Entrepreneurship plays a significant role in temporary practices in Amman, however, according to the study findings, in Jordan this category suffers from high registration fees; lengthy and complicated registration procedures; in addition to labour costs including insurance, pension and salaries.

In addition to policy makers and governmental authorities, barriers to temporary urbanism are generated from various stakeholder groups including real-estate developers in addition to the local community. Similar to what Urban Pioneers suggests, temporary use is only made possible depending on the response of the property owner(s) which may support or reject out of fear that temporary user(s) may (and will) block potential future profitable redevelopment opportunities (Stadtentwicklung, 2007). Accordingly, a temporary user(s) may secure the site for free while other(s) may pay a moderate rent or a service charge, some might get permission to use the site all year round while other(s) may have permission to use it in specific times. Moreover, in terms of local community obstacles, as the examples demonstrated, the lack of awareness to temporary urbanism in general and the fact that many temporary spaces surrounding communities look at

temporary uses as acts of vandalism that violate the urban space and at temporary users as infamous, decadents, notorious and disrespectful to others personal freedoms adds to the challenges that face the phenomenon.

The lack of information and data and the fact that informal practices are not acknowledged in statistics or studies makes temporary urbanism in Amman more ambiguous and unclear which the study argues is an urgent issue that needs to be addressed for a sector, which as previously mentioned, makes almost up to half of the country's national economy, a significant percentage that can equally be an advantage or a threat depending on how it is undertaken. The lack of information around temporary urbanism including temporary uses, users and practices, alternative economies, informal economy and self-employment in Amman is another barrier which this study argues has resulted in less academic and scholar attention to the phenomenon which in return asserts the need for further future research on.

Contextual particularities of Amman also pose numerous obstacles to temporary urbanism. For example, in light of the current high political tension levels, the study argues officials must be wary of security implications in cases of confrontation with temporary users. Municipalities must set reasonable priorities, realistic alternatives and discard the current temperamental and random measures. Moreover, as noted above, each case can be re-thought about in more effective ways that may overcome the anti-development battle. As seen in the examples earlier, in the uncontrolled informal sector including flea markets, Souqs and street vending, favouritism and prejudice is practiced where unfair preferential treatment is given to particular persons or groups over the other(s). The study argues this may result in negative outcomes as the examples earlier also indicated including the acceleration of the situation by temporary users, or the evolution of

internal informal protection systems in return of mandatory tributes which is already the case in many examples.

Lastly, the study identifies practice related barriers including its experimental nature and uncertainty in addition to the transformation, commodification, resistance and displacement the practice has been going through. As a result, according to the study findings and as examined in the examples above, temporary spaces remain neglected, perceived irrelevant, economically useless, and marginalized in the place making competition. And temporary users remain powerless, oppressed and easily displaced. Moreover, the practice in general is thought of as an illegal practice and uncivilized appearance with negative impacts that deform the image of the city where conversely this study argues the costs invested to its removal may contribute to its development and chip in the economic growth.

6.2.3. Benefits of temporary urbanism in Amman:

Looking at the international temporary use experience presented earlier in the literature review chapter and how the temporary use has been harnessed in economic and urban development policies in addition to the marketing of the city, this study argues similar benefits may be obtained in the context of Amman (Ground, 2013; Heinemann, 2002; Hernández et al., 2010; Németh and Langhorst, 2014; Oswald et al., 2013; Panu Lehtovuori, 2012; Smet, 2013; Zagami, 2009). As presented throughout the chapter, the city of Amman enjoys similar characteristics of temporary urbanism practices to the ones found in the global context. Moreover, looking at the meanwhile experience and the various temporary use experiences across other different contexts

confirms the study finding that in Amman, if similar temporary use strategies are appropriated and implemented many benefits may be accomplished.

The first and most paramount potential benefit for temporary urbanism this study seeks to highlight is the reclamation of derelict, vacant and underutilized brownfield sites. According to the study findings, the vast quantity of underutilized spaces available in Amman and under the relatively flexible and tolerant environment—in comparison with neighbouring countries socio-cultural characteristics and political situation— would allow temporary urbanism to thrive. As demonstrated throughout the chapter, the majority of temporary structures in Amman are erected on vacant underutilized spaces, they increase public access to space, improve property value, minimize maintenance costs, promote previously derelict space by transforming decayed sites into thriving ones, embrace start-up businesses and create job opportunities. In addition, the study argues, temporary use of brownfield sites in Amman may contribute to making up the deficit of green areas and open spaces the city suffers from. Similar to brownfield sites and as the previous chapter and examples above demonstrated, temporary users including start-ups, entrepreneurs and other temporary user groups and individuals are neglected, marginalized and pushed to the peripheries of development priority lists. This study therefore argues taking forward temporary urbanism concepts into the reclamation of brownfield sites may equally contribute to achieving spatial justice to both urban components and ultimately contributes to achieving greater spatial justice in Amman in general. This argument is picked up later in the next chapter.

Identified as the economic structure that is separate from and operates largely independent of traditional economy (Healy, 2008), alternative economy is another benefit this study argues temporary urbanism brings to the economic construction of Amman. According to the study

findings, in the midst of economic reform, restructuring and attempt to create job opportunities, the role of informal economy in the development sector is often absent from the minds of decision makers, by informal participants noted participants referred to businesses and activities carried out by non-registered companies and not participating in any illegal activities but are not included in the formal tax system or official records. The majority of participants confirmed that adopting temporary practices in Jordan may support informal economy and make it more attainable. According to the study findings, temporary practices may be an important potential revenue source to the state treasury as well as a source of information about informal economy in Jordan, its realistic size and the role it plays in achieving development planning goals which can address the lack of information about the urban phenomenon obstacle identified earlier.

Moreover, excluding Syrian, Egyptian and other foreign labour, temporary urbanism practices may considerably decrease unemployment and as a result, financial inclusion and the expansion of its user base to include temporary users which the study argues can be both a tool and an incentive to gradually introduce temporary practices to the planning systems within the wider aim of capacity building, protection provision, and the overall development of the planning industry. Furthermore, away from numbers and percentages temporary urbanism may represent, this study argues it is necessary to stop at the significance of incorporating it into the traditional economic system, try not to '*force-regulate*' it in the sense that incentives and exemptions are offered freely and voluntarily not for the purpose of imposing taxes, fees or other laws which calls temporary users to give up on.

According to the consulted financial experts, in the lack of alternatives, temporary practices may be an escape from mendacity or illegal gain practices such as theft or fraud to provide a decent

living and reduce the pressure on the already slim National Aid Fund. Therefore, this study argues, Jordan, similar to many other developing countries, should pay attention to temporary users for a variety of reasons including that, as the context chapter emphasized, the country predominantly consists of underprivileged or lower-income class which according to the study findings are not granted many of their rights including minimum wage, advantages and benefits such as health insurance, retirement, vacation leaves, in addition to employers uncommitted duties. As emphasized earlier, temporary urbanism is widely considered when planning for crisis, lack of vision or chaos, accordingly, this study argues taking forwards temporary urbanism concepts may be effective for planning for the after math of the economic crisis Amman is still suffering from in addition to the regional turmoil surrounding the country. Using tactical methods and employing the local knowledge of communities the study argues may unpack the overlooked economic impact of the phenomenon and contribute to the overall urban development of the city

According to temporary users interviewed for the study, temporary uses do not '*deform the urban scene of Amman*' they are not an '*uncivilized appearance*' and they do not attempt to '*violate*' or '*vandalize*' the urban space, on the contrary, they argued they contribute to the peculiar socio-cultural experience which is another potential benefit this study argues temporary urbanism brings to the case of Amman. The study argues temporary urbanism has many social and cultural benefits including encouraging cultural innovation and creativity thus promoting the cultural identity of the city, supporting community causes and expressing social solidarity, and advocating community empowerment and the unique socio-cultural Ammani experience through emphasizing the role of the right to participation and appropriation previously discussed in the literature review chapter. Moreover, as demonstrated in the examples earlier, non-conventional

practices in Amman highlight the versatility and resilience of the local community, allows them to think big despite the lack of resources and gives entrepreneurs in Amman a chance to experiment with those ideas and transform them into realities in addition to maintain spaces Ammanis escape the everyday burdens of life to.

Overall, benefits to temporary urbanism the study argues contribute to city marketing and the promotion of Amman as a creative city that embraces temporary users under flexible open-source urbanism and a friendly start-up business environment in a less financially thriving context. Accordingly, the study suggests mapping the amounts and locations of distinctive patterns of temporary urbanism would contribute to the wider debate in critical urban research about temporary urbanism and bridge the gap on research by provoking scholars to look more in-depth at the peculiar phenomenon in the overlooked Middle Eastern context in future research.

6.3. Conclusion:

This chapter discussed temporary urbanism in Amman, the second theme in the study's overall theoretical framework. By shedding the light on the distinctive patterns emerging throughout the city, the chapter identified six typologies of temporary uses, spaces and practices including (1) flea markets; (2) bazar-like Souqs; (3) street vendors including bastas, sheds, tents, stalls and kiosks; (4) vacant-underutilized cliffs (overlookings or Matalls); (5) gypsy nomad tents (Kharabeesh), and; (6) refugee camps. Afterwards, the chapter shifted its focus to highlight the obstacles facing temporary urbanism in Amman including barriers similar to the international context as identified in the literature review chapter in addition to particular barriers including traditional planning; the lack of agencies to represent the informal sector; real-estate developers

and local community related obstacles; the lack of information on the urban phenomenon; contextual particularities in addition to practice related barriers. The chapter then highlighted the potential benefits temporary urbanism may offer to Jordan including similar outcomes to successful temporary use experiences in the global context including economic growth and urban development in addition to Amman specific potential benefits including the reclamation of brownfield sites; shedding the light on overlooked alternative economy and its potential outcomes, and; the numerous socio-cultural benefits including the promotion of cultural identity, emphasizing the unique social and cultural experience and participation in the place making of the city.

Moreover, in an attempt to analyse the political dynamics and the power structure surrounding temporary uses in Amman, the chapter argued the different types of temporary practices in the city are a form of resilience and an expression of peoples' right to the city. These preliminary findings suggest further future debate, research and experimentation with temporary use in Jordan which is picked up in the next chapter. Accordingly, the study recommends a policy shift which emphasizes the role of temporary use in the social, cultural, political and economic development of cities.

CHAPTER 7: ACHIEVING A MORE SPATIALLY JUST AMMAN

7.1. Introduction:

The pursuit of ‘*spatial justice*’ in contemporary societies has been an ongoing quest in the search of just cities and just societies. As part of the central theme, this chapter seeks to investigate how to achieve a more spatially just Amman through taking forward temporary urbanism concepts into the reclamation of brownfield sites, a ‘*spatial process*’ and a ‘*spatial product*’ which this study argues –and has demonstrated so far—have numerous potentials and opportunities to provide theoretical discussions and empirical analysis on justice with a spatially informed social perception.

The chapter emphasizes explicitly the ‘*spatiality of justice*’ and injustice in Amman in general through looking at inequality indicators then moves to the smaller geographic scale of brownfield sites in order to elicit its findings. To doing so, and taking into consideration the discussions on the production of space, the right to the city, social justice and the city and spatial justice introduced in the literature review chapter in addition to the empirical fieldwork, the chapter firstly attempts to demonstrate spatial justice in Amman in general by examining established inequality indicators in literature discussions in addition to the peculiar spatial forms –and social forces—which contributed to its production. Secondly, considering locational discrimination is a fundamental catalyst for spatial injustices, the chapter sheds the light on the urban segregation between the Eastern and Western ends of Amman –as introduced earlier in the context chapter— and highlights its role in emphasizing spatial injustice throughout the city as well as examine the attempts to addressing it. Thirdly, to connect the theoretical framework of the study, the chapter investigates the connections between spatial justice and brownfield sites which the study argues

can aid in promoting more just urban practices, and lastly, according to the overall study findings, the chapter concludes with drafting a set of recommendations which it argues will guide Amman to becoming a more spatially just city. This chapter bids to contribute to the wider debate on the role of spatial justice in the regeneration of urban space in general and brownfield sites in specific and the widespread of its recognition and application.

At this point of the research, it is important to note that, according to literature discussions, ideally distributed development; utterly socio-spatial equality; even delivery of justice as well as universal human rights are impossible to achieve. Every geography where we exist has embodied injustice and therefore, making the selection for the site of intervention for the study was merely to highlight the potentials and possibilities it may offer to further spatial justice.

7.2. (In)justice in Amman:

As the introduction emphasized, in order to examine spatial (in)justice in Amman, it was fundamental to skim through the broader (in)justices and their manifestations throughout the city. Accordingly, looking at the available literature as well as the empirical fieldwork, the following section examines the general socio-economic injustices then shifts its focus to the more specific spatial injustice in the context of Amman.

7.2.1. Socio-economic (in)justice in Amman:

Thinking about space has significantly changed over the past few decades, Soja (2009) for example argues space is considered as container, stage for human activity or an active force

shaping human life. Accordingly, new emphasis on specific urban causalities has emerged to explore the generative effects of urban agglomerations not just on everyday behaviours but on processes such as technological innovation, artistic creativity, economic development, social change as well as environmental degradation, social polarization, widening income gap, international policies, and, more specifically, the production of justice and injustice (Soja, 2009: 2). According to the latest UNDP (2015) report on socio-economic inequality in Jordan which measures inequality in income, access to services, equality in opportunities for children and youth, and gender inequality, over the past ten years, Jordan has had success pursuing structural reforms in education, health and privatization as well as liberalization. However, the country still faces important challenges; macro and microeconomic vulnerabilities persist because of previous dependency on subsidies and energy that are no longer attainable; regional tensions in Egypt, Syria and Iraq that are weighing down the Jordanian economy through widening trade deficit and weakening investor confidence; high unemployment and a dependency on remittances from Gulf economies is an additional threat to economic stability, moreover, Jordan still faces the daunting '*short-term*' challenges due to the spill overs from the Syrian conflict.

Jordan displays inequality measures rather low in comparison to that of other countries with similar per capita GDP. Over the past decades, inequality fluctuated in Jordan, but reached an all-time low since 2006. Income inequality is high; less educated, prime-age employed men with large families are the worst off; education and income display the typical relationship: poorer neighbourhoods have less educated heads of households; larger households are over represented in the bottom income category; over half of the population under 15 years of age live in the poorest areas, the situation is better for youth – i.e. individuals aged 15 to 24 – whom are more

likely to live in better off areas. According to the report, the fact that half of the future youth will come from the poorest neighbourhoods –young cohorts aged 6-14 which will reach adolescent age in the coming years— and may bring forward the largest share of vulnerable youth that has been witnessed so far in the country should be a critical point to be addressed by policy makers.

Living conditions are quite evenly distributed across places of residence and income categories, and basic connectivity is reaching nearly all households in Jordan. Furthermore, access to educational and medical facilities is not much affected by residence or income category. The health and education status of women in Jordan compares favourably with that of other developing countries. Moreover, the health and education status of women in Jordan compares favourably with that of Jordanian men. Female labour market participation rates are one third of men's on average. Moreover, the gender gap in market participation is markedly higher for the most vulnerable women, i.e. those with low education or from the poorest areas. The '*marital status gap*' in labour force participation –relative difference in labour force participation between married and never-married women— is high. However, and irrespective of marital status, Jordanian women aspire to be employed. Jordan displays one of the lowest female labour force participation rates in the world. Even more worrying is the fact that the gender gap has worsened since 2006 as noted by the 2014 World Economic Forum. And lastly, geographic inequality in Jordan is also high as there are drastic differences in inequality levels between areas.

In light of the UNDP (2015) report, four main inequalities in Amman must be addressed; (1) income; (2) accessibility (3) opportunities, and; (4) gender-equality, the highest gap and unequal distribution across Amman is in income and road network indicators which is most apparent through the geographic distribution. This study therefore suggests the reclamation of brownfield

sites through temporary urbanism aimed to delivering higher income, better quality public access and equal opportunities for children, youth and women more specifically in eastern Amman may bridge this gap. It may provide a safety net that targets the poor and youth, foster women's participation within the labour force and provide a framework that includes policies to address non-monetary injustices as well as socio-spatial injustices. This is picked up later in the recommendation sections.

There are many inequalities that this report could not discern whether due to the limited information included in the data or due to the context particularities. However, given that Jordan seems to have universal access to education, health and services but is on the lower end on income equality and road network in addition to inequality of opportunity for children and youth, and taking into consideration that socio-economic inequalities are drivers for spatial inequality, this research shifts its focus to examine spatial (in)equality across the geographic zone of Amman, the connections between it and the above discussed socio-economic equality indicators, and how can achieving spatial equality address the gap between those indicators whether through increasing income in poorer areas or emphasizing connectivity and public access to space.

7.2.2. Spatial (in)justice in Amman:

Combining the terms '*spatial*' and '*justice*', discussions argue, opens up a wide range of possibilities for social and political action, as well as for social theorization and empirical analysis, that would not be as clear if the two terms were not used together (Campbell, 2013; Hadjimichalis, 2011; Wagner, 2011; Williams, 2013; Yenneti et al., 2016). Similarly, this study

argues, marrying the two terms in investigating the spatiality of justice in the case of Amman would open up like outcomes.

Soja (Soja, 2010a) argues that, critical spatial thinking today hinges on three main principals; (1) the ontological spatiality of being, in which he argues we are all spatial as well as social and temporal beings; (2) the social production of spatiality, that is space is socially produced and can therefore be socially changed, and (3); the socio-spatial dialect, in which the spatial shapes the social as much as the social shapes the spatial. Similarly, in Amman, when thinking about space, peculiar spatial forms and social forces contribute to its production. This study argues the intensity of the urban restructuring processes which unfolded within a relatively short period of time through the contemporary history of the city was the most prominent. Moreover, as emphasized in the context chapter, due to the numerous immigrations and the political regional turmoil in addition to globalization and the peculiar socio-cultural identity of the city, the social structure of Amman is characterized with diversity, complexity, symbiosis and coexistence which also contributed to its unique social production.

In its broadest sense, '*spatial (in)justice*' refers to the intentional and focused emphasis on '*spatial*' or '*geographic*' aspects of '*justice*' and '*injustice*' (Soja, 2010a). Fundamentally, it involves the fair and equitable distribution in space of socially valued resources and opportunities. However, it is important to understand here that this study does not argue spatial justice is replacement or alternative for other forms of justice including social or economic rather a critical way to looking at justice. From this outlook, there is always a spatial dimension to justice and every geography in return has an embodied justice and/or injustice. Soja argues that spatial (in)justice can be perceived as both a '*process*' and an '*outcome*', as geographies or

distributional patterns that are in themselves just/unjust and as the processes that produce these outcomes (Soja, 2010a). Accordingly, this study argues, brownfield sites and temporary uses are both a process and outcome to spatial injustice that must not be overlooked. As the previous chapters demonstrated, the identified potential brownfield geographies in Amman as well as the city's distinctive temporary urbanism patterns are non-existing in the official planning systems; they are overlooked in development and redevelopment plans, and; their users are marginalized, easily displaced and prejudiced against, thus are in themselves unjust. This argument is picked up later in the spatial justice and brownfield reclamation section.

Indeed, seeking increased justice or decreased injustice is a fundamental objective to all societies and a foundational principle to sustain human dignity and fairness. Rawls' (2009) theory in justice may say little about the spatiality of justice and injustice. However, the study argues, it is fundamental to take his criteria of equality, diversity and democracy (public participation) into consideration when looking at the case of Amman. According to Rawls' three hallmarks of urban justice— material equality, diversity and democracy— and looking at the study findings, the case of Amman does not do too well. In terms of *diversity*, despite the highly diverse population mix, the urban practices do not address mix-use or mix-economy development. It does not take immigration which over the past few decades have resulted in mixed (in ethnicity as well as in income) neighbourhoods. The recent Metropolitan Growth plan for example –despite being currently on hold due to the economic crisis aftermath and uncontrolled exponential population growth— prioritized high-rise, megaproject development over lower-income neighbourhood development which the study argues resulted in further gentrification and emphasized the urban segregation. At the same time, the lower property prices and authoritative censorship leeway in

addition to the low-income housing policies means the area will retain most of its population and will continue to be the preferred initial regional immigrants' destination which means it will continue becoming more racially mixed and ethnically diverse, yet, with no sign for potential mix-income policies anytime soon.

In terms of *equality*, future development plans and agendas do not seem to emphasize the overall development of the city, promote the creation of affordable housing in high-end areas for example, or priorities the considerably insufficient green areas or public open spaces which the study argues may encourage public access in lower-income neighbourhoods. In general, the lack of sensitivity towards lower-income communities versus the excessive interest in high-end ventures that radically transform the city and emphasize the urban segregation is another measure of inequality manifested in Amman. Moreover, the fact that the components of the Amman master plan are restricted to land use and development and do not address the links between the socio-cultural activities or interactions throughout the city which despite witnessing unforeseen levels of wealth still suffers from increasing inequality is also raising concerns.

Lastly, in terms of *public participation* (the democracy criterion), according to the study findings, this component is either missing or uneven. Decisions on important projects are being held away from public sight or community boards advice. Governmental authorities in Amman have successfully avoided public participation by placing large scheme projects in the hands of private development companies and corporations that are not bound by this condition and have power to city zoning and exercise dominance. Thus, while there may be endless meetings and citizen input into the arrangement of a small space on the neighbourhood level, there will be

nothing but procedural hearings for the construction of another tower or mega-project. The lack of deliberations the study argues does not promote public participation.

The preliminary motive for the latest Amman plan was to accommodate growth, mainly the private sector projects which poured in the country in the early 2000s as demonstrated in previous chapters. However, also as highlighted earlier, the following economic crisis and political turmoil—more specifically the Syrian crisis—forced the plan to be put on hold. The plans for future development did not encompass the poorer districts stretching eastward; they merely addressed the typical residential, commercial, and industrial needs, and, according to the study findings; did not include neither brownfield sites or temporary uses which this study suggests would promote spatial as well as social justice and contribute to the overall production of space of Amman.

There is little effort in development plans to upgrade disadvantaged higher density parts of the city including the provision of jobs or housings for the current population or the continuous immigration influxes. In general, the future development agenda in Amman has less commitment towards achieving equality than the reviewed cases in Europe, the United Kingdom or the United States. Moreover, the spatial planning of Amman is confronted by many issues including brownfield redevelopment, temporary uses and users, gentrification, minority groups poverty and unemployment in addition to increasing property prices. According to the study findings, Amman plans have less commitment to overcome these disadvantages, they do not encourage the economic development of smaller groups, and suffer a lack of public subsidies provision to developers. Furthermore, when it comes to transport infrastructure, the main tool for stimulating business development (Goldsby et al., 2014), in addition to its numerous economic and environmental benefits, the city fails to provide access as it does not invest in public transit.

Transport in Amman relies extensively on private vehicles, causing travel within the city to be very costly. Public accessibility this study argues is vital for achieving greater spatial justice.

Development in Amman heavily relies on the private sector, consequently, developers and companies can easily override citizens simply by refusing to invest. Moreover, they ignore the provision public benefits to obtain planning permission and instead devote considerable time and money to create unrealistic images and promises of '*state of the art*' urbanism (Daher, 2013) and as a result, the realistic public benefits and needs end up unmet.

In the contemporary context, the concept of justice and its relation to notions including equality, democracy, civil rights and citizenship has taken new meanings whether due to the increased economic inequalities, the social polarization associated to globalization or the new economy (Griffin et al., 2015; Low and Iveson, 2016; Wagner, 2014). The '*justice*' this study attempts to achieve is one that is inspired by a symbolic force that crosses beyond class, race and gender to foster a collective political consciousness and a social solidarity that leans on a wider, shared experience of space. Worldwide, the quest for justice has become both a call and a mobilizing force for new social movements that attempt to extend the concept beyond the social and the economic to new forms of struggle and activism (Wald, 2013). Similarly in Amman, numerous NGO's and CSO's have taken the responsibility to promote concepts such as social justice and the right to the city through different tools. One NGO, Ahel (Arabic: أهل, English: *Ahel*. Understood as kin or family members), for example, leads a collective action to bring about change for justice and protection of human rights which it attempts to implement through empowering and mobilizing communities in active citizenship (Ahel, 2016). According to the NGO founders, despite the fact that the organisation attempts to empower community through

organizing and managing campaigns in addition to training teams from the community itself to overcome its own problems, property ownership remains a significant hurdle. Most project ideas they argue only lack fund to become real, having a space to physically realise those ideas may significantly cut back on the overall costs. Another NGO, Ta3leelih (Arabic: تعليه, English: *Ta'leelih*. Understood in local Jordanian dialect as late evening social gatherings), acts as an open social platform for people to discuss their ideas, issues and community concerns. The organisation promotes social justice and similar concepts, however, concepts such as spatial justice and people's right to the city remain beyond its grasp. Ruwwad (Arabic: رواد, English: *Ruwwad*. Meaning pioneers), is another non-profit community development organisation that works with deprived communities through education, youth volunteerism and grassroots organising to achieve child development, youth organising and community support in underprivileged neighbourhoods. The NGO focuses on civic society and entrepreneurs to advance its sustainable development goals by nurturing civic engagement and actively encouraging grounds-up solutions (Ruwwad, 2016). However, the inequalities the organisation seeks to address are socio-economic and lack the spatial dimensions. In terms of initiatives, Reclaiming our Streets (Arabic: شارعنا, English: *Share'na*) initiative launched through Al-Balad theatre (Arabic: مسرح البلد, English: *Masrah Al-Balad*) is a project aimed to strengthen citizenship through different forms of art, more specifically graffiti art. A project based on the believe that citizenship is strongly connected to the feeling of ownership which the project aims to “*beautifully express*” (Al-Balad Theater, 2015). The theme of the project is ‘*resistance*’; resistance on all kinds of oppression whether it be social, political, religious, personal or historical, the project aimed to harness the creativity and imagination of participants to express resistance through urban graffiti art. Yet, similar to the previously highlighted examples, has little

consideration for spatiality. To sum up, examples of projects and initiatives that promote justice within the broader notion of equality, democracy, civil rights and citizenship in Amman vary, however, as the examples earlier demonstrated, the spatial element is missing from their frameworks.



Figure 75 Ahel's 'حصار وقتها' it's about time' campaign to provide more spatially equipped educational environment for the special needs. Source: Ahel (2012)



Figure 76 a Ta'leelih in one of Jordan's most deprived areas to discuss public concerns in 2016. Source: Ta3leeleh Facebook page (2017)



Figure 77 A session of Ruwwad's Youth Empowerment program. Source: Ruwwad Facebook page (2017)



Figure 78 Reclaiming our streets 'Resistance' campaign in 2016. Source: Al-Balad Theatre for author (2016)

At the end of this section, looking at the available literature on justice and equality in the case of Jordan, in most cases, only socio-economic inequalities are highlighted, little research is conducted on them in general and little is being done to tackle these inequalities, in addition, and most importantly to the study, neither spatial nor political spatial equalities are addressed in discussions in the Middle Eastern context, this study therefore identifies a gap in literature which further investigation is needed to explore. This remains a potential research project. On the other hand, and as the introduction emphasized, as locational discrimination is a fundamental catalyst for spatial injustices, the following section demonstrates the urban segregation case in Amman

between its Eastern and Western ends and highlights the role it plays in emphasizing spatial injustice throughout the city.

7.3. Spatial segregation in Amman:

The urban segregation emphasized in the context chapter between Amman's Eastern and Western ends, the study argues, also contributed to the production of spatial injustice. Locational discrimination which Soja (2011) argues is created through the bias(es) imposed on particular population(s) as a result of their geographic location is also fundamental to the creation of lasting spatial structures of privilege and advantage. Class, race and gender are the three most prominent forces that shape locational and spatial discrimination and their effects must not be reduced only to segregation, he adds. According to Soja, the political organization of space is another powerful source to spatial injustice. The political organization of the city as well as the redlining of urban investment, and the effects of exclusionary zoning to territorial apartheid, institutionalized residential segregation, as well as the creation of other core-periphery spatial structures of privilege he highlighted also imply to the case of Amman.

While east Amman is characterized with clustered informal settlements –by informal the study refers to self-built constructions not included in planning and developmental programs— developed near Palestinian refugee camps which according to studies was in order for groups inhabiting informal settlements to get access to UNRWA services including medical aid and primary education in addition to relief and social services, *see temporary urbanism chapter*. West Amman neighbourhoods are characterized with private villa-like residents and high-rise mixed-use modern buildings. The spatial allocation is also a reflection of citizenship between the

original Transjordanians, Jordanians of Palestinian origins, Palestinians or refugees from other nationalities.

Camps and informal settlements have been growing exponentially on vacant lands including deep valleys and steep hills in Eastern Amman post 1967, the high rate of home ownership in informal settlements was due to earlier real-estate transactions, which may or may not be registered in the land registry, as well as former upgrading policies, which included access to housing (HUDC, 2004). Moreover, due to rural depopulation and changing lifestyle, many rangelands in East Amman have been illegally appropriated and built on by indigenous tribes and Bedouins (Razzaz, 1991, 1996). The government issued a special law to regulate the land appropriation in 1986. Moreover, the government periodically allows squatters to purchase the state land they occupy for nominal prices.

Areas populated by Transjordanian tribes pose different challenges from those occupied by Palestinian refugees, the main problems concern real estate ownership, taxes and issues that do not involve questions of nationality or identity in contrast to areas inhabited by Palestinian refugees. Informal settlements which result from rural depopulation receive special treatment from municipal services and the Land Registry Department. In general, mayors, whom often come from the same tribe as the settlement members, provide basic services for the residents within their sphere of influence without requiring the intervention of the Housing and Urban Development Corporation (HUDC) (Ababsa and Daher, 2011).

In Amman, HUDC defines informality according to the availability and accessibility to road network, the shape of building and the legal criterion linked to types of ownership (Ababsa, 2011) while the UN habitat defines a parcel informal if lacking one or more of the following

conditions; (1) access to improved water; (2) access to improved sanitation facilities; (3) sufficient living area – not overcrowded—; (4) structural quality/durability of dwellings, and; (5) security of tenure (UN Habitat, 2015). According to both definitions, the majority of constructions in East Amman are informal.

Informality in Amman is also subjected to citizenship. The term ‘*informal settlement*’ can refer to slums (Arabic: سكن عشوائي, English: *Sakan Ashwa’e*) when addressing Palestinian inhabited areas while the term ‘*poor area*’ (Arabic: مناطق فقيرة, English: *Manatiq Faqeera*) is preferred when addressing Jordanian inhabited areas.

Informal settlements in Eastern Amman pose numerous challenges, they suffer extremely high population density, are typically located in dangerous topographies including floodable valley basins or steep hills (Ababsa, 2011). The dominant building type in East Amman are collective housing in apartment blocks up to four floors high with the possibility for another up to four floors below street level in buildings located on hilly sites which can make a total of eight floors high buildings or clustered single modular self-built housing units often unfinished either from one or more elevations or from the roof for potential future extension plans. Numerous informal settlements in Eastern Amman are currently in a dilapidated condition. On the other hand, the dominant building types in Western Amman are private residential villas.

In addition to the urban attributes, the segregation between Eastern and Western Amman extend to the spatial distribution of its demographics, including population distribution, income levels as well as education levels. According to data obtained from the DoS based on the latest census conducted in 2015 and the latest household income and expenses survey conducted in 2013— and as the maps and figures below will demonstrate— the percentage of under 15 years old

population is considerably higher in East Amman compared to the one in West Amman.

Conversely, the elderly population (between 75 to 79 years old) is found more in West Amman than in East Amman. In addition, bigger family sizes are spatially arranged in East Amman neighbourhoods and informal areas near camps against smaller size families spatially arranged towards the West.

Similarly, employment indicators represented with workers and job seekers also reflect the urban segregation of Amman. More economically active population is found towards the west while job seekers are found more towards the east. In terms of poverty, the latest household income and expenses survey in 2013 further confirms the disparity, large pockets of poverty were identified in Eastern parts of Amman in comparison to the higher income levels in Western Amman.

According to the survey, more than third of families living in East Amman are poor. HUDC carried out upgrade programs to bridge the gap and the Ministry of Social Affairs provides aid through the National Fund that covers basic food needs and, as highlighted earlier, health services and education are generally provided by UNRWA.

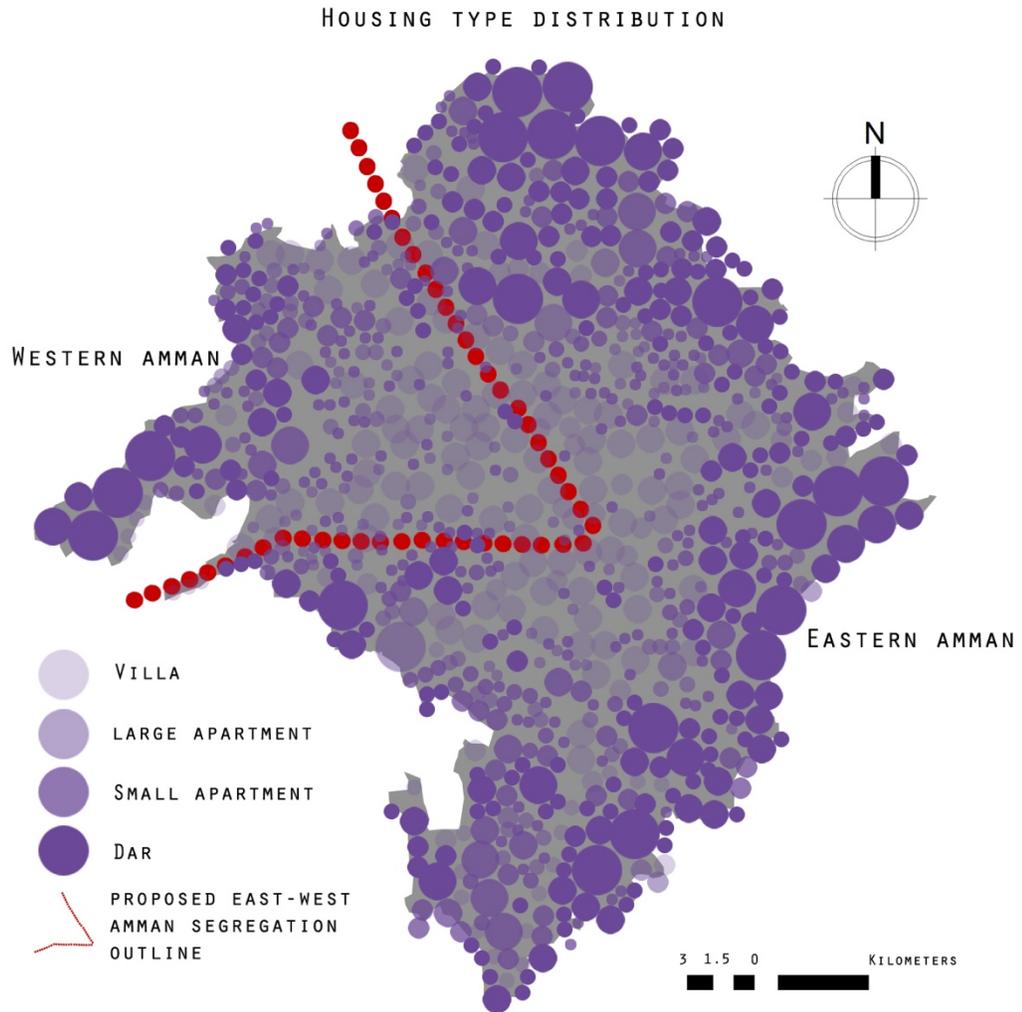


Figure 79 Housing type distribution in Amman according to the 2015 census. East-West segregation line based on Ababsa (2011). Source: Author based on DoS and GAM data (2017).

UNDER 15 YEAR OLD POPULATION SPATIAL DISTRIBUTION

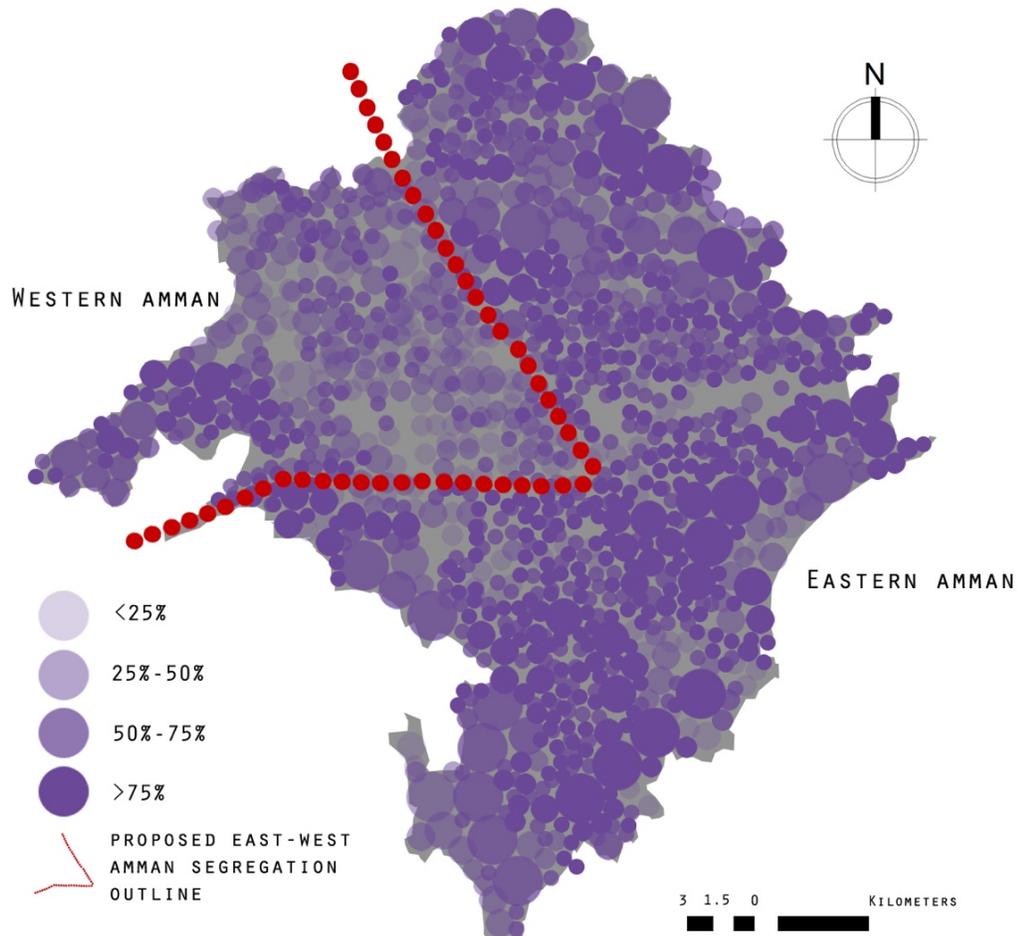


Figure 80 Spatial distribution of under 15 years old age population in Amman based on the 2015 census. East-West segregation line based on Ababsa (2011). Source: Author based on DoS and GAM data (2017),

75-79 YEAR OLD POPULATION SPATIAL DISTRIBUTION

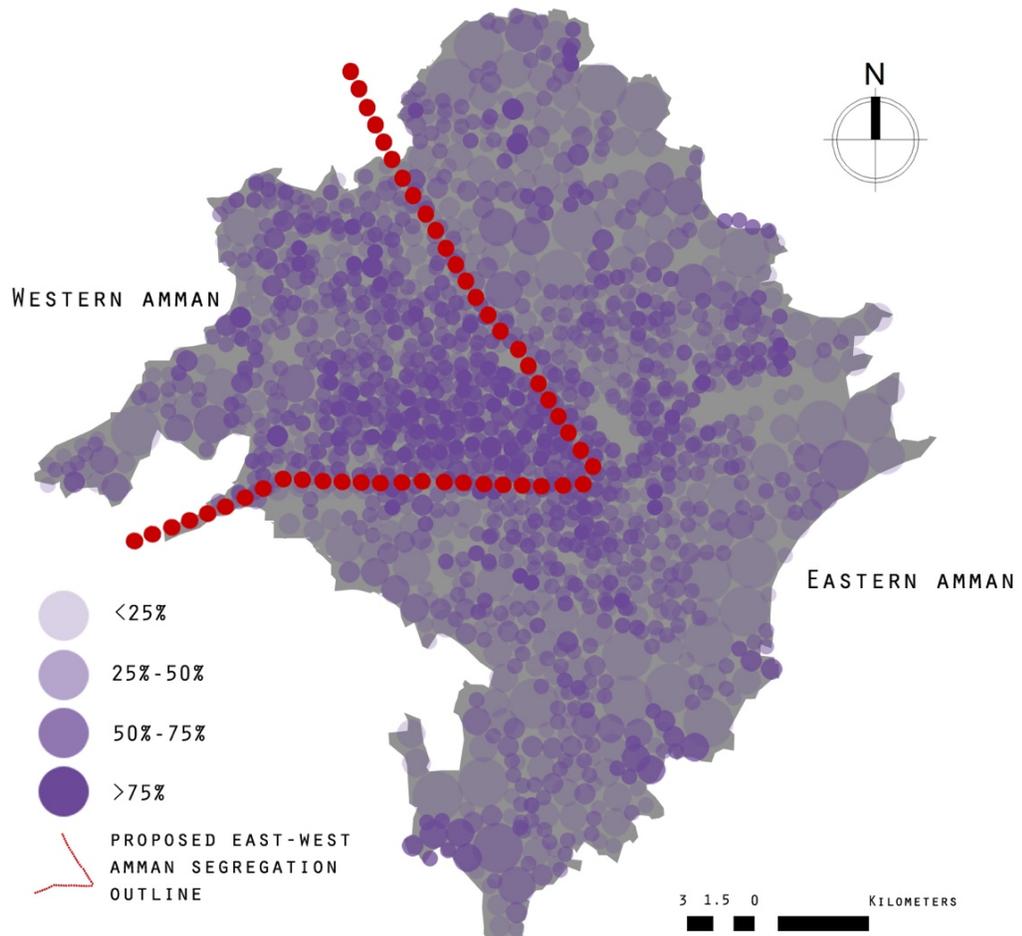


Figure 81 Spatial distribution of 75-79 years old age population in Amman based on the 2015 census. East-West segregation line based on Ababsa (2011). Source: Author based on DoS and GAM data (2017).

ACTIVE WOMEN POPULATION SPATIAL DISTRIBUTION

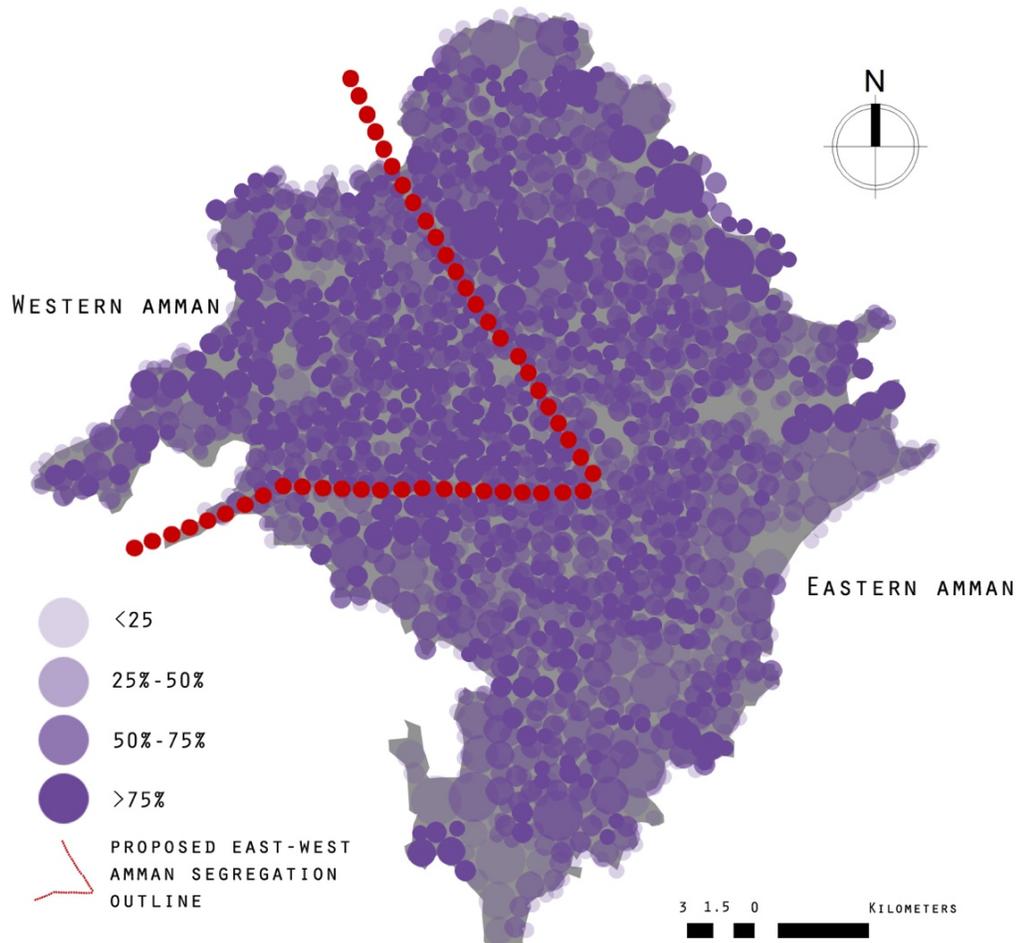


Figure 82 Spatial distribution of active women population in Amman based on the 2015 census. East-West segregation line based on Ababsa (2011). Source: Author based on DoS and GAM data (2017).

ACTIVE MEN POPULATION SPATIAL DISTRIBUTION

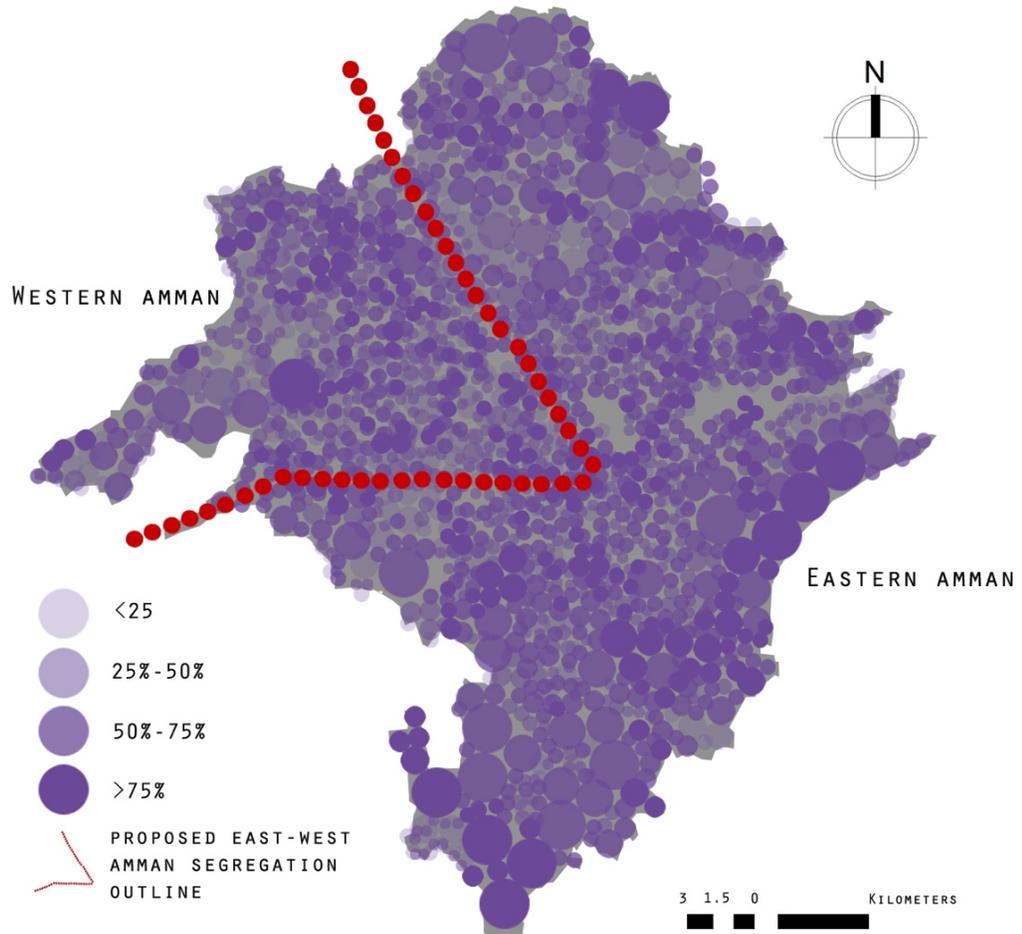


Figure 83 Spatial distribution of active men population in Amman based on the 2015 census. East-West segregation line based on Ababsa (2011). Source: Author based on DoS and GAM data (2017).

JOB SEEKERS POPULATION SPATIAL DISTRIBUTION

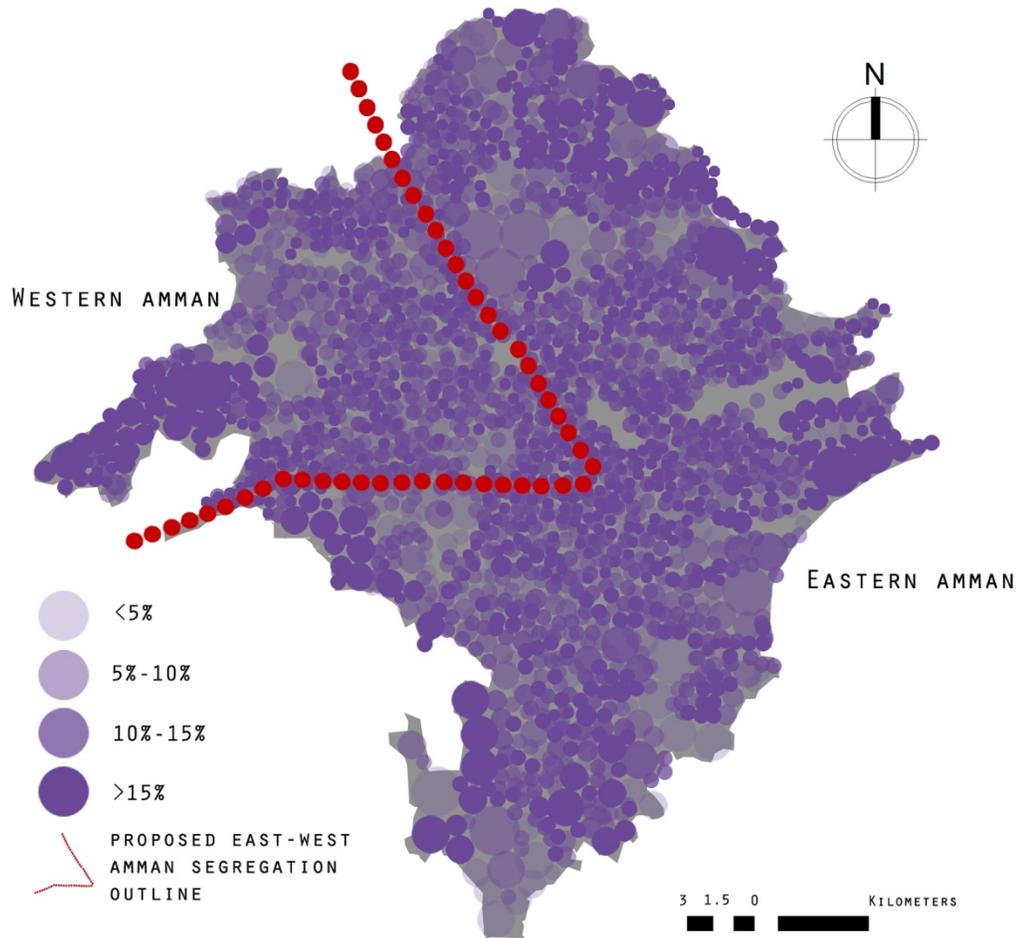


Figure 84 Spatial distribution of job seekers population in Amman based on the 2015 census. East-West segregation line based on Ababsa (2011). Source: Author based on DoS and GAM data (2017).

WORKERS POPULATION SPATIAL DISTRIBUTION

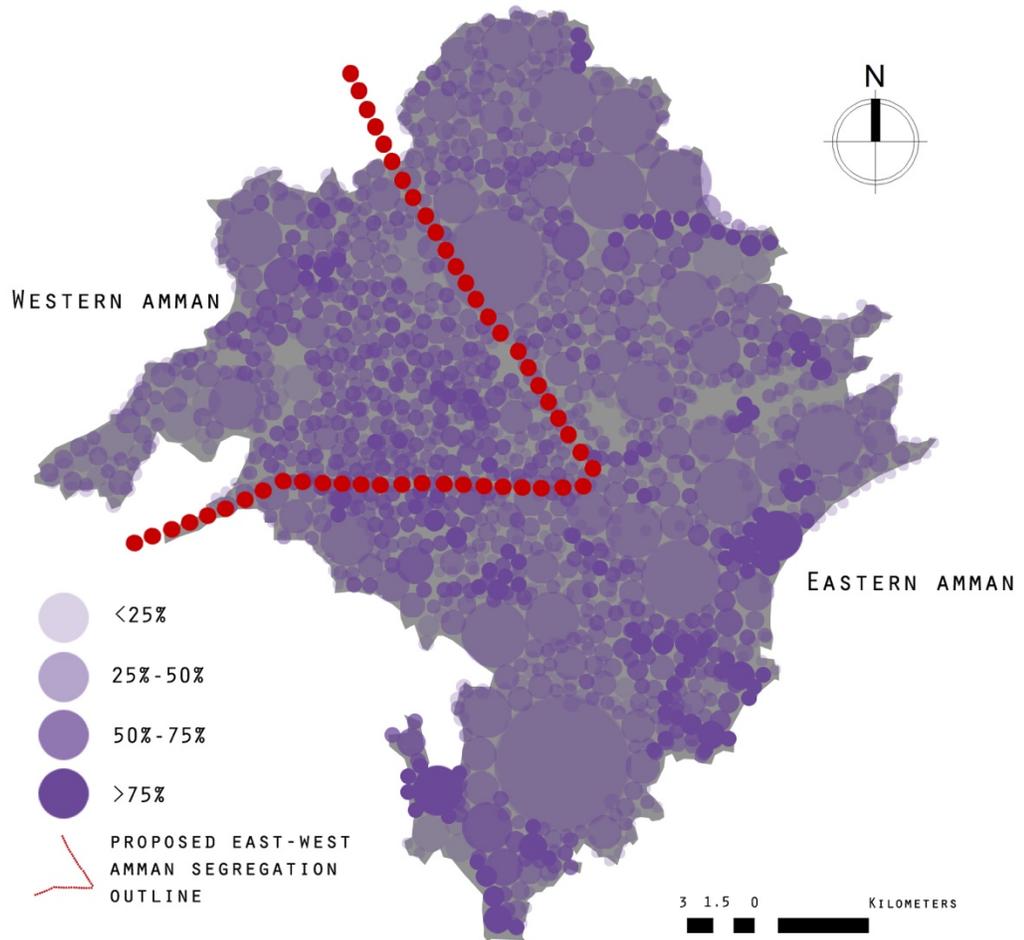


Figure 85 Spatial distribution of workers population in Amman based on the 2015 census. East-West segregation line based on Ababsa (2011). Source: Author based on DoS and GAM data (2017).

Concerned authorities have long recognized the spatial segregation and different public policies between upgrade and social housing were implemented to resolve the gap between the two ends of the city (Ababsa, 2011; Al-Asad, 1997). The following section demonstrates the attempts carried out to achieve spatial justice in Amman which the study argues emphasized the disparity instead of addressing it and resulted in further spatial injustice.

7.4. Attempts to achieve spatial justice in Amman:

As the previous section concluded, concerned authorities have long been aware of the spatial segregation the city suffers from. Consequently, GAM, with the help of other official bodies, conducted numerous attempts and upgrade policies to address the situation since the early 1980s (Ababsa, 2010b). The upgrade approach focused on the provision of access to services and housing and was set originally to involve public in the decision-making. And while the first criterion was addressed, the latter was certainly not. Access has been given to home ownership and some services, however, the participation of public condition was not adhered to. Furthermore, public social housing projects were constructed on the outskirts of Amman thus further expanding the spatial segregation and alienating the poor.

By 1980, almost a quarter of Amman was occupied by informal settlements inhabited by Palestinian refugees and the situation became a national problem that went beyond urban management. Accordingly, and as advised by the World Bank, the Urban Development Department (UDD) was created within the Greater Amman Municipality to develop an urban renewal project for informal settlements located in East Amman. The department implemented new concepts of urban development advocated by the World Bank including; (1) *funding of real-*

estate ownership where UDD purchased land and sold it for squatters for nominal prices; *cost recovery* which allowed the reapplication of the project; (2) *self-construction* which allowed squatters to learn building trades; (3) *job opportunity* whereby the priority of recruitment would be given to the local population; (4) *community involvement* in order to facilitate the upgrade so it adapts to the realistic needs of inhabitants, and lastly; (5) *incremental housing* which as the name implies, allowed for the gradual development of housing from a central unit equipped with sanitation requirements. A decade later, in 1991, the Housing and Urban Development Corporation (HUDC) was created from the merger of the Housing Corporation and the UDD and the programs were no longer exclusive to East Amman, rather started being implemented throughout the country. However, post the Oslo peace process in 1993, the implementation of policies fell back to include only the provision of services in informal settlements in East Amman without addressing issues of access to property or real-estate status as before. Moreover, for the first time in the history Jordanian administration, all ten UNRWA Palestinian refugee camps in addition to the three unofficial camps became part of the HUDC work and responsibility (Ababsa, 2010b, 2012; Al Daly, 1999).

Almost another decade later, in the context of structural adjustment policies advocated by IMF, in 1997, the National Strategic Plan-Community Infrastructure Program (CIP) to reduce poverty and unemployment was implemented in both camps and informal settlements in East Amman. CIP worked differently than UDD upgrade programs, local population made the majority of the required working force, thus, unemployment was shortly addressed, however, there was no aid to access ownership. Another decade later, in 2006, HUDC planned several upgrade projects in Eastern Amman but were suspended in 2008 because of the royal initiative '*Decent Housing for*

Decent Living’ (Arabic: سكن كريم لعيش كريم, English: *Sakan kareem le'aish kareem*) which aimed to build 100,000 homes over five years for the neediest families in the country (Ababsa, 2010a, 2012). However, the project was planned on the outskirts of the city and thus, again, emphasized the spatial disparity.

The Amman Metropolitan Growth Plan was the latest planning and development attempt presented in 2008 by GAM to channel the city growth along priority corridors. A 205-page long document which was put on hold shortly after the economic crisis and regional turmoil. Despite recognising the inequality and challenges in the poorest areas and underprivileged informal settlements and camps needs in Eastern Amman, the plan fell short in addressing these issues. Looking at the plan, the only policy designed to decrease the gap between the two extremes was a shy attempt to impose tax on additional floors added to high-rise towers to be built as part of the private sector investment ‘*revival*’, theoretically, the tax imposed would be directed to a community development fund dedicated to finance heritage preservation, greening the city and social programs, however, unfortunately, the plan did not see the light due to the shortly following economic crisis and regional turmoil. The figure below sums up the upgrade policies and programs dedicated to address the spatial segregation in Amman since the 1980s.

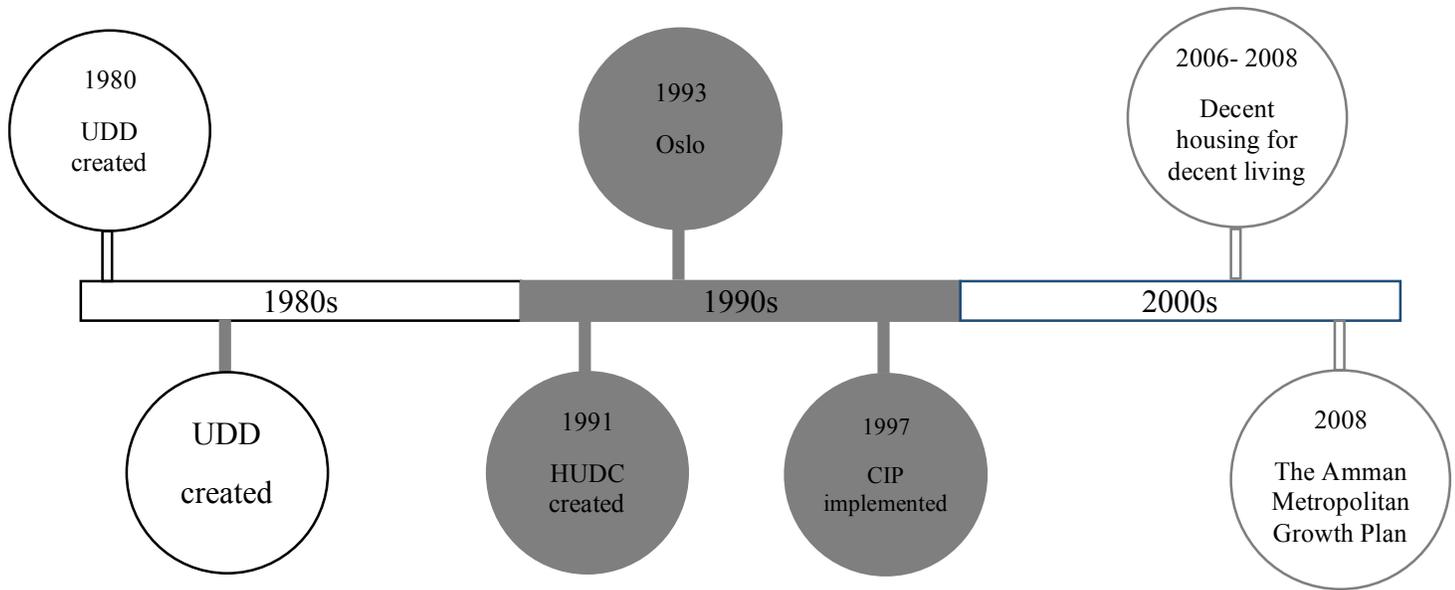


Figure 86 Upgrade policies time line. Source: Author (2017)

In addition to programs and policies, attempts to bridge the two ends of the city included relocating the Municipality to its new designed landmark headquarter in East Amman in the year 2000 making it easily accessible for both Eastern and Western Ammanis; building the unique cylindrical stone Al-Hussain Cultural Centre in 2006; constructing the architecturally distinctive National Museum in 2010; opening Al-Balad theatre on a slope in Eastern Amman (Ababsa, 2007). Moreover, as another attempt for GAM to bridge the gap between the two ends of the city, the municipality launched a downtown revitalisation project aimed to revive the historic area of Eastern Amman by creating pedestrian zones in order to encourage pedestrians from both East and West Amman to reclaim their own natural history in the heart of the city in addition to creating a touristic attraction. According to the municipality website, the ultimate goal for the

project is “creating a more viable environment for the Eastern areas of Amman and linking it with West Amman” (GAM, 2008a).



Figure 87 GAM building. Source: Bilal Hammad architecture (2010)



Figure 88 Al-Hussain cultural centre. Source: Marcelo Tardio on Panoramio (2013)



Figure 89 Jordan National Museum. Source: the Jordan Museum official website (2010)

The downtown revitalization project was the product of Amman Institute for Urban Development (Ai), a department established in 2008 in GAM but no longer exists today as it was closed in 2011 –investigations on what happened to the Ai suggested either a corruption case or a link to the economic crisis or led to a dead-end, thus, mainly for the safety of the researcher, no further investigation was conducted— the institute focused on issues such as connectivity throughout the city; the inadequate performance of the public realm in the decision-making and community engagement and mobilization as well as establishing community facilities which the study argues might have helped address the spatial segregation in addition to fundamental issues such as employment; land use and zoning; the built fabric and form; housing issues; road and transport; infrastructure; heritage and the environment in addition to the slow economic growth and challenges in accommodating future growth. The institute promoted flexibility, which the study

also suggests, an interdisciplinary approach that unfolds Ammanis' potentials and responds to future development pressure. Moreover, the institute policy recommended the mixing of land use, which the study previously highlighted the lack of, and outlined the role it plays in embracing diversity and generating income. Ai suggested numerous projects and interventions including public projects, socio-economic development projects as well as pilot interventions that focus on improving the public realm through promoting walkability by enhancing sidewalks and creating pedestrian friendly networks as well as plazas and open spaces which the study highlighted the severe lack of, however, in the short time between 2008 and 2011, few of the projects were realistically fulfilled including the revitalization of King Faisal plaza; the Hashemite plaza in front of the roman theatre, and; the Abdoun park (*see images below*). In addition to the Amman Downtown plan and Revitalization Strategy, Ai produced numerous reports, strategic plans, and development manuals including the High-Rise Towers development manual; the High Density Mixed Use (HDMU) development manual; the Interim Industrial Land Policy development manual; the Airport Road (Amman periphery) Land Use development manual, as well as; the Corridors Intensification Strategy. However, despite the high possibility for these proposals to further spatial justice concepts, due to the economic crisis after math, the surrounding political turmoil and the closure of Amman institute, the plans until this day have an undecided fate and may not see the light.



Figure 90 King Faisal plaza in 1952. Source: Delcampe.net (2012)



Figure 91 King Faisal plaza after revitalisation by Ai. Source: Paths worldwide elderly getaways (2015)



Figure 92 The Hashemite plaza schematic plan by Ai. Source: Yugi's Blog (2009)



Figure 93 The Hashemite plaza project after completion by Ai. Source: Assawsana.com (2014)



Figure 94 Abdoun park project by Ai. Source: Freedom's falcons on Wikimedia (2013)



Figure 95 The kids' area and public plaza in Abdoun park by Ai. Source: Wikimapia (2016)

Although Ai did not explicitly address the issue of spatial justice per se, however, according to the study findings, it was the closest official body to highlight the socio-spatial problems and put proposals to address them within both development plans as well as regulatory frameworks. Moreover, and also without explicitly proclaiming nor using the systematic definitions, the Ai suggestions addressed many issues the study highlights including brownfield rehabilitation, gentrification, urban regeneration, periphery development and informal economy and even somehow temporary urbanism. However, unfortunately, as mentioned earlier, due to ambiguous circumstances, the institute ceased to exist and due to the lack of information, time, research considerations and for the safety of the researcher, no further investigation was conducted.

To sum up, thirty years of urban renewal, Amman continues to be characterised by its highly contrasting ends. East Amman; the poor, densely populated areas with high rates of unemployment versus West Amman; the rich, dispersed neighbourhoods where active population is greater, education and services are better and infrastructure is more developed. Maps demonstrating the spatial configuration of the city allows the observer to draw a clear line separating its two ends. New development projects solely focus on property located in the Western end, leaving large overpopulated areas under-equipped and lacking social development thus further emphasizing the spatial segregation and depriving Eastern Ammanis from their '*right to the city*'.

Now as the chapter portrayed the spatial (in)justice scene in Amman and the attempts to address it, the following section looks at the connections between it and brownfield sites. However, due to considerable contextual differences between the discussions presented in the literature review and the case of Amman which, as demonstrated so far, can lend itself to a different interpretation

of the broad principles of equality, diversity and participation, the criteria to achieving spatial justice may not be in complete acceptable, nevertheless, the study argues it offers a set of expectations that ought to form the basis for just urban planning in Amman. In the following sections, the criteria will be addressed on the local level and with regards to the specific urban outcome of brownfields and with regards to the specific urban process of temporary uses within them as this study is aware a just national urban policy is more complex and therefore will not be further investigated in this section but will be picked up later in the recommendations section.

7.5. Spatial justice and brownfield reclamation:

The fact that brownfield sites and temporary spaces are not the '*normal*' working of urban systems despite the '*normal*' everyday activities that take place within them this study argues is another primary source of spatial injustice. In the context of Amman, and as the examples in the *Brownfields of Amman* chapter as well as the *Temporary Urbanism in Amman* chapter demonstrated, the priority for development is in favour of '*real*' property and '*real*' investments and for the '*rich*' over the '*poor*' and similarly the accumulation of locational decisions. This geographically uneven distribution of development is another framework to interpret the processes that produce spatial injustice. Accordingly, the following section investigates the connections between spatial justice and the reclamation of brownfield sites. However, to doing so, the study argues it is fundamental to firstly investigate the role of spatial justice in urban planning in general in order to inform the investigations on its role in the reclamation of brownfield sites then afterwards inform the overall recommendations. The following sections further illustrates.

7.5.1. Spatial justice and its role in urban planning:

Prior to discussing the specific relationship between spatial justice and brownfields, the chapter sheds the light on some general connections between ‘*spatial justice*’ and ‘*urban planning*’.

According to Marcuse (2009c), just cities should not merely seek justice in distribution, rather look at the development of each individual and all individuals. From this outlook, to achieving justice, he argues, rethinking the city and genuinely addressing the issue of power in societies must be recognized. In the collaborative work of *Searching for the Just City: Debates in Urban Theory and Practices*, numerous researchers search for the connections between spatial justice and urban planning. DeFilippis (2009) for example brings up the question of scale and the relation between injustice and globalization in his work in *On Globalization, Competition and Economic Justice in cities*, similarly, in the case of Amman the study previously highlighted that planning happens at the scale of masterplans and thus, smaller geographic scales including brownfields remain overlooked and communities struggle with resulting economic injustices.

Yiftachel et al. (2009) in *Urban Justice and Recognition: Affirmation and Hostility in Beer Sheva* introduce the ‘*grey spaces*’ and analyse the political geographies of urban informalities which they conceptualize as grey spaces. The vast expansion of grey spaces in contemporary cities they argue reflects the emergence of new types of relations which are managed by urban regimes that facilitate a ‘*creeping apartheid*’ and unequal urban societies. Similar to this study, they suggest the concept of a ‘*planning citizenship*’ as a “*possible corrective horizon for analytical, normative and insurgent theories*” (Yiftachel, 2009: 87). Like the case of Amman, their work referred to the case of Bedouins and migrant workers but in the case of Jerusalem. Dikeç (2009) talks about

Justice and the Spatial Imagination where he attempts to conceptualize the notion of spatial justice in order to point to the dialectical relationship between (in)justice and spatiality and the role that spatialisation plays in the production and reproduction of domination and repression. The politics of power he explores is also similar to what this study attempts to investigate, moreover, the spatial imagination of users both this study and Dikeç's research emphasize may have a significant role in addressing spatial justice. In *From Justice planning to Common Planning* Marcuse (2009a) argues that *Just City* thinking contributes to strengthening the normative claim and that although the call for distributive justice is necessary, it is still not sufficient as it fails to address the cause of injustice which he argues are structural and lie in the role of power, also similar to what this study previously argued in the socio-economic inequalities section. Wolf-Powers (2009) in *Keeping Counterpublics Alive in Planning* looks at the connections between justice and the public sector, her work asserts that the role of 'counterpublics' or 'marginal publics' must be kept alive in planning similar to what this study also suggests. From a European perspective, Novy and Myer (2009) in *As Just as it Gets? The European City in the Just City Discourse* argue that the Just City concept is peculiarly American and developed for the United states context, thus, must be read differently in European countries. The same applies for this research, if not more complex, as this study takes place in a Middle Eastern context.

Similarly, in her work in *the Just City*, Fainstein (2010) encourages planners and policy makers to embrace a different approach to urban development with an objective to combine city planners earlier focus on equity and material well-being with considerations of diversity and participation so as to foster a better quality of urban life within the context of the global capitalist political

economy. Fainstein applies theoretical concepts about justice developed by contemporary philosophers to the concrete problems faced by urban planners and policymakers and argues that, despite structural obstacles, meaningful reform can be achieved at the local level. Drawing on the work of John Rawls, Martha Nussbaum, Iris Marion Young, Nancy Fraser amongst others, she develops an approach to justice relevant to twenty-first-century cities, one that incorporates three central concepts: diversity, democracy, and equity. Moreover, she tests her ideas in different cities and evaluates their development programs to conclude by identifying a set of specific criteria for urban planners and policymakers to consider when developing programs to assure greater justice in both the process of their formulation and their effects which is similar to what this study ultimately attempts to.

As emphasized in the literature review chapter and according to the thoughts of Lefebvre and Soja (Lefebvre, 1991b; Soja, 2010a), space is paradoxical. It is socially produced, it is disputed, and constantly changing within social, political, economic as well as geographic territories. Accordingly, there has always been—and always will be—a struggle over geography (Hayden, 2014). However, if uneven development is the result of urban regeneration, then to address it, it need to be engaged both socially and spatially (Bromberg et al., 2007). Spatial injustice and social connections, therefore, are the simplest connections between space and social justice.

According to the UCLA's *Critical Planning on Spatial Justice* (2007: 2), the socio-spatial dialectic to achieving spatial justice where the different economic and social condition of groups and the '*geography of injustice*' in addition to the social production of space impacts social groups and their opportunities. Accordingly, spatially segregated groups living at different socio-economic scales are divided between '*rich*' and '*poor*'—and in some extreme cases to groups

completely isolated areas— (Bassett, 2013). According to Bassett, those involved in the production of the physical and social space through processes of planning, development or community activism, are also involved in the evolving of just and unjust spaces. By placing focus on the interactions between space and social as well as spatial justice, a perspective that rethinks on our assumptions about space and who has the right to use it which the *Design Studio for Social Intervention* (DS4SI) along with the *Praxis Project* argue in their *Spatial Justice* framework can help diverse social justice struggles find common ground and offer a way of thinking across traditional sectors to find scalable and organized responses, a process that may allow us to reconfigure how space is used and by whom (Gervais-Lambony and Dufaux, 2009: 20).

According to the UCLA's *Spatial Justice* issue (2007), in order to contextualize spatial justice and unpack its theoretical framework, it is necessary to link it to realistic examples. Moreover, in order to recognize spatial injustices, it is necessary to work against issues of institutionalized oppression and covert power imbalances (Bassett, 2013). Accordingly, three types of connections as represented in space are identified, *spatial claims*, *power* and *links*, and working across them is the way to change or reconfigure these injustices. While *spatial claim* refers to the ability to live, work or experience space; *spatial power* refers to the opportunities to succeed and contribute to space; and *spatial links* refers to the access and connection to and with other spaces, the study refers to the connections as *compromising factors*. The following table further illustrates how the suggested framework can help identify spatial injustices and what could potentially be used in the broader planning discourse including the case of Amman. However, it is important to note here that making these connections to urban redevelopment remains dependent on the nature of the

decision-making processes and the opportunity to open up the discussion on spatial justice in the urban planning dialogue.

Compromising Factor	Description	Examples	Detecting Questions
Spatial Claim	Lacking the ability to live, work, or experience space	“Sovereign struggles, squatters’ rights, autonomous zones, nomadism”	<ul style="list-style-type: none"> • Who uses the place, who does not, and why? • How is the space used? • What talents and gifts do people have here? • What is unique about the history and culture of the area?
Spatial Power	The removal of opportunities to succeed in and contribute to space	“How a given place creates the conditions that allow or deny chance to succeed in space”	<ul style="list-style-type: none"> • What qualities would you use to describe the place? • How are people able to practice, contribute and create here? • What messages and behaviours does the space suggest? • What prevents anyone from full participation in personal or public life?
Spatial Links	The inability to access and connect to and with other spaces	“Connection to assets and resources held within a place - link to surrounding areas and rest of the city or region”	<ul style="list-style-type: none"> • What barriers exist in the physical environment? • What invisible, historical or social barriers divide people? • What historic memory exists in the place and the people here? • What connects this place to other places?

Table 4 UCLA's compromising factors. Adapted directly from UCLA's Critical Planning – Urban Planning Journal, Volume 14, 2007, pages 15-16

Accordingly, the compromising factors translate into realistic examples, the table below demonstrates cases adopted from the UCLA framework which the study argues may similarly be adopted for the case of Amman.

Example	Compromising Factor
Gentrification	Spatial power, spatial link
Community historically, economically marginalized	Spatial power, link
Food deserts	Spatial power
Access to a good education	Spatial link; spatial power
Displacement due to redevelopment	Spatial link; claim
Mobility opportunities	Spatial link
Policing and prison industrial complex	Spatial claim; power; link
Militarization of public space	Spatial claim, power
Environmental racism (zoning)	Spatial claim

Table 5 UCLA's example are their connections to spatial justice. Adapted from UCLA's Critical Planning – Urban Planning Journal, Volume 14, 2007

To sum up, there is a variety of ways to approaching the issue of justice and spatiality in the urban setting. In addition to what the examples above demonstrated, abundant contemporary literature highlights the *spatial* in urban planning discussions, however, the question of how these theoretical frameworks may inform the real practice as well as the smaller urban phenomenon of brownfields to achieve more spatially just cities by taking forward their notions is what this study attempts to investigate in the following sections.

7.5.2. Spatial justice and brownfield reclamation:

As the chapter has so far demonstrated, urban development practices in Amman have resulted in uneven geographic patterns causing spatial injustice. Understood as the connection between spatial claim, spatial power and spatial links, this section attempts to investigate spatial (in)justice in vacant and underutilized brownfield sites in Amman which this study argues through the implementation of flexible policies that emphasize social solidarity across differences and discriminations, these overlooked geographies may act as catalysts to achieving a more spatially just Amman. The focus of this section is to look at the role of spatial justice in the reclamation of brownfield sites through looking at the spatial policies and frameworks as demonstrated throughout the chapter, the brownfield typologies and practices that take place on these sites, more specifically temporary practices as demonstrated in the *Brownfields in Amman* chapter as well as the *Temporary Urbanism in Amman* chapter. The study argues the examples explored demonstrated high levels of spatial equality which resulted in just spaces, therefore if spatial equality is achievable, the study presumes that spatial justice can also be achievable. The argument is picked up in the following section to suggest policies that the study argues may give direction on how to approach spatial justice as a way to mitigate unjust impacts on paradoxical geographies such as brownfields as part of the overall spatial making of Amman.

According to Foucault, the interactions between space, knowledge and power can be both oppressive and enabling. Thus, taking the socio-spatial dialect of brownfield sites this study argues mean we recognize that these geographies have both positive and negative impacts. Moreover, Soja's ideas on spatial justice and injustice are embedded in every spatiality we live in

in every scale, from the space of the body, to cities, regions until the globe. This study therefore argues they are also embedded in brownfield sites.

In their *Can the Just City be built from below?* Connolly and Steil (2009: 173) write about brownfields, planning and power in the case of South Bronx. They argue that although “*writings on the just city have advanced theoretical and philosophical justifications for the redefinition of planning priorities, they have not yet examined in detail the issue of institutional structure*” looking at the governance of brownfield redevelopment example in the US where the ‘*active institutional experimentation*’ has been shaped in some cases by explicit articulations of justice, their research investigates the working of grassroots environmental justice organizations to reconfigure organizational relations and their efforts to establish a counter-institutional position within the existing field of real-estate development and governance structure. Similarly, in the case of Amman, the relationship between the community organization and the distribution of power in planning has its complexities as the tension between balancing the two –a more equal distribution of economic resources and more equal distribution of decision-making power— persists.

Moreover, and also on the case of the Bronx, Fainstein’s work on Just Cities, presses the idea in *Planning for the Just City* (2009a) through looking at the case of the New York City wholesale food market in the centre of a poor and working class community in the Bronx run largely by immigrants which was pre-empted by politically privileged developers in order to construct a shopping mall instead. Similarly, as the previous *Brownfields of Amman* chapter and *Temporary Urbanism in Amman* chapter demonstrated, the case is echoed in many examples in the study context. Many temporary uses including markets, bastas, kiosks and sheds run by local Ammanis

are threatened by either immediately being relocated with no previous warning or of being displaced at any time in favour for property owners or private investors.

Similar to the Bronx case in both the works of Connolly and Steil as well as Fainstein's, the concentration of vacant, underutilized lands in many low-income neighbourhoods in Amman as demonstrated in the thesis so far, is a concrete representation of urban injustice. Connolly and Steil (2009: 175) argue that "*it seems clear that in a Just City this land would at least be cleaned up and protected ... less clear though, is the question of who should have the power to decide the substance and shape of any development that takes place on the restored land*". This is especially the case in Amman, where years of legislative neglect made it still waiting for any laws that attempt to regulate, clean-up or redevelop the formerly developed sites.

Many brownfield sites in Amman, as demonstrated so far, are in severely deteriorated status, still, the local community and public organizations seek to reuse these sites without proper remediation or clean-up. In cases of contaminated sites including discontinued mining sites and quarries, owners avoid the clean-up responsibility even at minimal costs despite the many attempts of local organizations to raise and bring public attention and political power to addressing owners and polluters. In many examples, the temporary users are frustrated from fighting the continuous battle against officials, investors and decision makers. Moreover, groups advocating justice such as NGO's and CSO's have no realistic role in achieving it.

As eastern Amman continues to have the higher unemployment rates and poorer areas, it also contains the higher percentage of brownfield sites. The correlation between, class, nationality and level of dereliction is not accidental. Cycles of industrialization and deindustrialization as well as investment and disinvestment of capital has followed the logic of '*profit maximization*' and

'political expediency' which suggest pollution should be concentrated in those areas with the lowest property values and wages and the least political resistance (Harvey, 1996; Squires, 1994). Accordingly, brownfields are a product of social construct that benefits certain groups over others.

As the chapter demonstrated, Eastern Amman is generally made up of subsidized housing developments mostly occupied by long-term residents, lower-income indigenous residents, informal settlements, immigrant population as well as young people excluded from the decision-making process. This segment of the population that has less formal representation in politics, power and land-use decisions either turn to community associations and grassroots organizations or to self-organized groups, thus, their legitimacy is based upon their opposing stance rather than a connection to decision makers in comparison to property owners and private investors or governmental authoritative. Therefore, they have less power to change and they are in constant challenge with official schemes.

On the other hand, the counter-position that emerges from the connection of these groups to the majority of neighbourhoods' residents excluded from the official decision-making process and which defines their identity is one that is consistent with the concepts of spatial justice as their practices reflect the idea that the just exercise of power demands the participation of those most affected yet most marginalized in making decisions about them. This approach is found in Young's (2011) theorization about creating inclusive democratic communication in spite of structural inequality and cultural differences. According to her, a "*democratic theory of unjust conditions*" establishes "*institutional conditions for promoting self-development and self-determination of a society's member*" (Young and Allen, 2011: 33). However, the field of

organization concerned with brownfield redevelopment in Amman is made solely of community-based groups while, as Young suggests, should also be made of political intermediaries, city and state agencies as well as private development interests with a constant connection between these groups with the official authorities through informal open lines to sort out their goals and priorities.

While there are few studies that specifically investigate the relationship between spatial justice and brownfields, this study argues research into this relationship is important because, as the previous chapters demonstrated, brownfield sites represent numerous opportunities for the creation of jobs, investment, economic growth as well as urban development. Therefore, an efficient strategy for the reclamation of brownfield sites should be a spatial justice goal (Arnold and American Planning Association., 2007).

Issues associated with brownfields have been framed as environmental justice (Teelucksingh, 2007) and there are studies that examine the relationship between the two (Been and Gupta, 1997; Fisher, 2011; Greenberg et al., 2000; Maranville et al., 2009; Solitare and Greenberg, 2002). The reviewed studies looked at issues such as the spatial distribution of low-income minorities in brownfield sites and suggested further research in order to further assess the issue. Moreover, EPA has recognized the problem of environmental injustice and brownfields and attempted to address it by awarding brownfields grants to communities with distressed central cities and communities with large populations of minority and lower income residents (Fisher, 2011) as well as provide numerous facilitations for developers choosing to invest in brownfield sites.

According to the study findings, there are numerous spatial justice issues associated with brownfields. The findings highlight an extreme disparity between the spatial-socioeconomic characteristics of brownfield sites compared with the ones for the city of Amman. The study hypothesizes that temporary users or occupants of brownfield sites are impacted by spatial injustice due to their preference for a vacant, underutilized space. In other words, they sacrifice spatial justice and their right to the city in return for the no rent they pay to occupy the space. The results also indicate that given that justice criteria including equality, diversity and participation were also found significantly different between different brownfield sites in the city, it can be concluded that spatial justice issues associated to brownfield sites are more complex and extend beyond race, gender, class or locational discrimination. The results of the study were not surprising, looking at the demonstrated examples in the previous chapters it was easily concluded that brownfield sites as well as temporary uses are both unjust. This research pilot therefore suggests a brownfield agenda is a must to embark on the more complex associated issues in the relationship between spatial justice, brownfields and temporary urbanism. This argument is picked up in the recommendations section.

As the *Brownfields of Amman* chapter as well as the *Temporary Urbanism in Amman* chapter emphasized, the two urban phenomena are well connected. The majority of temporary uses are naturally constructed on brownfield sites, both are vague, ill-defined and not considered in official statistics or systems, both are marginalized, overlooked and considered unfit for development, and both have emerged organically from the realistic needs of people and have managed to thrive for decades without intervention. Accordingly, and taking into consideration that any authoritative proposal to address the issue has numerous potential complex consequences

issues and may eventually be discarded, the study proposes the reclamation of brownfield sites in Amman may be best addressed by taking forward notions of the already existing temporary urbanism practices. This critical spatial analysis and attempt to understand the production of two types of unjust geographies in the context of Amman informed by literature discussions in addition to the empirical fieldwork this study argues may be a starting point to unravel more complex considerations and to pave way for further future research.

As demonstrated throughout the thesis, Amman has an extremely diverse population alongside immigrants where ethnic minorities cluster in different neighbourhoods. Yet, the development plans still do not aim to increase income diversity and does very little to address brownfield reclamation and rather focus on upper class transformative development within Western Amman despite the fact that tactical spatial strategies in Eastern Amman have played a significant role in making leading and vibrant centres for innovative community-based organizations where new community-based ideas succeeded to overcome locational discrimination and create new thriving economies. Perhaps the most dramatic examples of the impact of spatial approaches in the search for justice are temporary uses which successfully challenged the locational bias and created a sustainable system that would primarily serve thousands of families and cater for the urgent needs of poor surrounding neighbourhoods. Brownfields can provide recreational as well as economic development opportunities in lower income neighbourhoods and may help make up the deficit in open areas and green space the city suffers from as well as emphasize the need for local economic development that support small businesses and create jobs with decent wages for local residents. Instead of the eviction of temporary uses which operate more sustainably for their users, perhaps by accessing public fund or grants, the informal business and self-employment

sector which as previously highlighted represents up to almost half the national income may become legitimized.

To sum up, the relationship between spatial justice, brownfields and temporary use is not straightforward and due to time and financial constraints as well as research limitations may not be in totality examined in the body of one thesis. This section therefore bid to highlight the lack of literature on the topic and provoke further research. Next, looking at this chapter as well as the previous two empirical chapters which briefly outlined the three research themes –brownfields, temporary urbanism and spatial justice—in the context of Amman, the following section seeks to present a draft of preliminary recommendations which the study argues may help Amman achieve a more spatially just city.

7.6. Recommendations to achieving a more spatially just Amman:

In *The Right to the Just City* Harvey and Potter (2009) argue that injustice is integral to the capitalist system which is in itself unjust, thus, any attempt to achieve a just city within it is doomed to fail. According to them, the problem for planners is not in the philosophical definition of justice rather in the analysis of capitalism which resulted in various injustices. Therefore, a realization of just city without structural change is not possible.

Today, competition across economic and investment schemes are the emphasis of development which according to Fainstein (2010: 20) forced planning strategies to give priority to growth over the expense of all other values and serve the developers interest at the expense of everyone else. According to literature discussions, few policies that address similar unjust practices exist and are

little implemented, consequently, spatial inequalities remain the responsibility of community and activist groups to fight for (Bassett, 2013).

In the hopes of having not one, but a coalition of groups that come from different backgrounds and obtain different perspectives and ideologies perusing a united agenda with key concerns about the harms speculators are doing by tying up key sites and demolishing temporary businesses that have great socio-economic values in addition to other unjust practices against brownfields and temporary users, structural change is the first recommendation this study puts forward.

Similar to many of the reviewed cases, Amman can also utilize mobilization and facilitate social control and civic society mechanisms. Bringing out the diversity and social ties of Ammanis this study argues can extremely advocate achieving a more spatially just city.

Establishing official brownfield concerned bodies that identify the type and nature of interactions each group has with the city, state, private development, and community organizations and as a result form a brownfield coalition to draft and advocate more comprehensive, rationale legislations in collaboration with justice advocating groups as part of community mobilizing efforts in order to set their goals and highlight the greatest challenges they face this study argues may generate greater equality while simultaneously maintain local control in the form of community based groups that mobilize local level participation and work in dialogue with the city and authoritative agencies. This locally networked approach can be seen as an attempt to leverage the power of local governments to achieve more just redistribution of spatial resources and is about creating long term change to the nature of the relationship between decision makers in urban development and community members. This would mean simultaneously enabling

greater participatory democracy by provide access to infrastructure as well as improved environmental health and economic redistribution. A strategy that acknowledges that in practice, a just city requires both the redistribution of economic resources and decision-making power must be thought of together.

According to Crumley (1995), heterarchy is a system of organization where its elements are unranked (non-hierarchal) or where they possess the potential to be ranked in a number of different ways. In social sciences, heterarchies are networks of elements in which each element shares the same '*horizontal*' position of power and authority, each playing a theoretically equal role. In processes of urban development, heterarchical governance—which is especially situated for situations where established institutional arrangements are in the process of being altered (Jessop, 1998; Stark, 1996)—describes periods where private market actors give up some of their autonomy in decision-making and, in return, state actors give up some of their top-down authorities. In order to bring this about, according to Jessop (1998: 36) “*the added value that comes from partners combining resources rather than working alone*” must be evident to all involved. From this, an inter-organisational capacity that is greater than individual member arises which this study offers by promoting a heterarchical governance to the case of Amman as part of the structural change recommendation discussed above. Nonetheless, Jessop highlights the dangers of uncritically celebrating heterarchical forms of governance since they do not change market principles, rather is a new, more complex and wider arena where tensions created by competition for capital are expressed.

In the *Brownfields of Amman* chapter, the examples demonstrated both the institutional vision for brownfield development that this study seeks as well as the underlying nature of just urban

development outcomes and functional heterarchical governance model which can incorporate the counter-institutional positions discussed earlier. Temporary users must be connected to the larger field of policymaking within the context of the existing interconnections between the state's political capital and private developers' economic capital where the organizational network would emphasize the ability of community groups to realize just outcomes. Currently, temporary users' failure to affect the outcomes is premised upon the disadvantaged organizational position of the temporary user groups and the lack of a functional heterarchical governance structure which would enable the recognition of the added value that Jessop highlights. This recognition is enabled in part from the mechanical creation of value demonstrated in the linkage and approval requirement sought, but also from the residual trust and recognition of roles that comes about with the incorporation of these mechanisms into a re-formed network of brownfield development actors.

While a full network analysis cannot be developed in complete within this thesis as in the context of Amman there exist many unmet demands of heterarchical government, nonetheless, the study demonstrates the approach as a potential way to officially represent the community groups as well as temporary users within the regulatory framework around urban development. The general recommendation set forth below may be seen as an outline of a few characteristics to achieving a more heterarchical governance.

In the ongoing discussion on the concept of a just city, Marcuse argues, spatial justice must be an ultimate goal of every planning policy (2009c), to doing so, the second recommendation this study suggests is a set of general guidelines based on literature discussions as well as the study findings for each of the study themes.

On *public participation and community involvement*, the study suggests: looking at the issues raised by the individuals in the local community; making best use of local community knowledge; conducting workshops with the local community to point out the possibilities as well as limitations of projects and exclude unnecessary efforts; municipalities to perform area-wide surveys and engage in participatory community processes to establish residents' priorities for local development; creating linking channels that promote the debate for the general common interest by negotiating with property owners, developers, temporary users and all other involved stakeholders from the standpoint that connectivity fosters growth and economic development and must be emphasized to promote a pro-poor, mixed-economy growth, and that; economic incentives need to be put in a place to increase public participation in the decision-making as the diminished role of public participation contributes strongly to increasing spatial inequality.

On *brownfields and temporary urbanism*, the study suggests: drafting brownfield clean-up programs that can provide tax-credits for example to brownfield developers; channelling a portion of public funds and grants for those clean-up programs; developing end-use policies for discontinued mining sites and quarries; mapping the amounts and locations of brownfield sites and creating an official database in land and registration systems; acknowledging informal economy and its practices as part of the economic structure of the city; encouraging temporary uses and temporary users; channelling a portion of public funds and grants to support temporary users; developing economically sustainable projects informed by community needs with the help of NGOs focusing on lower income groups, youth and women development in addition to organizations focused on culture and art; constantly evaluating planning decisions and not giving economic competitiveness the highest priority with little or no consideration to the question of

justice; spending a portion of social welfare budget on programs that are specifically targeted for lower income groups and focus on social assistance programs that aid them to lift themselves from the poverty trap. Such programs eligibility may be determined on the basis of income level, age, gender and geographic distribution; in times of economic contractions, the private sector this study suggests needs to be structured in ways that it offers some advantages to the public sector in order to successfully attract temporary users; focusing on the reshaping of inner cities through brownfield sites by placing greater imputes on urban regeneration projects with actual results that become important in addressing brownfield regeneration, and; adopting strategies to enhance attractiveness of brownfield sites and temporary practices.

On *planning policies and strategies*, the study suggests: in planning for as yet uninhabited or sparsely occupied areas, there should be broad consultation that includes representatives of groups currently living outside the affected areas, mega-project, for example, must be subjected to public view and be required to provide public benefits to low-income groups; planners must take an active role in deliberative settings that promotes public participation; zoning could be relaxed; plans could be developed in consultation with the target population if the area is already developed—the existing population, however, should not be the sole arbiter of the future of an area and citywide considerations must also apply—; governmental authorities must consult not only with private investors and foreign experts but also with local authorities and community organizations and ensure the implementation of the plans is in partnership between national and local levels; relooking the traditional planning that perceive brownfield sites as unfit for development and economically infeasible and temporary users as informal; introduce spatial planning that shifts the focus in priorities on ideals of integration across physical, economic and

social pillars and focuses on the regulation of space as well as society and the expansion of the city to accommodate the booming demographic shifts; emphasize the government's role in shaping space, rather than society and change the role of the national government in social relations away from traditional frameworks; introduce policies that encourage urban regeneration and broaden the scope of redevelopment that explicitly focuses on the physical element to inclusive urban regeneration that combines physical, economic and social pillars; reform the institutional model of urban development to one that is founded upon notions of justice, in addition to; paying more attention to addressing the urban segregation through strengthening the connections between East and West Amman through urban renewal/regeneration projects; the preservation of spatial value; implementing strategies that are initiated at the national scale but implemented contextually on the local scale; integrating strategies that combine physical, economic and social pillars while giving priority to dilapidated urban space as well as utilizing the spatially dispersed brownfields to addressing these socio-economic disparities which may offer a feasible and sustainable solution

To sum up, as literature discussions confirmed, no geography enjoys full spatial equality and Jordan is no exception. However, there is a growing body of literature that supports the view that spatial inequality account for significant economic, political and socio-cultural outcomes. Consequently, significant levels of inequality could have large negative effects on human welfare and society. Discussions also increasingly recognize that more egalitarian societies grow faster than unequal ones. Concerns for spatial inequality in Jordan are therefore, this study argues, an important research priority for both ethical and developmental considerations.

Key concepts including spatial justice, the right to participation, the right to appropriation, and urban regeneration must be introduced to the planning industry in Jordan, moreover, a marriage between spatiality and economics must be accentuated.

This study argues the need for a policy shift that no longer focuses on shaping spaces or societies rather on decentralization and deregulation is long overdue, moreover, strategies for implementation must become a primary element for the development of spatial projects focusing on both the government in its all scales including national, provincial and municipal through providing umbrella policy visions as well as land-use functions as a key instrument in carrying out spatial plans which must be regularly updated and broadened to emphasize the constantly emerging physical, economic and social developments.

The study argues perhaps the planning industry in Jordan should move towards building a national movement centered on the notion of the right to the city informed by Lefebvre, Harvey, Soja, Fainstein and Foucault in addition to other scholars that fostered a similar critical spatial perspective and join the world quest for seeking more spatially just cities. Moreover, it calls for the creation of a radically new conceptualization of space and spatiality, and for an urban and spatial concept of justice in the Middle Eastern context, one that takes into consideration concepts of the city and right to difference and its role in the production of space as well as concepts of social and spatial justice and the city.

Lastly, before this chapter comes to an end, it is important to point out that the study recognizes the concept of spatial justice is foreign to the Middle-Eastern setting, it has been extensively researched in American as well as in European contexts but not as much in the study case context, thus, it must be read differently and addressed according to the different context

particularities. However, the recommendations suggested although may not fit as well in the study context, still, this study argues, may offer if not solutions but frameworks to inform an approach dedicated to further the achievement of a more just Amman.

7.7. Conclusion:

Spatial equality remains an under researched topic in the context of the study. The purpose for this chapter was therefore to provide a better understanding of the topic. Firstly, by examining the overall inequalities manifested throughout the city, the chapter provided a background to investigate the more specific spatial inequality. Secondly, from the standpoint that locational discrimination is a catalyst for spatial injustice, the chapter shed the light on the urban segregation between Eastern and Western Amman through examining the spatial distribution of socio-economic equality indicators and later demonstrating the attempts to address it over the course of thirty years of urban practices. Afterwards, in order to connect the three themes of the study and synthesize its findings, the chapter examined the relationship between spatial justice, brownfield and temporary urbanism in order to inform the overall research question which the chapter addressed in its final section by suggesting a set of recommendations which it argues will aid Amman to become a more spatially just city.

CHAPTER 8: CONCLUSIONS

8.1. Introduction:

This chapter provides an overall review of the study's main goals and objectives and demonstrates how each chapter sought to address them. The chapter then highlights the key findings of the study as well as the key contributions this study may offer to the ongoing research questions it posed throughout the body of this thesis as well as the broader research sphere. The chapter also highlights some arenas of needed future work that may provide a better understanding of the research topic and contribute to the ongoing research surrounding the study areas.

8.2. Chapter summaries:

The *Introduction chapter*, served to place the study by introducing the three pivotal themes it revolved around; urban brownfields, temporary urbanism and spatial justice, it demonstrated the research focus as well as the thesis structure.

Broadly categorized under the three research themes of the study, the *Literature review chapter* examined thoroughly selected discussions on each topic. While the first part was devoted to exploring work on theorizing space by examining selected standpoints on space and the social theory including Marxism and the sociology of space; structuralism and the question of space; poststructuralism and postmodernism as well as the Lefebvrian and Lefebvrian-influenced approach found in writings on the production of space and the right to the city and reiterated in the works of numerous scholars including Harvey, Soja and Foucault amongst others. This

section served as the guiding line for the theoretical framework that informed the investigations and analysis on the three themes of the study throughout the rest of the thesis. The second part looked at the phenomenon of urban brownfields, it examined the various available definitions in their settings in order to later inform the one established for the study context, it also examined two key methods to identify them and evaluate their redevelopment; the Smart Growth Network (SGN) integrated framework and Thomas' GIS-based evaluation framework as well as tools including Cost Benefit Analysis (CBA), Environmental Impact Assessment (EIA) and Multi-Criteria Evaluation (MCE) in order to inform the identification and evaluation of potential brownfields in the study context later in the empirical chapters. The third and last part of the literature review looked at temporary urbanism, it briefly explained the urban phenomenon in light of available literature in order to guide the investigations and analysis on them later in the empirical chapters, moreover, it briefly reviewed the barriers temporary urbanism faces and the numerous benefits it provides for the development of cities and communities.

The *Methodology chapter* briefly recalled the aims and objectives that guided the premise of the research argument; it identified the research philosophy; described the approaches and processes utilized throughout the conduct of the study to collect the necessary data. In doing so, the chapter identified the target population of the study; demonstrated the sampling techniques performed and outlined the sample size, and; illustrated the main data sources and research instruments employed. The chapter continued to describe the ethical considerations faced throughout the conduct of the study including validity, reliability as well as generalizability of the research then moved on to describe the fieldwork experience and challenges including the data collection as

well as the actual field challenges. The chapter concluded with an outlining of the analytical framework that underpinned the methodological positioning throughout the study.

Considering the study took place in a Non-Western context, chapter four, the *Context chapter*, was set to portray the scene for the study setting in Amman, Jordan. The chapter provided a brief historical and political structure overview; it outlined the demographic, socio-cultural and economic characteristics of the country in general and the city of Amman in specific then shifted its focus on the planning scene in the city by shedding the light on the rapid economic growth of the city, the segregation between its Eastern and Western ends –which was picked up later in the empirical chapters— and provided an overview of the urban and regional planning of Amman.

Chapter five through chapter seven comprise the empirical –and largest— part of this thesis and examined the three themes of the study in the context of Amman. In more details, chapter five, *Brownfields in Amman*, began by highlighting the problem of lack of a systemic definition for the phenomenon and emphasized the importance of having one to unify the understanding of all stakeholders involved in the decision-making around brownfields and concluded by proposing a definition informed by the available ones in the literature. The chapter later shed light on the urban management of these spaces and highlighted the lack of current policies toward them, and by utilizing the reviewed methods and tools to identify brownfields and evaluate their redevelopment, embarked on identifying five potential brownfield typologies that spread throughout the study context. (1) Residual planning outcomes; (2) Discontinued mines and quarries; (3) Unfinished mega-projects; (4) Contaminated and hazardous sites, and; (5) Miscellaneous abandoned sites and buildings. Lastly, the chapter highlighted the general as well

as the specific challenges that face the regeneration of brownfield sites, in addition, it emphasized the benefits their reclamation may offer to the city of Amman.

Chapter six, *Temporary urbanism in Amman* demonstrated the rapid evolution of temporary urbanism in the study context and its implications for the development of the city. By sharing in-depth examples, the chapter identified six preliminary types of temporary urbanism, the examples included; (1) Flea markets; (2) Bazar-like shops; (3) Street vendors, sheds, tents, stalls and kiosks; (4) Vacant-underutilized cliffs (also known as *Overlookings* or *Matallat*); (5) Gypsy nomad tents (known as *Kharabeesh* in the local Jordanian dialect), and; (6) Refugee camps, more specifically the Palestinian and Syrian refugee camps. The chapter investigated its own hypothesis that the temporary use of space in Amman could be harnessed in the economic growth and urban development policies in addition to the official city marketing discourse of contemporary Amman through a policy shift aimed towards the promotion of the city as a ‘creative city’ with an ‘alternative economy’ supporting environment, moreover, by examining the types above, the chapter demonstrated how temporary uses may serve as alternatives for more serious problems—more specifically the refugees and immigrations problems — and everyday situations. Lastly, the chapter highlighted the barriers the practice faces as well as the potential advantages it may offer to the context of the study.

The last empirical chapter, chapter seven, *Spatial justice in Amman*, sought to examine the third and last theme of the study as well as link its three themes in an attempt to address the overall research question. The chapter discussed the ‘spatiality’ of ‘justice’ and ‘injustice’ in the city of Amman through looking at inequality indicators in general and spatial (in)justice in particular, then, from the standpoint that locational discrimination is a fundamental catalyst for spatial

injustice, the chapter further demonstrated the urban segregation between Eastern and Western Amman which was introduced earlier in the context chapter and briefly demonstrated the – failed— attempts made to address it. Moreover, to synthesize the study and make the connections between its themes in order to examine the study’s own broader hypothesis that the reclamation of brownfields by taking forward temporary urbanism notions may help achieve greater spatial justice, the chapter investigated the relationships between spatial justice, the reclamation of brownfields and temporary urbanism, and looking at the overall research concluded with drafting a set of recommendations which the study argued will guide Amman to becoming a more just city.

8.3. Key findings:

The study found that almost every concept introduced by this research in the context of Amman had not been encountered before by participants. However, what was interesting was that the underlying ideas informing the majority of these concepts were widely circulated and accepted. For example, although none of the participants has explicitly heard of the term ‘*spatial justice*’ previously, yet, when describing it is generally the manifestation of ‘*social justice*’ into ‘*space*’, the study found it was widely recognised and the idea of fair distribution of spatial resources is already established in the Jordanian community without the need for it to be specifically labelled. Similarly, other concepts such as the ‘*right to the city*’ are not well-established in everyday language, but are still practiced through the actions of the residents of Amman including activist groups and temporary users.

The study found the involvement of local people in the management of urban space generally and brownfields in particular is either restricted to a specific group of people, very limited or, in many cases, non-existent. The wide sample of research interviews undertaken for this study aimed to cover the perspective of diverse stakeholders. It also set out to analyse past and current policies and strategies which almost removed the role of the public in the development of urban spaces. This considerable lack confirmed the study's proposition that local participation within the urban management of space and decision-making in urban planning is very limited.

No systematic (nor even non-systematic) definition for brownfields exists in the organisational planning structure in Jordan or the wider Middle East, accordingly, brownfield typologies and potential sites remain unidentified and not included in future development plans. There is no database or base-map to identify their locations or size. As such, it is perhaps no surprise that they are all but disregarded in the urban planning of Amman. Using the existing definitions of brownfield from the UK, European and USA contexts the study found it valid that a similar definition may be appropriated and consequently, similar methods to identify potential sites and evaluate their redevelopment may also be employed. Utilising the previously explored methods including the SGN model and Thomas's GIS model in addition to tools such as the CBA, the EIA and the MCE, the study found that, if brownfields are taken forward in Jordan, there will be an urgent need to develop methods and tools to identify them and evaluate their development that are more specific to the particularities of Middle Eastern contexts. This is because the established definitions are designed to accommodate the characteristics and needs of the Western contexts they are originally developed in and for.

Conducting a preliminary mapping exercise for potential brownfield sites and creating a database for these sites, would be almost impossible without addressing the need to appropriate western definitions of brownfield and to develop Middle-Eastern-specific methods and tools to identify and evaluate them. The preliminary mapping for a sample area undertaken in this study was eye opening in terms of the difficulty associated with this exercise and revealed the urgent need to do it.

These key findings partially addressed the research question which asked about the challenges that face the reclamation of brownfields, however, in investigating those challenges the study came across numerous issues that hamper their development including: bureaucracy and bureaucracy-related processes and costs; the lack of arrangements surrounding the management of similar sites; the lack of public participation in the management of these sites despite how much their knowledge may be informing as found by the study and how enabling it would be for the community to develop long-term capacity and solve many challenging social issues; the lack of policies and programmes around the management of brownfields including correct environmental assessment and clean-up or end-use programmes and making the decisions around them; high clean-up costs; the challenge of encouraging investors to pursue the redevelopment of brownfields instead of the development of greenfields in spite of the added cost and financial risk; the lack of financial assistance for brownfield developers.

In addition to the specific challenges, the study found brownfields in Amman share numerous barriers with examined worldwide contexts including policy and planning problems such as: liability uncertainty; regulatory complexity; lack of coordination between the different stakeholders involved in the redevelopment of brownfields; insufficient information about the

locations and conditions of brownfields and confusion regarding clean-up levels. According to the research findings, the reclamation of brownfields in Amman would yield substantial environmental, social and economic benefits including the clean-up of contaminated land; an increase of property value; the expansion of the tax base; job creation and; promotion of a revitalised and positive image of urban life. Similar to the examples in the literature review, the recycling of brownfield sites in Amman may increase environmental quality, revitalise neighbourhoods, and financially benefit the public and private sectors. Moreover, the reuse of brownfield sites in Amman may offer an opportunity to address a variety of issues through a single activity.

By redeveloping disturbed land, the reuse of brownfield sites in Amman may help slow the consumption of undeveloped greenfield sites, because reusing brownfield sites makes it possible for developers to utilize existing infrastructure and facilities thus making them more sustainable. The remediation of brownfield sites in Amman would also help make up the considerable deficit in green areas and open spaces and may encourage the much-needed economic recovery by creating a business-friendly environment that encourages new investments and creates opportunities as part of the broader spatially just city. The reclamation of brownfield sites in Amman would contribute to neighbourhood revitalisation by: advancing neighbourhood properties; increasing public participation in decision-making around brownfield sites and the management of urban space in general, and; through the practise of temporary urbanism, the data also suggested the reclamation of brownfield sites in Amman would contribute to achieving greater spatial justice.

In an attempt to answer the research question around whether Amman has what it takes to take forward the approaches of temporary urbanism, the study found that many uses and practices are similar to those observed in the literature such as flea markets, bazar-like shops, stalls, kiosks and street vendors. However, there are also examples of temporary urbanism practice specific to Amman including the vacant-underutilised cliffs (also known as *Overlookings* or *Matallat*); Gypsy nomad tents (known as *Kharabeesh*), and; the Palestinian and Syrian refugee camps. Moreover, similar to the case of brownfields, when looking at the barriers and benefits to the urban phenomenon, the obstacles temporary urbanism in Amman suffers from included: bureaucracy and bureaucracy-related procedures and costs; the lack of a systematic definition; the lack of, or perhaps the absence of, regulatory arrangements around its management; and the lack of public participation in the management or decision-making process around temporary spaces, uses and practices. The study also found that a crucial barrier to temporary urbanism is the organization of traditional planning and the lack of agencies which: can initiate the practice; have experience with the technical aspects of its implementation; can organise and utilise the practice and; manage to insert it in the existing planning procedures. The lack of legal protection for contracts and transactions, high operation costs and registration fees, limited financial resources and access to concessional finance are also considerable challenges. The study identified numerous challenges generated from other stakeholders including real-estate developers, property owners –which may make or break temporary use— and local community groups. The lack of information and data and the fact that informal practices (including temporary uses) are not acknowledged in Jordanian statistics or studies makes them more ambiguous and unclear. Lastly, the study identified practice-related barriers including the experimental nature of temporary

urbanism and the transformation, commodification, resistance and displacement the practice has been going through.

As a result, temporary spaces remain neglected, perceived as irrelevant, economically useless, and marginalized in conventional place making. Temporary users remain powerless, oppressed and easily displaced. Moreover, the practice in general remains thought of as illegal, with an uncivilized appearance and producing negative impacts on the image of the city. Conversely this study argues the costs invested in removing temporary uses might instead contribute to their development and facilitate economic growth.

The benefits the practice may offer were consistent with the international experience of temporary use, including how temporary use has been harnessed in economic and urban development policies and city marketing. This study found similar benefits may be obtained in the context of Amman. Benefits include: the revitalization of derelict, vacant and underutilized brownfield sites; the provision of alternative mixed-economies that promote financial inclusion, and; the contribution to city marketing and the promotion of Amman as a '*creative city*' that embraces temporary users under flexible '*open-source*' urbanism and a friendly start-up business environment in a less financially thriving context.

The final proposition for this research argued that the reclamation of brownfield sites through temporary urbanism may aid Amman in achieving greater spatial justice. Although there is a slim body of literature that investigates issues of '*social justice*' or issues of '*space*' in Arabic literature and Middle Eastern contexts, there are no studies that seek to link these in relation to '*spatial justice*'.

In Amman, '*justice*' is immediately associated with '*equality*' and is measured mostly through the evaluation of socio-economic indicators including: the fair distribution of income; access to services; equality in opportunities for children and youth, and gender inequality. There is no consideration of the '*spatial*' in relation to '*justice*'. The spatial justice dimension is missing in Jordanian and Middle Eastern planning frameworks and the Arabic literature in general.

By shedding light on the East-West segregation of Amman, this study confirmed the hypothesis that locational discrimination is a fundamental catalyst for spatial injustice. Thirty years of attempts to address the urban disparities between Eastern and Western Amman demonstrates that if the '*spatial*' is not taken into consideration, '*spatial injustice*' is not a surprising result.

Moreover, the relationship between brownfields, spatial justice and temporary urbanism is little investigated in the literature, and issues related to brownfields are often categorized under the umbrella of environmental justice. The reclamation of brownfield sites and temporary urbanism are strongly connected to spatial justice and the study suggested a set of recommendations that if taken forward may aid in the achievement of a more just Amman. The recommendations included: structural change including systems, policies and strategies; establishing official bodies and agencies concerned with the brownfields, temporary use and spatial justice; encouraging public participation and community involvement and promoting heterarchical (non-hierarchical) governance.

Lastly, the study noted that no nation enjoys full spatial equality and Jordan is no exception. However, there is a growing body of literature that supports the view that spatial inequality accounts for significant economic, political and socio-cultural outcomes. In order to achieve these outcomes, key concepts including spatial justice, the right to participation, the right to

appropriation, and urban regeneration must be introduced to the planning sector in Jordan. Moreover, the connection between spatiality and socio-economics must be enhanced. This study also found that the need for a policy shift is long overdue away from shaping spaces and societies, moving instead towards decentralization and deregulation. The study suggested the planning sector in Jordan should move towards building a national movement centered on the notion of the '*right to the city*' informed by Lefebvre, Harvey, Soja, Fainstein and Foucault, amongst others, to foster a similar critical spatial perspective and join seeking global ambition for more spatially just cities. Thus, the study calls for the creation of a radically new conceptualization of space and spatiality, and for an urban and spatial concept of justice in the Middle Eastern context, one that takes into consideration concepts of the city and right to difference and its role in the production of space.

In summary, the study notes a considerable lack of information on all three themes in both the theoretical literature and empirical discussions in Jordan, and highlights the need for further extensive research to bridge the numerous identified gaps. Similarly, the study finds a considerable lack of urban arrangements including planning policies, strategies and agendas around the management of brownfields and temporary uses and users. At the same time, there is also a considerable lack of public participation in the management of these urban space and practices and the decision-making processes associated with them.

8.4. Key contributions:

This thesis has argued that the reclamation of brownfield sites through taking forward notions of temporary urbanism may further the achievement of spatial justice. The key contributions of this study thus were:

Defining brownfields for the Arabic literature and research in Middle Eastern contexts.

This thesis explicitly addresses the lack of a systematic unified definition for brownfields and brownfield sites in Arabic literature and Middle Eastern planning frameworks. Although this problem is not exclusive to the context of the study, that does not make it less important. In facing this challenge, the study proposed an Arabization (Arabic: تعريب, English: *Ta'rib*) of the term – understood as the process of localizing foreign texts or terms into Arabic equivalents— in order to avoid any fail to grasp the meaning(s) of the term in translation. Moreover, looking at the examined definitions in literature discussions on brownfields, the study suggested taking forwards an appropriated definition adopted from the CABERNET (2007) definition originally found in Ferber and Grimski's (2002) work which identifies brownfields as “*sites which have been affected by former uses of the site or surrounding land; are derelict or underused; are mainly in fully or partially developed urban areas; may have real or perceived contamination problems, and; require intervention to bring them back to beneficial use*”.

This thesis introduces the topic of Brownfield regeneration for discussion in Jordan and the Middle East. Moreover, although the study presented suggested preliminary fixes to the urban phenomenon (*see Brownfields in Amman chapter*), further research may increase their potential.

Highlighting the lack of methods and tools to identify brownfields and evaluate their development in Arabic literature and Middle Eastern contexts.

In general, few methods and tools exist to identify brownfields and evaluate their development in the broader global context, moreover, looking at existing definitions, the particularities of the Arab world and Middle Eastern contexts including the topographic characteristics of such cities; as well as the climate; the political-economic characteristics, and; socio-cultural characteristics for example are often not thought of. In addition to the methods adopted in this study, further research could explore and develop alternative methods that –after introducing the urban phenomenon to planning systems and defining it— seeks to identify potential sites and evaluate their development as part of the wider research on the phenomenon.

Establishing a preliminary Middle Eastern-specific brownfields typology.

The study established a preliminary set of brownfield typologies and identified types that may not exist in western contexts. As the *Brownfields in Amman* chapter demonstrated, five brownfield typologies perforate the urban fabric of Amman. Alternative definitions may have resulted in additional and perhaps more varied types. Discontinued mining sites and quarries; the contaminated and hazardous sites, and the miscellaneous abandoned sites and buildings may be shared with other contexts. But residual planning outcomes including bits, leftovers and Arsas, in addition to unfinished mega projects are specific to the study context and are a result of particular practices and circumstances the study context has been subjected to, *see chapter five*. The preliminary outlined typologies remain subject to professional examination and the study acknowledges the experimental nature of its findings and the constant need for further research to refine them.

Introducing ‘*temporary urbanism*’ to Arabic literature and research in Middle Eastern contexts.

This study may be seen as the first official text that addresses informal economies and self-employment together with other practices and uses such as open markets, street vendors and stalls in addition to camps under the wider umbrella term of temporary urbanism. Similarly to the term brownfields, ‘*temporary urbanism*’ does not exist within Arabic literature or Middle Eastern planning frameworks.

Moreover, by showcasing the distinctive patterns of temporary urbanization throughout the city, the study was able to identify temporary uses shared with the international scene as well as ones that are specific to the study context and that pose critical questions to the planning industry thus must be addressed. Previously identified temporary uses included flea markets; bazar-like souqs; in addition to street vendors, sheds, tents stalls and kiosks. However, when investigated within this context, the study revealed specific temporary uses of urban space, which it would be fruitful to research further. These included vacant-underutilised cliffs (*Overlookings* or *Matallat*) which are mainly a result of the challenging topography of Amman, gypsy nomad tents (known as *Kharabeesh*) which are mainly a result of the historical and socio-cultural development of the specific study context, and refugee camps which are mainly a result of the political turmoil in the specific surrounding context. Due to the complexities associated with each temporary use type (as demonstrated in the *Temporary urbanism in Amman* chapter), further research is much needed to examine each in more depth and further refine the proposed typologies.

Contributions to wider research

In addition to the case/context specific contributions outlined so far, the study identifies theoretical contributions towards relevant work in human geography and urban planning.

In general, as discussed so far, this study may be the first official attempt to address brownfields, temporary urbanism and spatial justice within the Middle Eastern context. Thus, it has newly introduced to the research context: definitions of brownfields at the local and regional level; the design of methods and tools to identify potential brownfield sites; the development of a brownfield typology.

This study may also be one of very few studies that highlight the importance of acknowledging informal economies –and accordingly temporary use—as an integral part of the economic structure of Jordan. In so doing, it sheds light on realistic challenges faced by both the regeneration of brownfield sites and temporary urbanism. The study has uncovered and explored the potential benefits offered by brownfield regeneration and temporary uses to urban life. Significantly, the study has brought the specific concept of spatial justice into conversation with planning practice within Jordan. It did so by investigating the relationship between the three interconnected themes of urban brownfields, temporary urbanism and spatial justice in the body of one thesis.

8.5. Future work:

The original intentions of the study exceeded its original focus on achieving spatial justice through the reclamation of brownfields by taking forward temporary urbanism and opened up a series of arenas for future research. In particular, there are a few key aspects associated with research on brownfields, temporary urbanism and spatial justice in Middle Eastern contexts and Arabic literature that this study would like to steer future research towards.

Consistent with the study findings that highlighted a theme of considerable lack in literature as well as practical arrangements in planning systems around brownfields, temporary urbanism and spatial justice within the study context, the study argues more academic literature is needed to better understand the phenomena and serve as a reference base for future research. In this thesis, the majority of data was either available in raw statistical forms such as tables, diagrams or maps or in less academic forms such as official reports, periodicals or annuals or in Arabic references which made the material exclusive to the Arabic-speaking world. The second main source of data was empirical and derived from participant interviews, focus groups or observation which may always have room for subjectivity and error, moreover, could not cover the totality of perspectives no matter how large the sample size was. In addition, contextual differences are extremely significant, an approach that may fit in a scope or scale of a Western context may not be easily applicable in a Non-Western one, thus, as noted above, further academic research is recommended to overcome this shortcoming. Therefore, further research that takes into consideration a wider sample and a broader theoretical framework and involves scholars from other interconnected disciplines including urban planning, architecture and human geography would enable the research problem to be considered from a wider lens.

In light of increasing economic decline currently experienced in Jordan in addition to the Syrian crisis and the ongoing Palestinian condition, as well as other –seemingly unending – surrounding political turmoil, there is a need to start thinking about planning for emergency conditions in more permanent ways. Ironically, this study highlights how temporary practices that are flexible and can accommodate for the changing needs of cities and communities undergoing similar circumstances might be mobilized in an almost permanent state of emergency. Thus, the study argues there should be more effort put into the research of temporary urbanism as a tool to address serious geopolitical issues as they play out in urban areas.

There should be a productive emphasis here on ‘*crisis*’, including not only preventing harm, but also informing aspirations to make the best out of the contemporary situation in Jordan. The practices of temporary urbanism might therefore be used to cultivate the benefits of the situation of apparent crisis including; making the most of skilled labour, diversity, mixed-income and mixed-economy societies. Therefore, the study suggests looking geographically at the theme of emergency and crisis in urban practice may be another arena for future research.

Throughout the body of this thesis, there were numerous implications on the role of ‘*the state*’ which is another dimension that this study argues needs to be examined closer as we look towards developing transparency around urban planning, which may help the achievement of more ethical, unbiased outcomes. This, then, returns to the importance of thinking about space as a political as well as social and spatial and to pay due regard to the specific political circumstances underpinning urban policy and planning in the Middle East.

8.6. Final remarks:

In this thesis, I have analysed practices and urban spaces that have so far been overlooked and marginalized in a context that does not receive much academic attention. I have argued that these spaces may be better imagined as spaces of justice and equality, spaces of social interaction, solidarity, spaces that embrace diversity, civil rights and empowerment, spaces where all sorts of discrimination whether it be class, gender or race are obsolete.

In doing so, I have posed many questions on how concepts such as '*the production of space*', '*peoples' right to the city*' and '*spatial justice*' are perceived and manifested in the context I come from, the Middle Eastern context. As a former student of Architecture, in which notions of urban design and spatial behaviour sometimes have quite different meanings to those found within Human Geography, I have focused on the importance of the *spatial* in considering the geographies and practices under study and examined how the tactical, bottom-up attempts involved in the construction of spatial-temporal experiences have unfolded. This study concluded that there is a chance to change place in ways that extend it beyond the physical boundaries rather into limitless socio-spatial manifestations.

While the '*ordered*', '*formal*' and '*planned*' are important to the organization of space, I have insisted that the '*spontaneous*', '*informal*' and '*organic*' are similarly important to the production of just spaces. Yet, caution must be taken as to not over emphasize them. By considering the humanistic aspect of these space and embodied social attributes, this thesis shifted focus beyond the urban planning dimension, without losing touch, to reframe debates around the ways in which brownfields and temporary uses are negotiated and encountered under the wider frame of spatial justice through everyday lives.

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