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The Politics of Planning Urban Development in the 20th Century Iran

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Dissertation

for the purpose of obtaining the degree of doctor
at Delft University of Technology
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Summary

This thesis contributes to a detailed understanding of the urbanisation of Tehran, and offers a new perspective on its complexities and specificities. This perspective builds on the work of urban scholars who have critically questioned the Eurocentric understanding of cities and have moved beyond an artificial hierarchy of cities that pushes for 'backward/underdeveloped' cities to become like 'advanced/developed' cities, even if that is inappropriate to their specific material and cultural condition. The thesis considers the urbanisation of Tehran over the course of the whole 20th century and argues that urban change and development process of Tehran is a multi-scalar process and despite its particularities and differences, have been connected to wider global development processes. In doing so this research examines the historic trajectory of Tehran's urbanisation and development through the lens of international development discourse (such as state-led industrialisation or long-term economic development planning and privatisation) and shows how the interconnection between Iranian city making practices and international development ideas have shaped Tehran urban spaces and social structure.

Throughout the last century, many international perspectives on Iran diagnosed the country and its capital city as being 'backward', 'Third World', and 'undeveloped'. Thus, the pressure to 'catch up' with developed and economically powerful nations has been crucial in the ways in which Iranian government regimes, political elites, experts, and citizens have dealt with the 'problem of underdevelopment'. In this thesis, the discourse of development refers not only to how development is defined or described, but also to how it is measured and practiced. Since the beginning of the 20th century, shifts in the global political economy have caused new discourses, institutions, and actors of development to emerge – bringing important implications for the formulation of national development polices and urban planning practices in cities across the Global South, including Tehran. Therefore, this study seeks to reveal how the interplay between the global discourse on development and Iran's development policies has resulted in particular urban plans and development projects for Tehran, whose outcomes have had long lasting effects on trajectories of urbanisation and urban transformation in Iran.

This research provides a historic perspective which first interrogates the relationship between urbanisation and development discourses and problematizes their perceived positive relationship in studies of cities in the Global South. Then a series of theoretical debates on history of urbanisation in non-Western cities, and shifts in international development discourse and its implications for the formulation of national development polices and urban planning practices

in cities across the global south are presented. These theoretical discussions have offered conceptual lenses and an analytical framework that have helped to create a multi-scalar approach which frames the history of Tehran's urbanisation as an intertwined local and global process. It is particularly through the application of this analytical framework that this thesis provides a novel understanding of Tehran urban development and the role of urban planning and design.

The multi-scalar analysis of Tehran's urbanisation is divided into three major periods over the last century. The beginning and end of each of these chronological periods is defined by crucial socio-political changes in Iran, each of which were motivated by the ambition to develop a modern and independent Iran that resists Western hegemony. Moreover, each period has been structured around the key shifts in international development discourses, as well as key national development policies, urban plans and projects for Tehran, their political and economic purposes, and the experts and institutions involved in making them. The empirical analysis of each period unpacks the differing agendas for the construction of nation-statehood and traces the conflict and alliances between state and non-state actors and agencies in the process of negotiating and implementing national development policies and urban plans for Tehran. Finally, the role of local and Western urban planners and experts, and the ideas and principles that guided their work, were examined through tracing the institutionalisation of expertise and the plan-making processes.

By revealing the pathway of Tehran's urbanisation and its specific historical trajectory, this study finds that the development of Tehran as a capital city during the 20th century has been one of the key mechanisms with which the Iranian state has constructed itself, and fortified its role as a builder and engineer of new 'modern' urban spaces. In each of the different periods, extensive powers to organise the territory were in the hands of the state, which can be seen as a way of maintaining and extending its authority and legitimacy.

The case of Tehran's urbanisation uncovers a mutual relationship between national development plans and urban change. The historical study of a series of key national development plans shows how Iranian ruling elites and chosen experts responded to dominant international development discourses and attempted to nurture a locally interpreted version of the 'developed' city. These efforts had direct implication for planning procedures and city making practices. As such, the case of Tehran deepens knowledge about the role of state and nation-building processes in shaping urban planning practices and urbanisation of southern cities, and also offers a counter-narrative to the common views in urban studies which suggest that large cities are bypassing their nation-states in driving economic growth and becoming strategic actors in the global economy.

Ultimately by interrogating state power in producing Tehran urbanism, we highlight the importance of and need for more research on the role of state (formal) and non-state (informal) actors in shaping Tehran's urban development trajectory and the politics of city-making practices. This is particularly pertinent to the careful investigation of the role of revolutionary charitable foundations in planning development as these foundations cannot be defined simply as public or private sector. In more general terms, it is important to further research the role of the religious-political groups (as non-state actors) or any other developmental organisation with ideological orientations in shaping urban spaces and spatial practices of Middle Eastern cities. In fact, it will be impossible to do any planning reform without considering the crucial role these ideological groups and organisations play in socio-economic development of these cities.

Samenvatting

Dit proefschrift draagt bij aan een gedetailleerd begrip van de verstedelijking van Teheran en biedt een nieuw perspectief op de complexiteit en de specifieke kenmerken daarvan. In het proefschrift gaan we in op de verstedelijking van Teheran in de loop van de twintigste eeuw en stellen we dat er een nauwe relatie bestaat tussen verschuivingen in het mondiale ontwikkelingsdiscours in deze periode en veranderingen in de ontwikkelingsplanning van Iran en de verstedelijkingsprocessen in Teheran. In de loop van de vorige eeuw zijn Iran en zijn hoofdstad in internationaal perspectief vaak betiteld als 'achtergebleven', 'derdewereldland' en 'onontwikkeld'. Aldus is de druk om de ontwikkelde en economisch machtige landen in te halen van cruciaal belang geweest bij de manier waarop de Iraanse regeringen, politieke elites, deskundigen en burgers het 'probleem van de onderontwikkeling' hebben aangepakt. In dit proefschrift verwijst het ontwikkelingsdiscours niet alleen naar de manier waarop ontwikkeling wordt gedefinieerd of beschreven, maar ook naar de manier waarop ontwikkeling wordt beoefend en gemeten. Sinds het begin van de twintigste eeuw hebben verschuivingen in de mondiale politiek-economische situatie geleid tot het ontstaan van nieuwe discoursen, instellingen en ontwikkelingsactoren. Dit heeft belangrijke implicaties voor de formulering van nationaal ontwikkelingsbeleid en stedenbouwkundige praktijken in steden in het mondiale zuiden, zoals Teheran. In deze studie onderzoeken we hoe de wisselwerking tussen het mondiale ontwikkelingsdiscours en het Iraanse ontwikkelingsbeleid heeft geleid tot specifieke stedenbouwkundige plannen en ontwikkelingsprojecten voor Teheran, waarvan de resultaten langdurige gevolgen hebben gehad voor de trajecten van verstedelijking en stedelijke transformatie in Iran.

Dit onderzoek biedt een historisch perspectief waarin de relatie tussen verstedelijking en ontwikkelingsdiscoursen aan de orde wordt gesteld, en vraagtekens worden gezet bij de geconstateerde positieve relatie hiertussen in studies over steden in het mondiale zuiden. Vervolgens worden er een aantal theoretische discussies gepresenteerd over de geschiedenis van de verstedelijking in niet-westerse steden, en over verschuivingen in het internationale ontwikkelingsdiscours en de implicaties daarvan voor de formulering van nationaal ontwikkelingsbeleid en stedenbouwkundige praktijken in steden in het mondiale Zuiden. Deze theoretische discussies hebben geleid tot conceptuele perspectieven en een analytisch kader, die samen hebben bijgedragen aan het creëren van een multiscalaire benadering waarin de geschiedenis van de verstedelijking van Teheran wordt gepresenteerd als met elkaar verweven lokale en mondiale processen. Vooral door de toepassing van dit analytische kader biedt dit proefschrift nieuw inzicht in de stedelijke ontwikkeling van Teheran en de rol van stedenbouwkundige planning en ontwerp.

Deze studie richt zich daarbij op het onderzoeken van de krachten van verandering en machtsconfiguraties die aan het werk zijn, en op de rol en betrokkenheid van belangrijke actoren en instanties die het traject van de stedelijke ontwikkeling in Teheran vormgeven. In de empirische analyse richten we ons in het bijzonder op de politiek van de stedelijke ontwikkeling en onderzoeken we de staatsmacht, haar verschijningsvormen en haar effect op de ontwikkeling van Teheran als hoofdstad. In de empirische analyse beschrijven we de vorming van de Iraanse staat en zijn transformatie in de twintigste eeuw, en de manier waarop dit proces de Iraanse planningspraktijken en de stedelijke transformatie van Teheran heeft beïnvloed.

De multiscalaire analyse van de verstedelijking van Teheran is verdeeld in drie hoofdperiodes in de vorige eeuw. Het begin en het einde van deze periodes wordt bepaald door cruciale sociaal-politieke veranderingen in Iran, die alle werden ingegeven door de ambitie om een modern en onafhankelijk Iran te ontwikkelen dat zich afzet tegen de westerse hegemonie. Bovendien is elke periode gestructureerd rond de belangrijkste verschuivingen in de internationale ontwikkelingsdiscoursen (zoals de door de staat geleide industrialisatie of de langetermijnplanning van economische ontwikkeling en privatisering), alsook rond belangrijk nationaal ontwikkelingsbeleid, stadsplannen en -projecten voor Teheran, de politieke en economische doelstellingen daarvan en de deskundigen en instellingen die betrokken waren bij het opstellen van het beleid. In de empirische analyse van elke periode ontrafelen we de verschillende agenda's voor de opbouw van een natiestaat en bekijken we de conflicten en allianties tussen overheids- en niet-overheidsactoren en -instanties bij het proces van onderhandelingen over en uitvoering van nationaal ontwikkelingsbeleid en de stedelijke plannen voor Teheran. Ten slotte onderzoeken we de rol van lokale en westerse stedenbouwkundigen en andere deskundigen en de ideeën en principes waardoor zij zich in hun werk hebben laten leiden, door de institutionalisering van de expertise en de planningsprocessen te bekijken.

Na het traject van de verstedelijking van Teheran te hebben belicht komen we in deze studie tot de conclusie dat de ontwikkeling van Teheran als hoofdstad in de twintigste eeuw een van de belangrijkste mechanismen is geweest waarmee de Iraanse staat zichzelf heeft geconstrueerd, en zijn rol als ontwerper en bouwer van nieuwe 'moderne' stedelijke ruimten heeft versterkt. In elk van de verschillende perioden beschikte de staat over uitgebreide bevoegdheden om het grondgebied te organiseren, wat kan worden gezien als een manier om het gezag en de legitimiteit van de staat te behouden en te vergroten.

Het geval van de verstedelijking van Teheran brengt een wederzijdse relatie aan het licht tussen nationale ontwikkelingsplannen en stedelijke verandering. De historische studie van een reeks belangrijke nationale ontwikkelingsplannen laat zien hoe de Iraanse heersende elites en geselecteerde deskundigen reageerden op het dominante internationale ontwikkelingsdiscours en probeerden een lokaal geïnterpreteerde versie van de 'ontwikkelde' stad vorm te geven. Deze

inspanningen hadden directe gevolgen voor planningsprocedures en de praktijken van de stadsontwikkeling. De casus van Teheran verdiept aldus de kennis over de rol van staats- en natievormingsprocessen bij het vormgeven van stedenbouwkundige praktijken en de verstedelijking van zuidelijke steden, en laat tevens een ander geluid horen naast de gangbare opvattingen in stedelijk onderzoek die suggereren dat grote steden hun natiestaten omzeilen en zelf de drijfveer zijn achter economische groei, en dat ze strategische actoren in de wereldeconomie worden.

Door uiteindelijk aan de orde te stellen wat de staatsmacht betekent voor de stedelijke planning van Teheran, benadrukken we het belang en de noodzaak van meer onderzoek naar de rol van formele overheidsactoren en informele niet-overheidsactoren bij het vormgeven van het traject van de stedelijke ontwikkeling van Teheran en de politiek van stedenbouwkundige praktijken. Dit betreft met name zorgvuldig onderzoek naar de rol van revolutionaire liefdadigheidsstichtingen bij planning van ontwikkeling, aangezien deze stichtingen niet zomaar in de publieke of de particuliere sector kunnen worden geplaatst. Meer in het algemeen is het belangrijk om de rol van religieus-politieke groepen (als niet-overheidsactoren) en andere ontwikkelingsorganisaties met ideologische oriëntatie bij de vormgeving van stedelijke ruimten en ruimtelijke praktijken van steden in het Midden-Oosten verder te onderzoeken. Het is namelijk onmogelijk om planning te hervormen zonder rekening te houden met de cruciale rol die deze ideologische groepen en organisaties spelen in de sociaal-economische ontwikkeling van deze steden.

CHAPTER 1

Introduction

Tehran became the capital city of Iran in 1797. At the time, it was a small town of 15,000 inhabitants. Over the course of two centuries, it has transformed into the second largest metropolitan area in the Middle East (after Cairo), with a population of 12 million. Tehran is variously categorised as a city of the Global South, as a Middle Eastern city, as an Asian city, and as a particular type of megacity. This variable categorisation represents a significant challenge, not only to current urban studies scholarship, but also to urban experts, scholars, and decision makers who are dealing with its rapid urban transformation. The lack of adequate representations of Tehran, hinted at by its association with such a broad range of categories, demonstrates the limitation of the current terms and concepts in urban theory to describe and study cities like Tehran. In the past, as a non-Western city, Tehran has been characterised as having failed to meet the normative ideals of urban modernity and progress. This 'developmentalist' approach – which sees certain cities as a deficient form of more advanced cities – has since been contested and reframed by many urban scholars (Robinson, 2002, 2006, 2011; Mbembe and Nuttall, 2004; Roy, 2009; Simon, 2001, 2011; Pieterse, 2010, 2014; Parnell and Oldfield 2014; Khatam, 2015).

Additionally, the 'developmentalist' approach has been largely criticised by postcolonial urban studies. These critiques have called for turning what was historically viewed as evidence of underdevelopment or failed modernisation into a sign of resilience, inventiveness, and the autonomy of cities and nations (Mbembe, 2001; Simon, 2004; Robinson, 2006; Pieterse, 2008). Furthermore, postcolonial urban scholars have questioned the hierarchies and generalising categories of terms such as global, third-world, mega-, African, Asian, post-Socialist, etc. – and argued that these categories simply divide cities into incommensurable groupings that limit our understanding of their reality and their diversity (Robinson, 2006, 2015; Simon and Pieterse 2013). Thus, these postcolonial critics claim 'if urban studies is to sustain its relevance to the key urban challenges of 21st century… it has to go beyond the poor fit of these categories' (Robinson, 2002: 546) and offer alternative ways of imaging and describing cities, their complexities, and their possible futures. These scholars strongly believe that deciphering the variation in processes of urban development across the world could suggest urban policy and planning models that are less prescriptive and more infused with specificities, localities, and creative approaches (Robinson, 2002, 2006; Pieterse, 2010; Roy, 2009; Patel, 2014; Parnell and Oldfield, 2014; Brenner and Schmid, 2015).

Today, there is active debate among urban scholars over different approaches to 'provincialising' the Euro-American scope of urban studies, and to finding new methods of analysis which show the interplay of urban processes happening on the global and the local scale (Robinson and Roy, 2016; Roy and Ong, 2011; Ward, 2011; Patel, 2014; Sheppard, Leitner, and Maringanti, 2013; Schmid, 2015, 2017; Merrifield, 2013; McFarlane, 2011, Hein, 2018). The challenge for these scholars is to 'rethink the Euro-American legacy of urban studies and consider the relational multiplicities, diverse histories, and dynamic connectivities of global urbanisms' (Robinson and Roy, 2016: 181). In other words, these scholars are eager to search for new possibilities to engage with the diverse forms of urbanism and urban developments in the Global South and highlight the pressing need for new forms of analysis that take a more global approach to urban studies (Robinson, 2015). The aim of this thesis is to join this quest, and in doing so the main contribution of this thesis is to offer a historical analysis of Tehran's urbanisation and development as an intertwined local and global process. Ultimately, the challenge here is to go beyond simple binaries and dividing categories, and look at urban processes to show how cities like Tehran, despite their particularities or differences, are connected with one another and linked to wider global processes.

In fact, it is central to this thesis – at a time when cities in the Global South are rapidly transforming and facing extreme socio-economic and environmental challenges – to rethink and reassess conventional approaches and given definitions to understand urban change. Moreover, in the case of Tehran this study argues that it is time for Iranian urban scholars and practitioners to re-examine the forces of change and power configurations that are at play, as well as the role and involvement of key actors and agencies that shape urbanisation and development of Iranian cities.

In order to achieve this ambition, this research traces the history of Tehran's urban development through the lens of international development discourse and seeks to reveal the connection between shifts in international development discourses (such as state-led industrialisation, long-term economic development planning, and privatisation) and Tehran urbanisation process. During the last century, shifts in the development discourse have been closely linked to shifts in the global political economy and geopolitical alignments, which in turn had serious implications for the urbanisation of the Global South. Hence this thesis investigates how the interconnection between hegemonic ideas of development and key national development policies in Iran has had formative influence on Tehran's urban planning practices and its socio-spatial transformation. In doing so, this study shows that, despite the hegemonic ideas of development and uneven global power relations, Tehran was not a passive recipient – instead the interplay between global, national, and local actors and institutions led to the formation of a particular form of development policies and planning practices in Tehran. In fact, in many instances, this multi-scalar interconnection led to the particular urban visions,

fantasies, and utopias that accompanied the new urban models and recipes for developing and modernising the city.

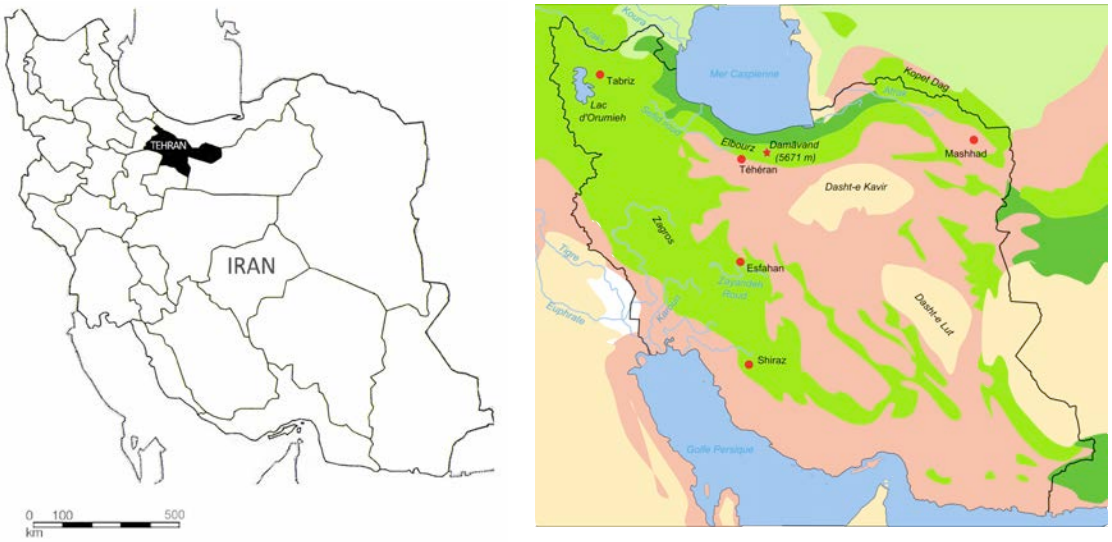
The case of Tehran is particularly intriguing because of Iran's unique historical and geopolitical position. In a matter of only a century, Iran repeatedly remade its political imageries and realities: from Shia's Qajar dynasty to the Constitutional Revolution in 1906; from a military monarchy under Reza Shah Pahlavi (1925–1941) to the rise of the nationalist movement in the early 1940s and the nationalisation of the oil industry in 1951; and from the 1979 popular revolution that overthrew Pahlavi's autocratic monarchy (1925–1979) to the Islamic Republic that established the only theocratic state in the modern political system. Moreover, unlike many countries in Latin America, Africa, and Asia, Iran was never officially a colonised nation – despite the fact that its natural resources and its strategic location, along with the discovery of oil in 1908, made it subject to indirect 'semi-colonial' rule by Western powers. Throughout this time, international perspectives on Iran persistently diagnosed the nation and its capital city as being 'backwards' and 'undeveloped'. In Orientalism, Edward Said shows how Western learning and consciousness created the term 'Oriental', which, when describing a man, implies weak but strangely dangerous, unintelligent, backward, and with a tendency towards despotism, and, when describing a woman, suggests a person both eager to be dominated and strikingly exotic. This image of the 'Oriental' persons justified their colonisation as a result of their supposed passivity and their inability to progress. This characterization led to a superior classification for Western countries and an inferior one for 'underdeveloped' countries, whether they were directly or indirectly colonised. The national humiliation provoked by Orientalism, as it was conveyed and practiced by Western powers, has continued to provide fuel for Iranian nationalist discourse and the desire for a self-sufficient, modern, and progressive national identity. Hence, the self-image of the nation in the 20th century was formed through a complex relationship with modernity, semi-colonialism, nationalism, and Shia Islam, directly influencing not only the socio-political or cultural aspects of Iran's modern history but also the urban and architectural reconfigurations of Iranian cities as visible forms of this self-image.

The next section of the introduction will briefly introduce Iran urban change and development process of Tehran during the 20th century. Furthermore, the following section summarises the existing body of literature on the modern history of Tehran and situate this thesis within current debates among both historiographers of Tehran and scholars of 20th century urbanisation and urban development. In doing so, the section reflects on the different ways scholars have approached Tehran's urban development process and planning practices, and further reviews their methods of analysis and periodisation in studying the historical process of urban change. The introduction concludes by summarising aims and objectives, as well as the methodological approach taken in this research and provides the structure of the whole thesis, presenting a brief description of each chapter.

1.1 A Brief Profile of Tehran Urban Growth in the 20th Century

Within the central area of the Iranian plateau lies two of the most arid and inhabitable deserts, the Dasht-e-Kavir (desert of salt-marsh) and the Dasht-e-Lut (the Lut desert). The aridity within these central areas is a major reason why most settlements are located on the margins of the deserts, and on the foothills of the surrounding mountains, where water resources are available. As a result, the major urban settlements and large cities have formed on the western, northern and southern flanks of these deserts. Moreover, important historical routes such as the great Silk Road from China to the Mediterranean passed through Iran on the southern slopes of the Alborz and connected some of these populated centres and became a major reason for their development. Tehran is one such city located on an alluvial plain, on the southern slopes of Alborz mountain range (Figure.1.1 and 1.2). Today the urban area of Tehran stretches from the Alborz Mountains to the north to the desert to the south. The city lies on a vast slope at an altitude that climbs from 900 to 1700 metres above sea level (Figure. 1.2).

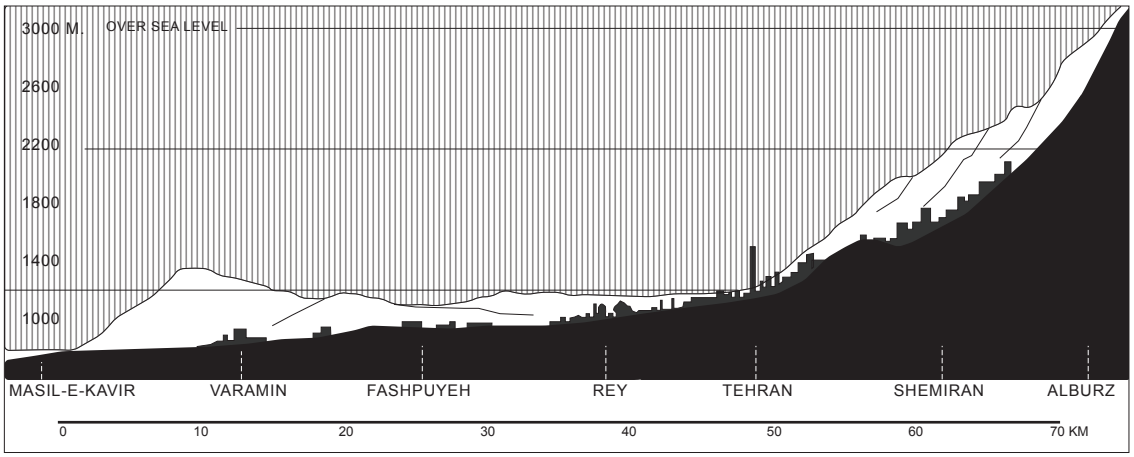
Figure 1.1 Iranian plateau and geographical location of Tehran and other major cities



Source: top image:author; bottom image: Atlas of Tehran Metropolis

Up until the 19th century, Tehran was a small walled trade town, lying outside the ancient city of Ray, and compared to major cities such as Isfahan and Tabriz had no major significance. In 1797, it was named the new capital, and within just a century the population of Tehran grew from 15,000 to 250,000. By the end of the 20th century it has become a large metropolis with nearly 12 million inhabitants. Between 1966 and 1996, and especially since

Figure 1.2 Tehran Topography



Source: author based on data from Tehran: an urban analysis (see bibliography)

1986, the development of the Tehran metropolis has been characterized by a rapid growth of its suburban areas, which in 2004 contained 30% of its 12 million inhabitants (Atlas of Tehran metropolis, 2005) (Table.1.1).

Table.1.1 Suburbanisation in the Tehran Metropolitan Region 1966-1996

Year	Tehran Province Population (1000)	Distribution (%)			Growth Rate (%)	
		Tehran Province	City of Tehran	Outside of the city boundaries	City of Tehran	Outside of the city boundaries
1966	3472	100	78.3	23.7	---	---
1976	5321	100	85.1	14.9	4.2	4.4
1986	8095	100	74.6	25.4	2.7	4.3
1996	10343	100	65.3	34.4	1.1	2.9

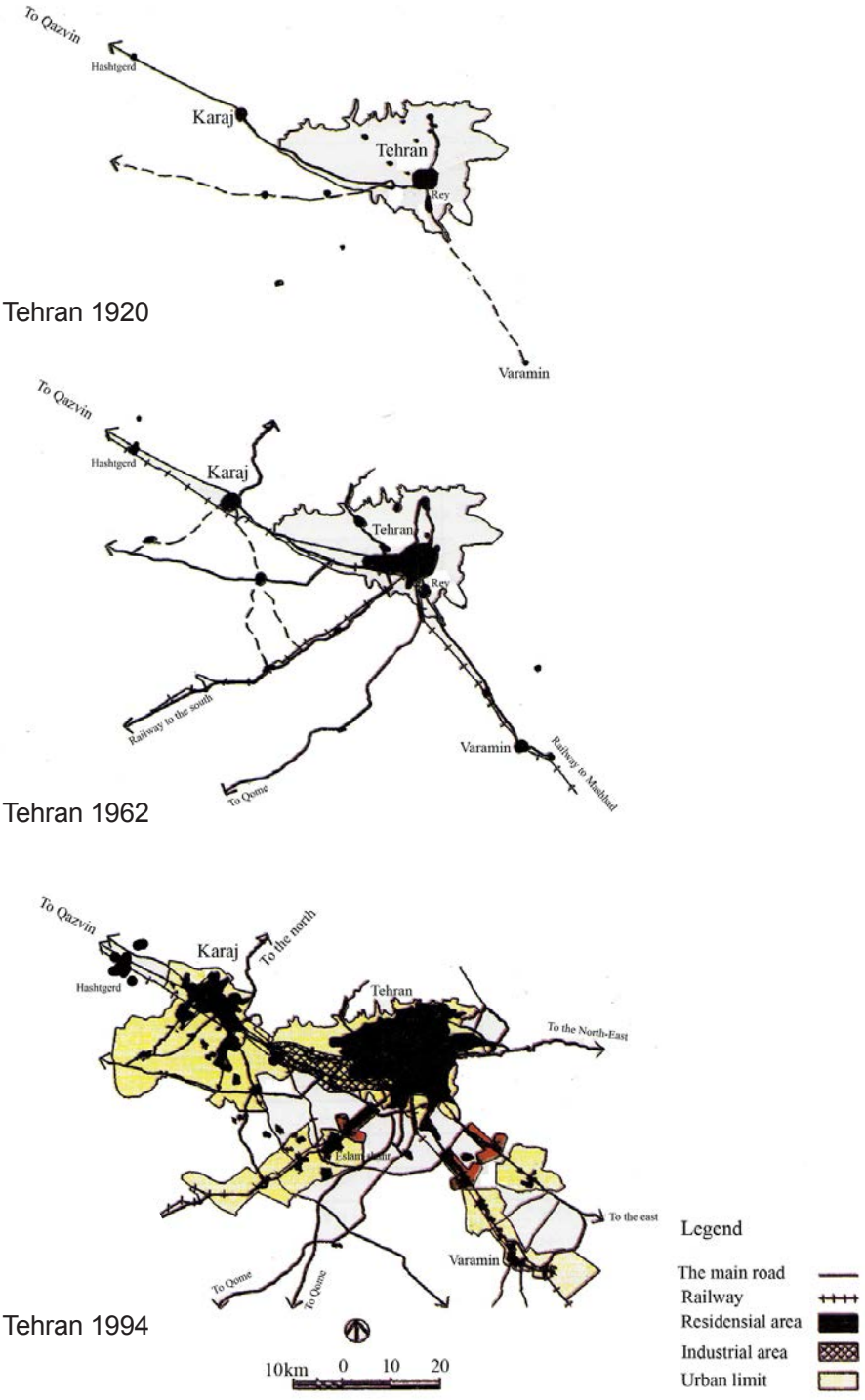
Source: Social studies of Tehran Metropolitan Plan, Report vol. 4 (84), Khatam, 1999.

Despite policies for decentralization of the country, Tehran is still one of the most densely-populated regions in Iran. The growth of suburbs is much faster than the city, especially due to rapid migration and the high increase of land prices in inner city areas (Figure. 1.3). Today territorial divisions between rural and urban areas are more blurred than before. There are villages just outside of the official municipal boundaries of Tehran with the population of several thousand inhabitants, or small towns such as Varamin and Eslamshahr, which are over-populated by several hundred thousand people. As a result, some areas outside of the official municipal boundaries may be considered as having the most populous concentrations within the province (Figure.1.4).

Stages of Tehran's growth

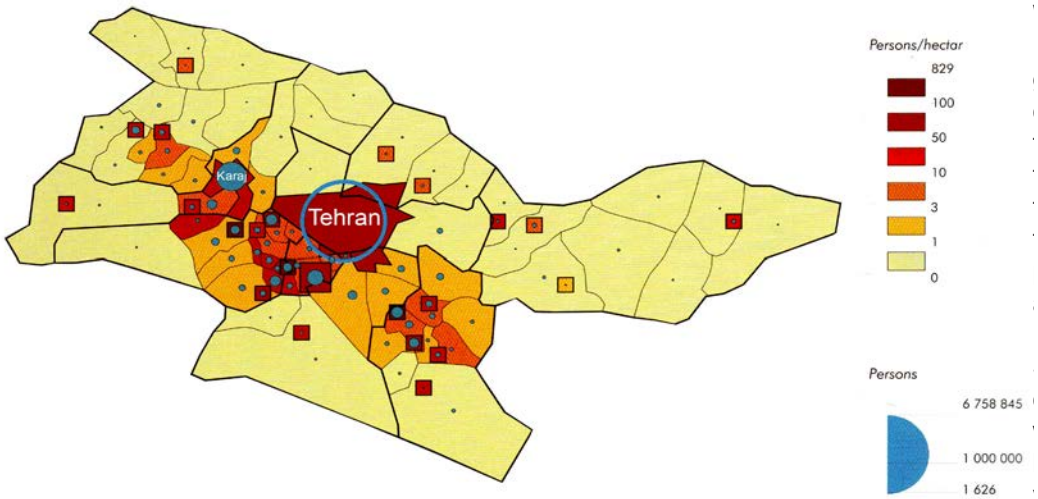
The original city of Tehran which was founded in the 16th century (the Safavid era) had an area of 4.2 km2. In 1870 decades after it became the capital of Iran, a new wall (fortification) was constructed around Tehran, increasing its area to 18 km2.

Figure.1.3 Tehran Metropolitan Region in 1920, 1962, 1994



Source: Source: Tehran Metropolitan Plan, MHUP 1998

Figure.1.4 Population Density in Tehran Province in 2004



Source: Atlas of Tehran Metropolis

In 1930, the city walls of Tehran were demolished and the city grew nearly three-fold, reaching an area of around 46 km2, and spreading northward because of its better climate. As a result of the rapid growth of the city towards the north and industrial developments in the south, in the 1960s, the Shemiran summer resort in the north and Ray (the ancient city in the south of Tehran) were merged with the city of Tehran (Figure.1.5 and 1.6). In the early 1970s, the population of Tehran doubled and reach 4.5 million inhabitants and Tehran's area increased to 250 km2. In the years following the 1979 Islamic Revolution and then during the imposed war of Iraq and Iran (1980-1988), the growth was towards the south and south west because of the high rate of immigrants from other cities and the increasing land and housing prices in the north of the city. Hence the outward growth of the city in the form of satellite towns and residential development have created a sprawling and fragmented urban fabric.

Table.1.2 Tehran size and density in 1966-2002

	1966	1976	1980	1986	1996	2002
Population (millions)	2.718	4.530	5.400	6.038	6.754	7.278
Legal City Area (km2)	180	252	520	600	700	700
City area per Person (m2)	66	56	61	70	85	96
Number of City districts	10	12	20	20	22	22
Number of housing units (1000)	354	656	960	1154	1480	1700
New housing unit/year (1000)	*	30.2	76.0	32.3	32.6	36.7
Housing ownership (%)	55	*	*	69	65	63

* No data available

Source: Source: Tehran Metropolitan Plan, MHUP 2004, Khatam 1999 Vol.4

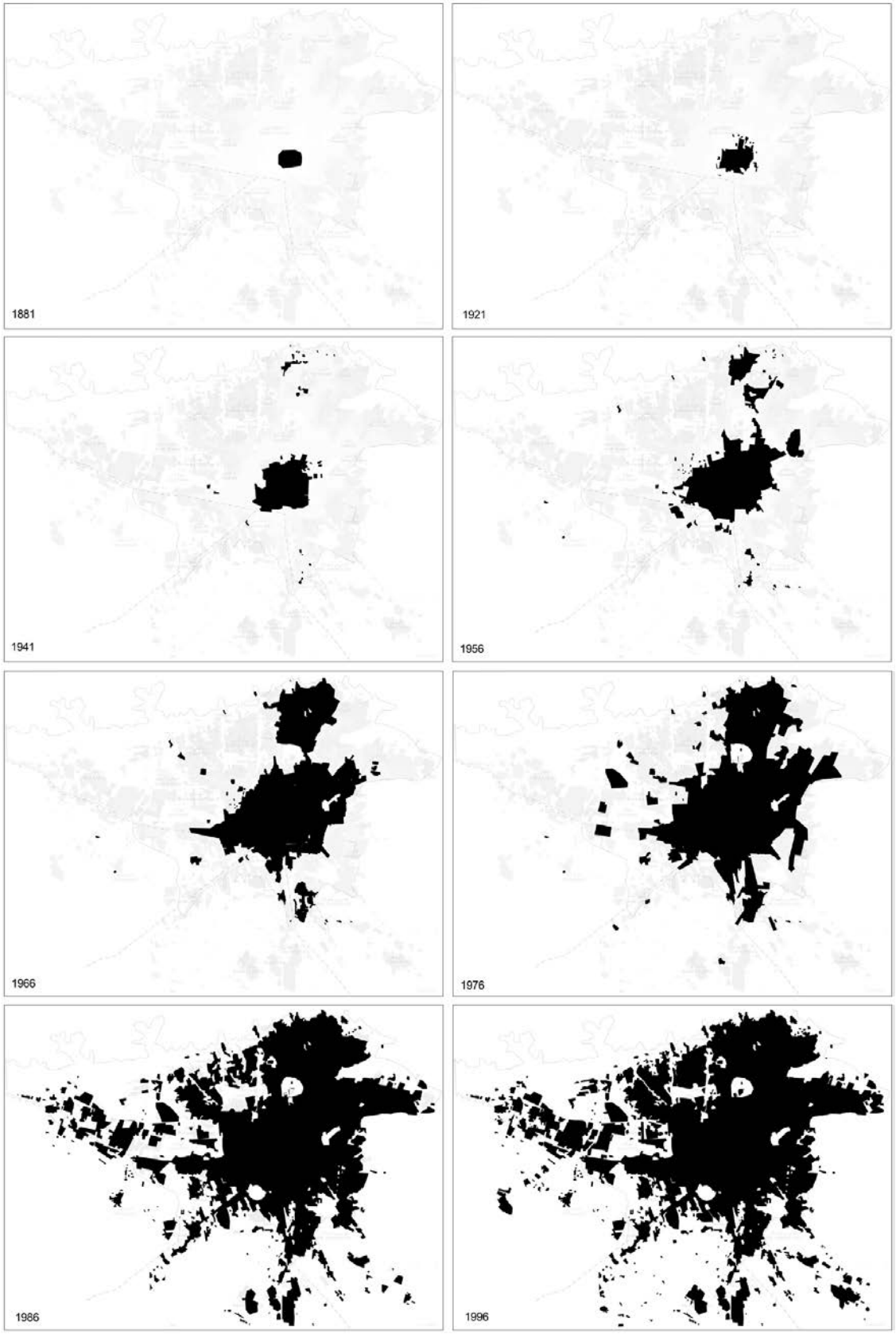
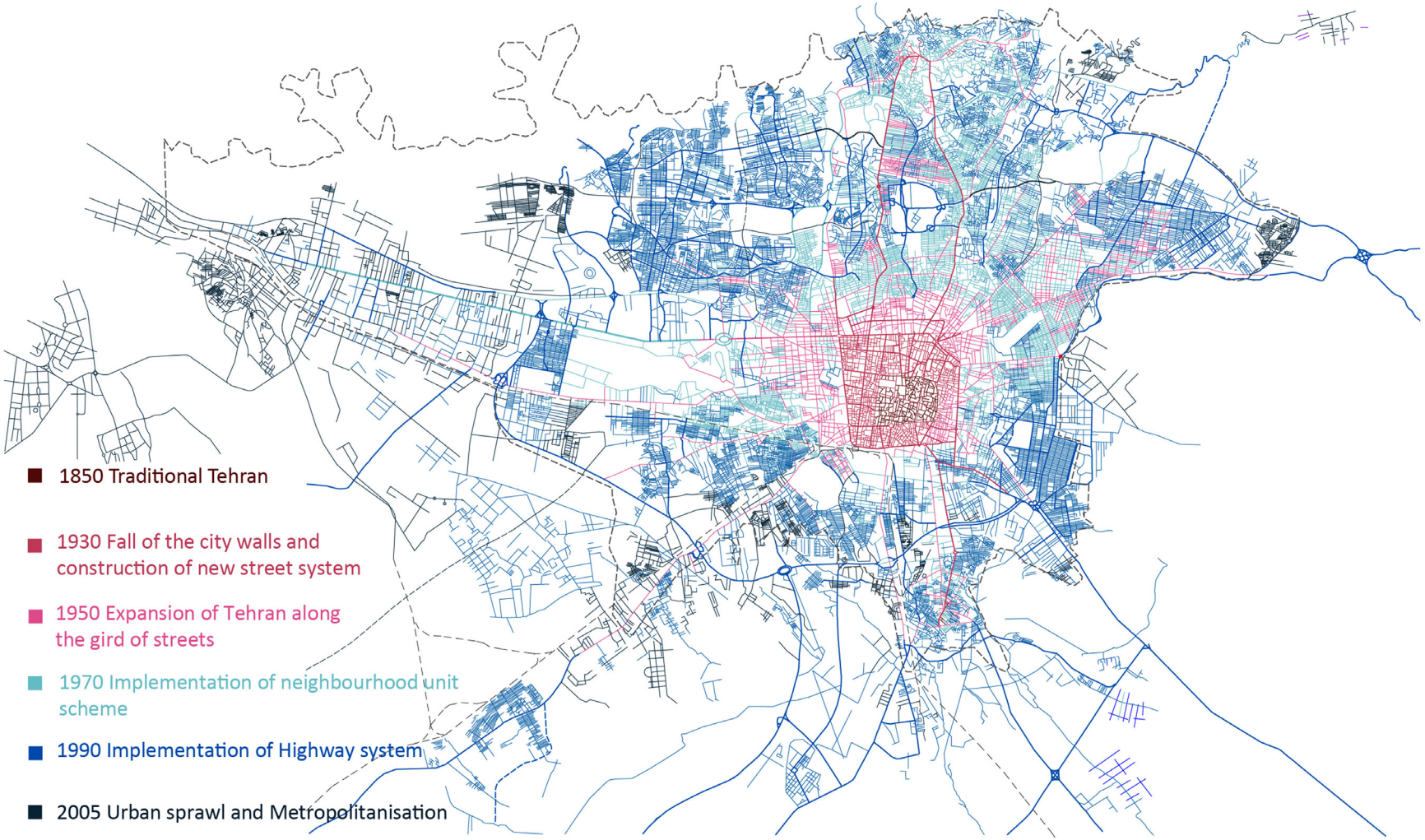


Figure.1.5 Stages of Tehran urban growth from 1800 until 1996
Source: Author, data collected from Atlas of Tehran Metropolis

Figure.1.6. Stages of Urban Expansion in Tehran



Source: Author, data collected from Atlas of Tehran Metropolis

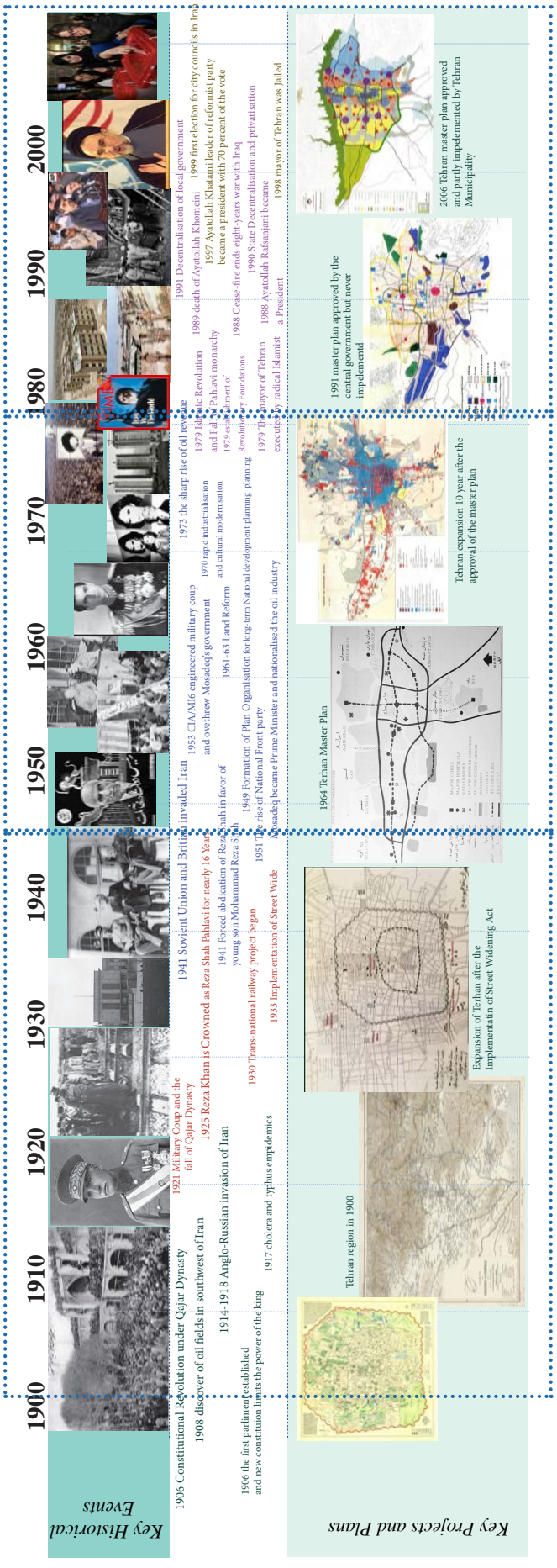


Figure.1.7. Timeline of Key Historical Events in Iran and Key Urban Plans and Project for Tehran

Source: Author

1.2 A State-centred Periodisation of Tehran

Many scholars of Iranian urban studies have addressed the history of Tehran's urban development and transformation. Since the 1960s, urban geographers, sociologists, planners, and architects have produced invaluable studies that give detailed, engaged, and rigorously researched accounts of Tehran's socio-spatial changes during the 20th century (Bahrambeygui, 1977; Hourcade, 1974, 1996; Habibi and Salimi 1997; Habibi et al., 2009; Amirahmadi and Kiafar, 1987; Madanipour, 1998, 2006, 2010; Bayat, 2010; Khatam, 2004, 2015; Vahdat Zad, 2013). These accounts have successfully shown the formation of socio-spatial and political dynamics through which present day urban patterns have emerged. In all of these studies there is one common characteristic: the way the modern history (1850–present) of Tehran's urbanisation and urban development is periodised. In these studies, Tehran's urban transformation is divided into four periods, where each is mainly defined by overall changes in the ruling political regimes. In the majority of these studies, specific phases of urban change have corresponded to autocratic rulers with their own respective visions of a modern city and society, as expressed through urban plans and large-scale development projects. Hence, the history of Tehran's urban change and development is written mainly from the perspective of the state and even more so from the perspective of specific rulers. The reason for this is mainly because of the centralised and autocratic nature of government in Iran during the 20th century and the important role that the state has played in the development of Tehran and other Iranian cities.

The common periodization which this thesis aims to re-evaluate is divided into four periods: The first period of Tehran, 1850–1925, mainly refers to the reign of the Qajar dynasty under King Naser-al din Shah and presents urban reforms such as the new city wall and the expansion of the bazaar (marketplace) initiated by the king. The second period of Tehran, 1925–1941, signifies the radical socio-spatial transformation of the city that resulted from the top-down urban modernisation (such as the construction of a new street system) by Reza Shah, the first king of the Pahlavi dynasty. The third period of Tehran, 1941–1979, is characterised by the continuity of urban policies from the previous period, such as the construction of large-scale urban centres and a massive new highway system under the second Pahlavi government (Mohamad Reza Shah), which led to the uneven and rapid urban development of Tehran and partly contributed to the political movements of 1979 and the Islamic revolution. The fourth period of Tehran, 1979–2000, is divided into two sub-periods. The first one (1979–1989) highlights Tehran's disorderly development as a result of the egalitarian and populist urban policies of the religious Islamic government of Ayatollah Khomeini, with his pro-poor and anti-urban bias. The second phase (1989–2000) shows the shift in state policy towards structural adjustment and the intensification of disorderly urban development, with

a particular focus on the inefficiencies of central and local governments in their attempts to manage rapid urban development. While this description by no means does justice to this form of periodisation, its purpose is to illustrate a common approach based on the reign of a particular 'dynasty' or 'state' that changed the city. As a result, in many of these studies the state is viewed as monolithic and as the sole representative shaping development and change.

The state-centric view is not unique to urban studies and it has been a common approach across Iranian studies. However, for more than a decade there has been an ongoing debate on the state-centred historiographic framework that has been adapted in different fields of the humanities. Many scholars have challenged the monolithic view of 'the state' in Iranian studies and questioned 'the tradition of thinking about historical change and progress as a process run by the state' (Schayegh, 2010; Atabaki, 2007; Cronin, 2003, 2007, 2009; Khatam, 2015; Keshavarzian, 2007). For example, Arang Keshavarzian's historical study of the politics of the Tehran bazaar examines the impact of state development policies and programmes on the bazaar before and after the 1979 Islamic Revolution. In this study, the role of the state is not taken for granted, and Keshavarzian demonstrates how state policies transformed the nature of the bazaar. He depicts in detail how the outcomes of certain policies were completely at odds with their initial intentions. In fact, he treats the bazaar as a nexus between the state and society and offers a more nuanced picture of how the autocratic states of both Pahlavi and the Islamic Republic functioned.

Another study that challenges the role of the state in the development process is the work of Cyrus Schayegh on the construction of the Karaj Dam during the Cold War. In this study, Schayegh argues that while the Karaj Dam was built by the state and supported financially and technologically by the US development agencies, it was not simply a state or US development project. Rather, domestically, the state built the dam to respond to the demand of Tehran's urban middle-class for electricity. Globally, without the Cold War and the resultant American aid, the state would not have been able to realise the dam project at all or, at least, it would have proceeded at a much slower pace (Schayegh, 2012). In the 1950s and 1960s, dams played a key role in many developing nations in the Third World and became a global development trend. However, Schayegh shows that, in the case of Iran, the Karaj Dam is the outcome of a series of interactions between state and society, and between domestic and global political imperatives, all of which were influenced (but not determined) by global development trends. Therefore, while these studies acknowledge the significant role of the state (political rule) in producing change, they clearly show that progress and change is the outcome of entanglements between various local and global actors and forces, rather than purely state-led and top-down.

While more and more scholars of Iranian studies are joining the debate over the state-centric historiography of modern Iran, the discussion among urban studies scholars, and especially planners and architects, is not as active as in other fields. There is a wealth of empirical studies that show in depth how Tehran has developed and urbanised during the last century, yet these studies have approached the 'state', 'development', and 'urban change' mainly from two viewpoints.The first view offers the classic framing of urban change, and approaches 20th century urban development as a process that transformed 'traditional' urban and social structures of the city into modern ones, with an emphasis on state-led industrialisation, top-down urban modernisation projects, and urban plans (Ehlers and Floor, 1993; Habibi, 1997, 2009; Hourcade, 1974, 1987; Mashadizadeh, 1995; Hessamian et al. 1985, Madanipour, 1998).

For example, S. M. Habibi, in his book De la Cité à la Ville, argues that the Iranian city was a reflection of the thoughts and ideology of a supernal world, and describes aspects of traditional Iranian cities that remain in the modern period and are reproduced in contemporary urbanism. Nevertheless, in his research on post-Second World War urbanism in Iran, he characterises Tehran under the Pahlavi dynasty as a 'mime-city' that has lost its identity as a result of top-down modernist planning. Bernard Hourcade's study of Tehran's rapid growth during the second Pahlavi government and the early years of the Islamic Republic recounts the various attempts of planners and the state to control the expansion of the city and solve problems such as social and spatial polarisation. Hourcade sees Tehran in real 'urban crisis' and calls it a metropolis impossible to control due to the lack of effective management and an unplanned (and uneven) urban development. Ali Madanipour in his seminal monograph, Tehran: The Making of a Metropolis, documents the transformation of Tehran's urban form as Iran is integrated into the world capitalist economy. He analyses a series of urban policies and plans which, from 1921 until 1998, transformed Tehran from a traditional town to a modern metropolis. However, unlike the top-down view of previous studies, Madanipour offers insightful analysis of the role of different public and private actors involved in the urban transformation. Yet the focus of his study is not on the power relations among actors and agents in shaping the urban, and hence it does not focus on the role and relations of state and non-state actors involved in urban processes and planning practices.

Without a doubt, Madanipour's comprehensive analysis of planning processes in Tehran offers broad local urban knowledge, and, more importantly, opens up new ways of thinking about Tehran's urban development. His book and his later studies on Tehran have become invaluable sources for many younger scholars who have been developing alternative viewpoints during the last two decades. These scholars argue that there is a greater need to critically understand how the nature of political rule and power relations have shaped Tehran's urbanism. In doing so, they call for situating the modern history of Tehran's urban development

in multiple local, national, and global contexts, and seek to offer more in-depth analysis of the involvement of the diverse and interconnected actors shaping urban processes. Hence, they see the historical process of urban change and development as an outcome of a series of local and global interactions and encounters among various agents and actors, rather than a distinctive product of state action (Tajbakhsh, 2005; Keshavarzian, 2007; Bayat, 2009; Ehsani, 2006; Khatam, 2015).

For example, Kaveh Ehsani's study on the transformative role of the Tehran Municipality on urbanisation after the Iran-Iraq War in 1989 analyses the city as an arena of alliance between the municipality and private capital, with the construction sector as its beating heart. Ehsani not only depicts the complex socio-political forces involved in this alliance, but also uncovers the ways in which both the central government and Tehran's urban middle class actively mediated the municipality's development strategy and urban renewal projects. Azam Khatam's seminal dissertation, Tehran Urban Reforms Between Two Revolutions, is one of a few recent works on Tehran's urban modernisation that is rich both theoretically and empirically. Khatam's work offers an important discussion on the relationship between urban modernisation and arbitrary rule in the cities of the Global South. Crucially, she also confirms the interconnectedness of the global, national, and local forces in shaping major urban reforms in Tehran in the 20th century, and as an urban sociologist mainly focuses on the state-society power relations and the role of particular social groups and movements in shaping urban change.

While these recent studies have begun to liberate Iranian urban studies from the state-centric viewpoint, their reach has been limited and their concern for the politics of urban development have not fully reached urban scholars or, more importantly, policy makers, planners, and architects who are busy working on Tehran and dealing with socio-spatial challenges on the ground. Thus, there is a need for generating new analytical and practical approaches to understanding Iran's politics of urban development and for rethinking the state's relationship to the production of urban space. For example, there is a lack of empirical research on the spatial consequences of different state-building and nation-building strategies, or there has been a limited discussion on how particular power relations among urban planners/experts and state institutions have shaped planning practices and urban change in Tehran. Therefore, this thesis contributes to the emerging body of literature on the history of Tehran's urban transformation by questioning the role and involvement of the state in the planning and developing Tehran in the 20th century and bringing to the fore the discussion on intimate association of national development plans with both global development discourse and city-scale development plans. Hence, this research attempts to examine the largely overlooked relationship between shifts in the international development discourse and Iran's nation-building strategies during the last century, and asks how

the interplay of global, national, and local conditions enabled particular development policies and planning projects for Tehran, which in turn brought significant changes for subsequent planning practices and urban processes.

In summary, the primary aims of this thesis are:

. to offer a better understanding of the link between international development discourses, national development planning and urban planning practices.
. to investigate the ways in which developmentalist and nationalist discourses operate in the nation-building process, and, in doing so, to discuss the formation of key national development policies in Iran and identify the various actors and agencies involved in making these policies,
. to analyse how these national development policies have enabled certain urban visions, plans, and projects, and, in doing so, have influenced the agencies, actors, and political imaginations which accompanied or contested these plans and projects,
. to generate and collect new empirical insights about the transitions between institutional frameworks and the state actors involved in producing key urban policies and plans,
. to develop and apply a methodological approach that enables this empirical insight and addresses the power relations between the various global and local actors and agencies involved in making and implementing urban plans and projects,
. to examine how the outcomes of these plans influenced the trajectories of urban development and urbanisation but also, in many instances, were at odds with the initial intentions of the plans.

Overall, the aim is to perform an analysis of Tehran's urbanisation during the 20th century that can account for its complexity and specificity, and present a critical view on the role of 'the state' and national development policies in shaping urban development trajectory and planning practices. A secondary aim is to discuss the role of planning in the urbanisation of Tehran, and contribute to the planning theory of cities in the Global South. Therefore, it is important to mention here that this thesis is neither a comprehensive survey of urbanisation processes of Tehran nor a critical assessment of Iranian planning system. Rather the focus here is to look at historical interplay between discourses of development and urbanisation and explore the ways in which this interplay has influenced Tehran urban spaces and planning practices.

1.3 Research Strategy and Methods

As discussed in the previous section, this study attempts to bring to the fore the multi-scalar relations between the various actors and agents involved in shaping Tehran's urban development processes and planning practices during the last century. In so doing, this research offers an analysis of three major periods of urban change in Tehran – each framed by major socio-political events in Iran and shifts in international development discourse. Thus, this section introduces a constructed timeline and the logic behind a new periodisation, as well as theoretical considerations and the specific methods used to collect and analyse data for each of these periods.

1.3.1 A New Periodisation of Tehran

The first step in re-examining the periodization of Tehran's urban modernisation and development is to reformat the previous periodisation, which generally divides the timeline based on major changes in political regime. In this dissertation, however, the 20th century is roughly divided into three periods determined by local socio-political movements which significantly influenced Iran's power relations locally and globally. Hence the beginning and the end of each period is defined by crucial socio-political changes in Iran, each of which were motivated by the ambition to develop a modern and independent Iran that resists Western hegemony. In fact, by dividing each period according to a major socio-political movement, this thesis argues that Tehran's urban development does not merely begin or end with a powerful state or a Western intervention, but rather that there are multiple forces at work in shaping the pace and scale of Tehran's urban transformation.

Each period, on the one hand, reflects the transitions in the world order over a time when cities like Tehran were categorised and labelled as 'backward', 'third world', or 'non-global' within the particular global setting, and, on the other hand, underlines the state's institutional transitions, as well as those policies and plans designed in return to contest these classifications and prove the falsity of these forms of characterisations. Therefore, each of these periods simultaneously signifies major shifts in global, national, and local power relations. Among a range of policy domains, special attention is paid to transportation, housing, master planning, municipal financing, and urban mega-development projects. Below is a brief outline of these periods.

First period (1906–1945): This period begins with the 1906 revolutionary movement that called for constitutional government, social justice, and resistance to the imperial powers which continued to violate Iran's territorial independence and labelled the nation as 'backward'. The 1906 Constitutional Revolution took place with great support from the nationalist elite, clergy (mostly Islamic reformists), and merchants (bazaaris or the traditional middle class) and led to the formation of the first parliament, which marked a radical shift in the country's legal and institutional framework and the establishment of municipalities. This period is characterised by the impact of institutional transitions after the Constitutional Revolution, as well as two World Wars, on Iran's spatial development policies and, consequently, on urban plans for Tehran. This period ends with the abdication of Reza Shah – forced by the British – and the Anglo-Soviet invasion of Iran during the Second World War. Together, these two events led to national crisis, which encouraged the rise of a nationalist movement and a series of efforts among various socio-political groups to renew and rebuild Iran's national autonomy.

Second period (1945–1979): This period begins in 1945 when Allied troops began to withdraw from Iranian territory, and the anti-imperialist milieu of the post-war period inflamed the nationalist movement among the Iranian political elite, clerics, merchants, and the developing bureaucratic middle class. This led to the emergence of various political parties (including the National Front party), which in turn led to the nationalisation of the oil industry and major changes in the national political economy and administrative structures. This period follows the interplay of new institutions such as the 'Plan Organisation' with bilateral and multilateral development agencies, such as the Ford Foundation and the World Bank, in shaping new spatial development policies. The period is further characterised by the links between long-term economic development plans, Tehran's first comprehensive plan, and the outcome of the urban plan.

Third period (1979–2000): This period begins with the 1979 mass uprising and Islamic Revolution that dramatically altered the political landscape of Iran and the Middle East. In the divided atmosphere of the Cold War, and during the rise of neoliberal ideology, the Islamic Republic, established in 1979, aspired to the utopian motto of its revolutionary leader Ayatollah Khomeini 'neither capitalist nor socialist, but Islamic', which rejected the two rival models in favour of a 'third way'. During this period Tehran's urban development became the spatial projection of the revolutionary utopian motto, and new revolutionary institutions emerged to materialise the ambitious revolutionary aspirations. This period examines the role of state and non-state actors in shaping urban planning practices and development process in two decades after the revolution.

Nevertheless, the study of how changes in Iran's political economy since the turn of the 21st century have influenced the role and agency of the state and non-state actors involved in the urban development of Tehran fall outside the scope of this study. As stated, the focus in this dissertation is on the urbanisation of Tehran during the 20th century. Understanding Tehran's urban transformation in the 21st century would require further and extensive research that exceeds the capacity of this dissertation. Yet, the findings of this dissertation provoke a series of questions for future research on Tehran in the 21st century.

1.3.2 Key Concepts

Before discussing the main conceptual and theoretical issues considered in this research, it is important to highlight here that in this thesis the term Global South is used with an awareness that many scholars are critical about the term and remain sceptical about its added value compare to other terminologies such as 'Third World'. Yet in this thesis the term Global South is used in the absence of any other short terminology for cities outside of Europe and North America which doesn't suggest econometric understanding of cities. In other words, the term Global South is useful in this research, because it is political and therefore it is more than a geographical entity and collection of post-colonial or previously underdeveloped countries. In this research the term Global South 'references an entire history of colonialism, neo-imperialism, and differential economic social change through which large inequalities in living standards, life expectancy and access to resources are maintained.' (Dados and Connell, 2012:13).

This research describes, assembles, and reveals the complexities of Tehran's urbanisation by questioning the relationship between development and urbanisation, as well as by addressing the interaction between the local and global actors and agencies involved in shaping urbanisation and development trajectories of the capital city. The research builds on the premise that:

> the complex processes involved in restructuring cities and urban regions require a new understanding of contemporary urbanisation. What is needed is a dynamic approach in urban studies that not only detects and describes the emergence of new urban forms but also focuses on the mechanisms of urbanisation processes and explains how general tendencies take shape in specific places (Schmid, 2012: 57).

This provides a point of departure for historically tracing the connections between shifts in international development discourses (such as state-led industrialisation, long-term economic development planning, and privatisation) and urbanisation processes in the Global South. Throughout the last century, ideas about how development can be put into practice have long

been controversial and contested (Desai and Potter, 2002). Nevertheless, the link between development and urbanisation is important: development involves a range of actors from state and non-state organisations, international agencies, and specialist groups, all of whom have a vested interest in how change and development should proceed (Desai and Potter, 2002). Hence, this research interrogates the relationship between urbanisation and development discourses by questioning and problematising both urbanisation and development, asking; What is the definition of these terms? And what is the nature and direction of the relationship between them? These questions allow us to reflect on alternative analytical approaches for understanding various urbanisation processes, different meanings and forms of development, and how these processes, meanings, and forms have changed over time.

In so doing, this research is inspired by emerging scholarship in the last decade that critically question the link between urbanisation and development, and argue that despite the common understanding among scholars and international development agencies such as World Bank and UN-Habitat the correlation between these two processes is more complex and not necessarily positive. This new wave of scholarship invites urban scholars and practitioner to go beyond economic and socio-demographic analysis of the relationship between development and urbanisation, and instead search for dynamic multi-scalar analyses of interconnections between larger political and economic processes and the local power relations that determine the urban planning and development processes, and thus the urbanisation trajectory of southern cities (Roy and Ong, 2011; Fawaz, 2009; Robinson, 2006; Yacobi and Shechter, 2005; Davis, 2005, 2016; Schmid, et. al, 2017).

Through discussing various perspectives on urbanisation in the Global South and the changing definition, politics, and practices of development in the last century, this study aims to offer a detailed understanding of Tehran's urbanisation process during the 20th century by investigating the intersection between dominant international development discourses and national development policies and urban planning practices.

With regard to the above, the theoretical framework is organised in two parts, which will be discussed extensively in chapter two.

In order to show how this research grasped the magnitude of rapid urbanisation in 'southern cities', the first part provides a very brief history of urbanisation in the Global South within the broader history of colonialism and capitalism. The history of urbanisation in non-Western cities is revisited through the lens of political economy with the aim of presenting its uneven, diverse, and complex dynamics – and discusses further how the rapid transition from agrarian to urban societies in the Global South has occurred under very different global con-

ditions compared to the Industrial Revolution. This section ends with a brief discussion of different perspectives on the urbanisation processes across the Global South and the themes that have received attention from urban scholars and practitioners.

The second part reviews key shifts in international development discourse during the last century and traces the interplay between shifts in global political economy, changes in definitions and practices of development, and the emergence of dominant urban development and planning models for developing cities. This section is divided into three sub-sections, each depicting one of these shifts in international development discourse and its implications for the formulation of national development polices and urban planning practices in cities across the Global South.

The theoretical debate closes by discussing the conceptual framework and analytical lenses that derived from theorising and problematising the relationship between urbanisation and development. This section wraps up the theoretical discussion by depicting how rethinking the relationship between urbanisation and development, as well as critically tracing the link between international development discourses and dominant urban planning practice have provided useful lenses of analysis for studying Tehran's urbanisation during the 20th century.

1.3.3 Methods: Interviews, Archives, and Literature Review

Alongside acquiring theoretical knowledge, the study leans on desk-based research: reviewing existing empirical research and morphological studies on the history of Tehran's urban transformation; reviewing literature on various aspects of the historical transition in institutional frameworks and of the state actors involved in key urban policies and plans; utilising official documents and reports on key urban plans and development projects; and studying newspaper archives, former state officials memoirs, government archives, and the national census. Moreover, series of interviews and archival studies were conducted during several fieldtrips to Tehran between 2011 and 2015, which provided invaluable information on state and non-state practices in the reconstruction and development of the city throughout the 20th century.

Literature review

There are several invaluable empirical studies on Tehran's urban transformation, namely: Seger (1978), Bahrambeygui (1977), Hourcade (1974, 1987), Hourcade and Adle (1996), Marefat (1988), Alemi (1985), Habibi (1997, 2005), Madanipour (1998, 2006, 2010), Amirahmadi and Kiafar (1987, 1993), Ehsani (1999), and Khatam (2015). These studies provided important insights into the historical growth of the city, its physical transformations and the evolution of the planning system under the different dynasties and political regimes

of the last century.

For research into the modern history of Iran and the political economy of development, this study relies on various sources. On the history of modern Iran, the study refers specifically to Ervand Abrahamin's Iran Between Two Revolutions (1982) and A History of Modern Iran (2008) as well as Homa Katouzian's The Persians: Ancient, Mediaeval, and Modern Iran (2009). For other specific areas, such as discussions on modernity, Islamism, nationalism, class structure, and the nature of arbitrary rule, this study refers to the work of Banani (1961), Ashraf (1981), Katouzian (1981), Chehabi (1990), Ansari (2003), Milani (2004, 2008), Atabaki (2007), Mirsepassi (2000, 2010), Cronin (2003, 2007), and Matin (2013).

Archival Study

While the desk-based research and literature review have provided important secondary data for this research, conducting archival study and semi-structured interviews generated the main primary data of this dissertation. Especially the access to a number of state and non-state archives in Tehran as well as international libraries, such as the British Library in London and the Middle East Special Collections at Leiden University in the Netherlands, provided important insight into the development processes and physical transformation of the city through maps, photographs, and cartography. These archives also supported the research with key documents such as number of reports and publications by the World Bank and planning institutions namely Plan Organisation in Iran which supplemented the research with more in-depth knowledge of emergence of particular planning institutions and the role of certain international actors and agencies in forming planning profession and the making of urban policies and plans.

The archival study has organised around the main objectives of the thesis and number of key themes and questions. The following key points are prepared primarily to guide both the archival study and interviews. Nevertheless, these key points and questions were very helpful to order and synthesize the collected archival materials and information gathered form interviews.

- Political structure and national development planning
  . What was the structure of the state in each period of study?
  . Who were the key actors involve in national development processes? And What were their ambitions and objectives?
  . Who were the key international partners/experts involving in preparing development plans and projects?
  . What type of projects proposed in each national development plan? And where, when, and for whom the project was built?

- Urban planning system and planning institution
  . What kind of planning system formed in Iran?
  . How were the planning profession and institution established and how did they evolve? Who were the key figurers? What were their goals and ambitions?
  . How did changes in the political structure of the state influence the planning system and its institutions?
  . How does the political and economic interest of central and local government affect the preparation and implementation of plans and urban projects?

- Development pattern of Tehran
  . How the state and non-state power relation affect the pattern of growth?
  . How the change in the role of the municipality in each period have influenced the growth of the city?
  . What type of urban projects shaped the trajectory of urban growth?
  . Why certain development patterns have persisted despite various planning attempts?

All the data related to each specific theme assembled to supported the empirical research in chapter 3,4, and 5. Nevertheless, archival study in Iran has its particular limitation. As anyone who has conducted research on Iran has encountered, examining any aspect of its history can be a daunting prospect. Due to two revolutions and a series of political transitions, along with significant institutional reorganisations, a considerable portion of the country's archives have been lost or destroyed or have become inaccessible. Despite many recent positive changes and new forms of digitalisation, many items are still unidentified in storage spaces or remain inaccessible. An impressive portion is in private hands; both families of former state officials and foundations related to influential figures maintain documents, and access to this material depends on personal contacts. For example, having worked at Iran Cultural Heritage Organisation helped me considerably during conducting archival study, as my former colleagues especially Dr. Mokhtari director of Historical Buildings and Cultural Heritage in Tehran, were crucial in directing me to right sources and putting me in touch with potential interviewees.

The complicated process of accessing archives in Iran resulted in looking for other sources, such as oral history collections and interviews. This study benefited extensively from the Iranian Oral History Collection at Harvard University and Oral History collection of Foundation of Iranian Studies. All of the archives and collections that I visited are listed in the appendix.

Interviews

Between June 2012 and November 2015, I conducted series of semi-structured interviews and unstructured interviews with a broad variety of experts and citizens, in addition to many informative but casual conversations which are not included as interviews. A full list of interviews can be found in the appendix. These interviews provided critical insights into local approaches to urban planning and development policies across the 20th century, as well as an understanding of the processes through which urban plans and policies were implemented, the problems faced, and the solutions that were considered and discarded. It is important to mention that not all interviews have directly supported this research, as in a number of cases interviewees were reluctant to answer questions due to their political views and professional position. For the list of interviewees and the information they provided for this research the reader is referred to the Appendix.

Interviews with experts and professionals:

Between June 2012 and November 2015, I conducted 17 interviews with experts in Tehran and four other interviews at two conferences in Chicago (American Association of Geographers 2014) and Dublin (Aesop Conference 2013). The experts included members of the Iranian Society of Consulting Architects and Planners, a number of officials at the Tehran Municipality and the Ministry of Housing, and a variety of academics, activists, and journalists. These interviewees were chosen for their knowledge and experience on topics related to Tehran. The interviews were semi-structured, and most interviews were guided by some opening questions, but specific issues or other questions often emerged during the interviews. If possible and permission was granted, audio recordings were made. The interviews were designed to extract information about different aspects of Tehran, often shaped by the professional position, specific discipline, or expertise of the interviewee: from land use and property conditions, to planning and the implementation processes of mega-urban development projects, to evaluations of the planning system, to the political economy of governing Tehran. At first, a list of government officials, planners, and architects of key urban projects was prepared, as well as academics with knowledge of these topics. However, establishing key contacts at the government level was challenging. In many instances planning consulting offices, architects, and academics were necessary to facilitate contact with state officials.

Unstructured interviews:

Additional unstructured interviews were conducted in Tehran. These were exploratory interviews which didn't have any fix format and happened when there was the opportunity to establish a new network and a moment for an interview. Unstructured interviews were conducted with various groups of Tehran residents, such as journalists, activists, artists, and developers. For instance, interviews were conducted at exhibition openings, when I was invited to dinner at the house of a friend whose father is one of the key developers in Tehran, in

traffic with a talkative taxi driver. Thus, these interviews were mostly in casual and spontaneous setting, and type of place and interaction usually shaped the content of the interview; for example, artists and journalists who were concerned about the city and the way it is planned focused on describing challenges they faced in generating debate between communities and state officials. Despite the often flexible format of these interviewees, the information collected during these interviews proved to be of great value.

1.4. Dissertation Outline

This dissertation contains six chapters: a brief introductory chapter (Chapter 1); a theoretical chapter (Chapter 2); three empirical chapters (Chapters 3-5); and a conclusion (Chapter 6). Following this introductory chapter, chapter two lays out the theoretical foundations and themes that are central for this dissertation. It sets out the principal concepts and places them within the context of current debates in the literature. The following three chapters are in chronological order and explore the interplay of geopolitics, state spatial development policies, and Tehran's urban planning practices in each of the three periods identified in this dissertation's revised periodisation. Each chapter reviews key national development policies, urban plans and projects for Tehran, their political and economic purposes, and the experts and institutions involved in making them. In other words, each unpacks the differing agendas for the construction of nation-statehood and traces the conflicts and alliances between state and non-state actors and agencies in the processes of negotiating and implementing national spatial development policies and urban plans for Tehran.

Chapter 3, 'A Modern Capital for a Modern Nation (1906-1945)'[1] , describes the national and geopolitical aspirations behind the 1906 Constitutional Revolution and shows the impact of the revolution and the First World War on the establishment of the Pahlavi dynasty as well as on the legal and institutional transitions of the country. This chapter analyses the political and economic aspirations behind a number of key state spatial development policies, namely the transnational transportation system, the 1929 Land Law, and the 1933 Street Widening Act. It further explains their link to the urban development plans for Tehran by investigating the formation of the Technical Bureau of the Ministry of the Interior and the Tehran Municipality, and traces the power dynamic between the two. In doing so, the role of the political elite, architects, engineers, landowners, and merchants in negotiating, implementing, and contesting Tehran's urban renewal plans in 1931 and 1936 will be discussed. Moreover, the involvement and collaboration of local and Western urban planners and architects in urban development plans for Tehran will be analysed. Ultimately, the chapter discusses how planning during this period was primarily used as a tool for nation-state building, and consequently urban renewal plans

1. Part of this chapter is published by the author in 'Tehran the Scene of Modernity in the Pahlavi Dynasty: Modernization and Urbanization Process of Tehran 1925-1979'. in F. Arefian and Moeini (eds) (2016), Urban Change in Iran, Urban book series, Springer: 103-112.

produced a particular urbanism that benefited the landowners but was resisted by merchants and the urban poor.

Chapter 4, 'The 1968 Tehran Master Plan and the Politics of Planning Development in Iran (1945-1979)',[2] traces the rise of democratic and nationalist movements from the mid-1940s. The anti-colonial milieu of the post-war period incited a surge of nationalism among the Iranian political elite, landlords, tribal chiefs, Shia clerics, merchants, and an emerging bureaucratic middle class, which led to the nationalisation of the oil industry and radical shifts in Iran's political economy and its relationship with the West. This chapter demonstrates the critical role of the Iranian technocratic elite and emerging urban middle class in the expanding state bureaucracy, the establishment planning institutions (namely the 'Plan Organisation'), and in advocating for a vision of progress and urban modernity. The focus here is to trace the exchange between the 'Plan Organisation' and bilateral and multilateral development agencies such as the Ford Foundation and the World Bank. The chapter offers in-depth analysis of the Plan Organisation and the ways in which Iranian expert culture and urban planning practice was shaped through the preparation of five-year national development plans. This chapter discusses how comprehensive urban planning emerged as the preferred model for planning and development of Iranian cities. Ultimately, the chapter offers insight into the design and implementation of the Tehran 1968 master plan and its influence on subsequent urban development.

2. This chapter is published in the Journal 'Planning Perspective' in May 2018. https://doi.org/10.1080/02665433.2018.1468805Press, Honolulu, HI, pp. 113–139

Chapter 5, 'The Politics of Building in Post-Revolution Tehran (1979-2000)'[3] , begins by describing how the mass uprising in Iran and the 1979 Islamic Revolution dramatically altered the political landscape of the Middle East and toppled assumptions about modernity, religion, and economic and political development in the region. This chapter shows how the shifts in Iran's political system after the 1979 Islamic Revolution and wider global processes, such as neoliberalisation and globalisation, had significant implications for Iranian spatial development policies and urban development in Tehran. Specific attention is given to the political condition as the establishment of the Islamic Republic had substantially transformed the constitution and administrative structure of the country and thus the planning and decision making processes.

3. The shortened version of this chapter is accepted for publication in Yacobi, H. and Nasasra, M. (eds.) (2019) Routledge Handbook on Middle East Cities. The title of the book chapter is the same as the title of Chapter 5.

The chapter discusses the ways in which the Islamic Republic has sought to 'catch up' with developed nations and establish an independent and economically self-sufficient development model based on the principles of Islam. However, despite the utopian motto of Ayatollah Khomeini – 'neither capitalist nor socialist, but Islamic' – this chapter argues that the state's development policies after the Islamic Revolution were neither Islamist nor capitalist.

Instead the Islamic Republic adopted a hybrid commitment to Islamism, nativism, and developmentalism. In fact, since the 1979 Revolution, Iranian cities, especially Tehran, remain a spatial projection of this hybrid commitment.

In order to understand how this hybrid, ideological commitment manifested itself in urban policy, this chapter examines the transformative role of the Tehran Municipality and a number of newly established revolutionary (charitable) organisations, such as the Housing Foundation (Bonyad-e-Maskan), and the Foundation of the Oppressed (Bonyad-e- Mostazafan). This analysis is divided into two sections. The first section (1979–1989), focuses on the ways in which charitable revolutionary foundations formed as a result of redistributive and egalitarian state policy. Specifically, this section depicts how the Housing Foundation and the Urban Land Organisation enacted and enabled new property and housing policies independent from the Tehran Municipality and parallel to the policies of other state institutions. The second section (1989¬–2000), examines shifts in the state apparatus after the Iran-Iraq War and the formation of a new 'reconstruction administration' under President Ali Akbar Rafsanjani, who brought institutional reform and aimed to build an Islamic developmental state inspired by Asian development models. This chapter illustrates the influence of new liberal/Islamic state policies on the Tehran Municipality and on the Housing Foundation and the Foundation of the Oppressed. The focus here is on the enactment of a construction tax – which politically and economically empowered the Tehran Municipality – as well as on the ways in which the revolutionary organisations benefited from privatisation and expanded into different fields and scales, such as commercial and infrastructural mega-projects. Ultimately this chapter concludes that urban development in Tehran after the Islamic Revolution is an outcome of balancing a position that is neither absent from the wider processes of globalisation and neoliberalisation, nor passive towards them.

The final chapter (Chapter 6) presents the conclusions of the research. This chapter reflects on the theoretical framework that is applied in this dissertation and shows how adapting the relationship between development and urbanisation discourses as an analytical framework have helped to better analyse the role of various actors in shaping the trajectories of Tehran's urban development. Moreover, this final section offers a discussion on how the findings of this research reveal critical aspects of interplay between state and non-state actors in different scales, and above all it shed lights on the role of the state and planning in urbanisation and development of Tehran.

CHAPTER 2.

Urbanisation and Development in the Global South: An analytical framework for Tehran

2.1. Introduction

Urban studies scholars and practitioners have long analysed and theorised the relationship between national development (understood politically and/or economically) and the urbanisation of cities in the Global South. However, as scholars like Diane Davis (2016) and Ivan Turok (2017) point out, there has been minimal consensus on what this relationship means, how to define the terms, what the nature and direction of this relationship is, and what the consequences of linking these processes are. The common understanding among many scholars and international development agencies, such as the World Bank and UN-Habitat, has been that urbanisation and economic development are closely interconnected and urbanisation is a driver of economic progress – thus, for the developing world, cities are the main engines of economic prosperity (McKinsey, 2012; Glaeser and Sims, 2015: 1, 7).

In 2016, the Habitat III conference was titled 'The transformative power of urbanisation'. It declared the economic significance of urbanisation and encouraged many governments of developing countries to take their cities more seriously. Notwithstanding, a new wave of scholarship on southern cities in the past decade has shown that the correlation between these two processes is more complex and not necessarily as positive as previously presumed (Satterthwaite, 2007; Davis, 2016; Turok, 2017, 2014). Hence, scholars of southern urbanism have questioned this common assumption and have argued that urban studies needs to go beyond economic and socio-demographic analyses of the relationship between development and urbanisation and search for more holistic understandings (Robinson, 2002, 2006; Davis, 2016; Parnell and Robinson, 2018).

In the introduction of the Routledge Handbook on Cities of the Global South (2014), the editors assert that the fixation with the socio-economic development model of cities—that was shaped by the Industrial Revolution and flourished through global economic integration—tends to overlook the particular political and economic dynamics of fast-growing cities 'where traditional authority, religious identity, or informality are as central to legitimate urban narratives as the vacillations in modern urban capitalist public policy' (Parnell and

Oldfield, 2014: 2). Moreover, in the work of scholars who critically interrogate the relationship between urbanisation and development in African or Asian countries through the lens of national power relations and political context (for instance Parnell and Robinson, 2006; Roy and Ong, 2011), we can see how 'international development discourses and national policy imperatives' have transformed urban policy, planning, and urbanisation in these countries (Parnell and Robinson, 2006: 337). Ultimately, the main argument of these scholars is that a holistic understanding of the relationship between development and urbanisation requires increasingly dynamic multi-scalar analyses of the interconnections between larger political and economic processes and the local power relations that determine the urban planning and development processes, and thus the urbanisation trajectory of southern cities (Roy and Ong, 2011; Fawaz, 2009; Robinson, 2006; Yacobi and Shechter, 2005; Davis, 2005, 2016; Schmid, et. al, 2017).

Inspired by these ongoing discussions on cities of Global South, the overall goal of this research is to offer a detailed understanding of Tehran's urbanisation process during the 20th century by investigating the intersection between dominant international development discourses (such as state-led industrialisation or long-term economic development planning and privatisation) and national development policies and urban planning practices. In order to address this objective, this chapter presents a series of theoretical discussions on development and urbanisation discourse, and highlights the shifting schools of thought, agencies, and actors that have been associated with these discourses during the 20th century.

The first section begins with a short history of urbanisation in the developing world and continues with a concise discussion of different perspectives on the urbanisation of the Global South. The second section reviews key shifts in international development discourse during the last century, and traces the interplay between shifts in global political economy, changes in definitions and practices of development, and the emergence of dominant urban development models for developing cities. In other words, the section depicts how shifts in development discourse have been accompanied by the emergence of particular institutions and actors who have had a significant influence on national development policies and urban planning practices across the Global South. The chapter concludes by providing a series of conceptual lenses which are derived from the theoretical discussion on the common assumption and understanding of development and urbanisation. These analytical lenses frame the empirical analysis of this dissertation investigating the urbanisation process of Tehran during the 20th century.

2.2 Perspectives on Urbanisation of Global South

Since the turn of the 21st century, every annual report from the United Nations and the World Bank has stated that the majority of the world's population is urban, and that the rapid growth of cities in Latin America, Africa, and Asia is posing serious economic, social, and environmental challenges unprecedented in the history of cities. Among others, the 2007 State of World Population[4] outlines these challenges and argues that we are experiencing the second wave of urbanisation – after the first wave of urbanisation that took place between 1750 and 1950 in Europe and North America. The report depicts the scale and significance of the second wave of urbanisation across the world:

> The first urbanization wave took place in North America and Europe over two centuries, from 1750 to 1950: an increase from 10 to 52 percent urban and from 15 to 423 million urbanites. In the second wave of urbanization, in the less-developed regions, the number of urbanites will go from 309 million in 1950 to 3.9 billion in 2030. In those 80 years, these countries will change from 18 percent to some 56 percent urban… developing countries will have 80 percent of the world's urban population in 2030. By then, Africa and Asia will include almost seven out of every ten urban inhabitants in the world (2007: 7, 8).

The crucial points here are the speed with which one billion people are added to the total global urban population and the ways in which this unprecedented pace and scale of urbanisation has challenged urban scholars, practitioners, and decision makers to the point that they often describe the urban condition of southern cities as unmanageable, chaotic, or dysfunctional. As a result, the cities of the south are mostly characterised by ineffective urban management, increasing unemployment rates compared to their population size, social segregation, political contestation, poverty, and a lack of urban-rural connections (Davis, 2004; Timberlake, 1987). These are the typical problems of southern urbanisation. This section offers a brief history of southern urbanisation and situates shifts in the urbanisation processes of the developing world within the broader history of colonialism and capitalism. The primary objective is not to be comprehensive but to set the stage for reflecting on emerging themes and viewpoints, to bring to the fore debates that support the main objectives of this research, and to understand and locate Tehran's urbanisation within larger global processes.

4. It is important to consider the work of David Satterthwaite, 'The Transition to a Predominantly Urban World' in 2007 that draws our attention to urban projections which go too far into the future, e.g. 2050. These projections must be treated with great caution because the underlying data set for many developing countries remain extremely problematic. This chapter seeks to take this message seriously.

2.2.1. Southern Urbanisation: A Brief History

By the late 15th century, Europe began to shift from the periphery of Asian prosperity and trade toward the core of the global economy (Abu-Lughod, 1991). The continent entered its Industrial Revolution, but still, until the 18th century, its cities remained relatively small (Sheppard, 2014: 143). Yet as industrialisation gathered pace and Europe expanded its colonial territory, cities such as Amsterdam, Paris, and London began to grow rapidly and compete with one another, reflecting their country's respective roles in the colonial project. From the beginning of the 19th century and until the early 20th century, while industrial cities in Europe continued to grow, new colonial cities were built next to already existing cities in Asia, Africa, and South America – cities that for thousands of years served as the heart of their socio-political community and economic networks (Abu-Lughod, 1991). These new colonial cities were built to extract resources and impose colonial power regardless of local urban patterns, and acted as the centre for 'modern' infrastructure and functions. Still, Europe's exploitative territorial interventions went beyond the boundaries of colonial cities and had profound implications for the existing national and regional socio-economic relations and trade networks.

By the beginning of the First World War, colonial and developing cities had become a platform for colonial powers to control international markets (Abu-Lughod and Hay, 1977). A lot of this was achieved through infrastructural development and urban engineering –sanitation, water, road, railway, radio, and telegraph networks were constructed as key elements of progress, emancipation, and the broader project of 'modernity' (Marvin and Graham, 2001). Yet the provision of infrastructure in colonial and developing cities had two major objectives that had significant implications for urbanisation: firstly, the infrastructures had to be designed in a way that could 'rationalise' the economies of these cities and create a structure that was heavily dependent on the export of primary products to the colonial centre (Marvin and Graham, 2001). For example, in this period in the Middle East subsistence farming was replaced by the production of cash crops, such as cotton and tobacco, which considerably changed the economic condition of the region and affected rural-urban relations (Ersoy, 2016). Secondly, new infrastructures produced a well-serviced urban core for the colonial and local elites to supervise production and exert political and administrative control (ibid). Consequently, the development of new infrastructural networks in developing countries was mainly geared to colonial geopolitical and economic interests, and led to regional inequalities, rural-urban discontinuity, and the over concentration of political and economic activities in a few urban cores. This condition complicated the transition of many developing nations from an agrarian society to a modern industrial one.

Post-colonial urbanisation

In the three decades following the Second World War an increasing number of colonial and developing nations gained political and territorial independence from the European powers. However, their urban structures and regional networks of trade continued to be dependent on the unbalanced urban and infrastructural systems they inherited (Roberts, 1977; Slater, 1975; Chakravorty, 2000). Yet the newly-established nationalist governments in most parts of the developing world sought to build national unity and territorial independence by expanding existing infrastructural networks to 'catch up' with the developed nations. This infrastructural development was perceived by national governments as the 'material representation of modernisation and the assertion of an embryonic national identity in the form of airports, four-lane highways, power stations that could sweep away the divisions of colonialism, and barriers of traditionalism' (Graham and Marvin, 2001: 84; Bhabha, 1994). In fact, infrastructural development became an integral part of national development. Nonetheless, the new infrastructure paralleled the existing networks that were built to extract resources from the hinterland to a few major cities. With a lack of infrastructure to link rural areas, peripheral economies and agrarian societies were marginalised and could not easily develop. Thus, the concentration of resources and middle- and high-income populations in a few urban centres led to the formation of an urban system dominated by one or two primary cities, where they became the centre of political and economic activities.

This unequal development between rural-urban areas is reinforced by Import Substitution Industrialisation (ISI) – a programme that attempts to reduce foreign dependency and the import of goods by protecting national industrial capital and improving wages for workers. In many developing countries, especially in South America, ISI was supported by military regimes and politically backed by urban industrialists and a bureaucratic elite (Roberts, 1978; Davis, 2004). Subsequently, new industries and manufacturing facilities where located in, or close to, main urban areas populated by workers and consumers wealthy enough to purchase manufactured products. In these terms, cities were viewed as catalysts of development and the countryside was left outside of the state agenda, which further attracted rural migrants to primary cities. In fact, nation states and many urban scholars at the time tended to see problems of poverty and unemployment largely as transitional and assumed that investment in a few major cities would 'trickle down' into rural areas such that residents of the periphery would eventually benefit from the expansion of infrastructural networks. But the rural-urban migration exceeded the infrastructural and financial capacity of these primary cities and exacerbated urban problems, such as fast-growing squatter settlements and informal economies

(Timberlake, 1985). The socio-political tension that arose as a result of the concentrated but limited resources in primary and capital cities, sharp rural-urban inequality, and economic disparities further influenced national

politics and development policies (Davis, 1994). Ultimately, a vicious cycle emerged, where the location of a state's macroeconomic development strategies was determined by the urbanisation patterns of capital and primary cities, which in turn enhanced urban primacy and aggravated urban problems (Min Joo, 2011).

Spatial Implications of New International Division of Labour

By the late 1970s, while developing countries were grappling with heavily-populated cities full of unemployed migrants with limited education or skills for an industrialising economy, the world economy had undergone a profound restructuring. Globalisation and the breakdown of the Fordist model drastically changed the economic nature of industry/manufacturing and services in the last decades of the 20th century. This process was reinforced by radical technological shifts – like computerisation – that had extensive territorial implications (Brenner, 2014; Pieterse, 2008). Moreover, economic activities were becoming increasingly dependent on information, knowledge management, and services – financial, legal, or communication and media/advertising – that do not require an industrial manufacturing or agricultural base. Therefore, those countries that did not have access to more mechanised and computerised means of production and distribution, as well as appropriately skilled workers, have faced profound economic marginalisation (ibid).

The transformation from standardised mass production (Fordist production systems) to highly-flexible industries (post-Fordist production systems) has significant consequences for the workforce in both developed and developing nations. One of the major consequences is the new international division of labour (NIDL) that began to emerge as a result. Whereas in the past the non-Western countries provided raw materials for processing in Europe and North America, under the new division of labour manufacture has shifted to the Global South. However, it has now been thoroughly deskilled, and all of the knowledge and expertise behind it – product design, coordination and marketing – remains in the Global North (Wright, 2002).

Yet it is important to mention that not all developing countries were able to participate in these structural economic shifts and some, such as the newly-industrialising countries known as Asian Tigers (Singapore, Taiwan, Hong Kong, and South Korea), were more successful in developing their economy and participating in the NIDL. Consequently, the economic success of a number of Asian countries by the early 1990s has led to new forms of competition

5.
The growth success (development model) of the 'tiger' economies of South Korea, Hong Kong, Taiwan and Singapore named by the World Bank as 'the East Asian Miracle'. While different from each other, these countries are an early exemplar of Asian countries who challenged the dominant state-centric development model at the time, yet still considering the role of the state more important the market. The main characteristic of this specific development model is: export promotion strategies and selective protectionism, active industrial policies, concern for macroeconomic stability, education policies and social cohesion.

among developing countries, many of which sought to follow the example of the Asian Tigers – which became known as Asian model of development[5] - to achieve similar economic progress. For example, in the case of Iran, in the 1990s a series of developmental strategies were implemented which were mainly inspired by development models from Singapore, Malaysia and China. In fact, the economic success of these Asian nations has led Islamic leaders in Iran and other Muslim countries to revise their development policies without reference to secular or liberal western political ideology.

The spatial shift of manufacturing industries led to the emergence of new forms of economic and political competition among both developed and developing nations. Additionally, the failure of communism and the end of the Cold War gave rise to new forms of competition among advanced capitalist countries over new positions/sources of power in the globalising economy. The end of the Cold War, together with the rise of neoliberalism, changed global political economy dramatically, with ramifications for both developed and developing countries (Davis, 2005).

On the one hand, major cities in advanced capitalist countries were competing to attract the most lucrative and specialist economic services, and, on the other hand, rapidly expanding cities in developing countries – in particular the primary and capital cities – were competing among themselves and with advanced global cities in the North to become hubs for industrial production and high-end specialised services. As Edgar Pieterse notes, 'many cities in the South and North (bypassed by the high-end services circuit) aspire to become global cities and will do just about anything to achieve that status' (2008: 17). In such a context, the development processes in many developed and developing cities were beginning to emphasise the provision of customised, network spaces within cities and regions to attract investors (Graham and Marvin, 2001). Thus, international corporations involved in foreign direct investment began encouraging and directing public and private development agencies to build ports, airports, logistics platforms, highways, rapid transit services, telecommunication networks, water, and energy services that were specially tailored to their economic interest and requirements.

Neoliberal Urbanisation

The pervasive liberal views and economic recession of the early 1980s forced almost all types of government – industrial capitalist, post-communist, developing, and newly industrialising – to explore transferring some of their municipal management and infrastructure operations to the private sector (Martin, 1999). Moreover, multilateral development agencies – such as the IMF, World Bank, and World Trade Organization – used their financial and technical

support to force neoliberal reforms that brought private corporations into national (and especially urban) management (Zetter, 2004; Graham and Marvin, 2001). As a consequence, many developing countries adapted 'structural adjustment' programmes which were followed by a state retreat from investments in urban infrastructure and development in favour of private firms. These processes unfolded at the precise time that developing cities and regions were already suffering from the highly unequal and inadequate urban infrastructure, ineffective urban management, and inability to cope with rapid rural-urban migration that led to huge unmet demand for services (Potter and Lloyd-Evans, 1998).

The country by country experience of privatisation of urban management and infrastructure development is unique and highly complex, but one dominant repercussion of this process has been that public subsidies for urban services and infrastructure for the urban poor has diminished and in many cases become insignificant (Pieterse and Hyman, 2014). This is true even in countries such as Iran, which in the 1980s adapted pro-poor development policies and focused substantial subsidies on the poor in the countryside in hopes of slowing down the rural-urban migration.[6] In these terms, uneven development of cities in the South, as well as the marginalisation of urban poor and the growth of the informal economy, continued to worsen as investments were mostly focused either in rural areas or on profitable/low-risk urban projects – thus ignoring the parts of the city that were socially and economically marginalised and were likely to experience increasing underinvestment.

6.
For a more general discussion on this topic, see Annez and Buckley (2009).

By the turn of the 21st century, the interplay between market forces and government policies has had a direct impact on the trajectory of southern urban development. One obvious outcome is the emergence of fragmented urban spaces and dualistic urban systems with enclaves of prosperity and innovation (in the form of gated communities or central business districts) and an informal, disconnected, and neglected city, where the urban poor and working classes are subjected to inhumane living conditions (Pieterse, 2008).

As described above, during the past thirty years, technological innovation and global financialisation have contributed extensively to the scale and speed of the second wave of urbanisation and the emergence of a complex geography of urban inequality. Yet, every developing nation and society reacted to and resisted the industrial transformation, new spatial division of labour, unequal provision of infrastructure, and financialisation differently – which has produced highly diverse and contested forms of urban settlement across the world. The extraordinary and complex growth of developing cities has led to a series of debates among scholars and advocates who think urbanisation does not necessarily support development and economic vitality (Satterthwaite, 2007; Turok and McGranahan, 2013; Bryceson et al., 2009). As Ivan Turok argues 'neither urbanisation nor [economic] growth is a straightforward

or uniform process occurring in the same way in different places… [the complexities and diversities of urban processes] make it difficult to disentangle and measure the magnitude of the causal relationship between urbanisation and development' (2017: 97). As a result, new discussions have emerged among urban studies scholars, namely debates on the relationship between urbanisation and industrialisation (economic development) and the spatial and demographic characteristics that define the 'urban' as opposed to the 'rural' (Davis, 2016; Brenner and Schmid, 2014, 2015; Parnell et al., 2009; Roy and Ong, 2011; Robinson and Parnell, 2018). These recent debates are critical for the further discussion and analysis of the mutual relationship between urbanisation and development. The following provides a brief overview of the topics of these debates.

Urbanisation and Industrialisation (Economic Development) Relation

Based on a variety of different studies, scholars of southern urbanism are reaching the consensus that, while urbanisation and industrialisation (economic development) appear to have a close relationship, this link is neither linear nor automatic. Multiple forces and conditions are involved in forming the link between the two. These studies have criticised northern, mainstream urban policy makers, such as the United Nations and the World Bank, and argue that these institutions are too fixated on conventional methods of measuring urbanisation and development to capture their complex relationship (Satterthwaite, 2007; Sheppard, 2014; Parnell and Oldfield, 2014).

These global institutions tend to seek parallels between the urbanisation process of developing countries and the urbanisation trajectories of northern (developed) countries, and draw a linear connection between industrialisation (economic development) and urbanisation. For example, the 2009 World Development Report by the World Bank explains the proliferation of slums across the developing world as 'characteristic of rapid urbanisation' and even goes so far as to accuse Nairobi's Kibera slum of being Dickensian. Through this analogy, the report goes on to explain how many of today's world-class cities, such as New York, Tokyo, Paris, and London, were littered with slums, and locates Rocinha of Rio de Janeiro or Dharavi of Mumbai on the same trajectory as these cities – only a little more than a century behind. In fact, postcolonial critiques challenge this fixation on the image of the 19th century industrial city that fail to comprehend the specificity of capitalist urbanisation of cities like Mumbai or Rio de Janeiro and their interdependence with larger political and economic processes. These critiques insist that urbanisation is not necessarily a synonym of industrialisation. The link between the growth of cities and the process of development is deeply political and multi-dimensional, which requires a more thorough analysis of the diverse forms of politics and ideologies that influence the urbanisation and industrialisation nexus. In the case of Iran, the current size and spatial distribution of the urban population is not a mere result of indus-

trialisation and capital accumulation, but rather it has been greatly shaped by political and geopolitical events such as the nationalisation of the oil industry in 1951, Land Reform in 1963, the Islamic Revolution of 1979, the Iran-Iraq War (1980-1989), the Afghan Civil War (1992-1996), and Western economic sanctions. Each of these events has significantly influenced the complex and extensive movement of populations that have shaped the urbanisation of Iran. Schmid et al. (2017) take this debate further and fundamentally question existing concepts and methods of analysing the urbanisation process. In their quest to understand the rapidly-changing global urban condition, they explain:

> the spatial units of analysis – conventionally based on demographic, morphological or administrative criteria – have to be reconsidered. Urbanisation processes do not simply unfold within fixed or stable urban 'containers', but actively produce, unsettle, and rework urban territories, and thus constantly engender new urban configurations. The essential task, therefore, is less to distinguish 'new' urban forms, than to investigate the historically and geographically specific dynamics of urbanisation processes (Schmid et al. 2017: 23).

The above premise is foundational for this research on the urbanisation of Tehran, which aims to move beyond the demographic and morphological analysis of urban change, and instead examine the interconnection between urbanisation and development as a historically and geopolitically specific and multidimensional process – as an outcome of the multi-scalar interplay between various actors and agents that shape and transform the urban territory.

The Disappearing Distinction Between the Urban and the Rural

As described earlier, the impacts of the second wave of urbanisation were felt at ever greater distances from cities, which produced territorial inequality and an extensive infrastructural and environmental transformation of national territories. Critical urban scholars began to argue that categories such as 'urban' (as opposed to 'rural') are not adequate to explain the uneven socio-spatial development, complex land ownership structures, geopolitics of infrastructural development, or processes of socio-environmental transformation that are currently unfolding in different parts of the urban world (Brenner and Schmid, 2015a, b). Among others, Neil Brenner and Christian Schmid, two distinguished urban scholars, have questioned the popular statement that more than half of the world's population now lives in urban areas – they argue that 'across national contexts, including in the UN's data sets, there is no standardised definition of the urban unit on which the basis of population size, density, or other proposed indicators of urbanisation levels are to be measured' (Brenner and Schmid, 2014: 10). They show that the current representation of a global urban condition is

'a statistical artefact' and faulty for its assumption of the 'urban' as a spatial, bounded area that can be neatly measured. In India and China, the levels of urbanisation can be depicted as well below or above 50%, depending on the method employed to classify 'urban' (Satterthwaite, 2010; Zhang, 2004). This poses important questions for how these data can be employed in policy formulation and planning efforts (Davis, 2016).

Subsequently, these scholars have called for 'a radical rethinking of inherited epistemological assumptions regarding the urban and urbanisation' (Brenner and Schmid, 2015a: 151). Inspired by Henri Lefebvre's thesis of the 'complete urbanisation of society' that renders urban boundaries meaningless, Brenner and Schmid have proposed a concept of 'planetary urbanisation' that interprets urbanisation as 'three mutually constitutive moments – concentrated urbanisation, extended urbanisation, and differentiated urbanisation' (2015a). The concept of planetary urbanisation invites us to see urban processes as a whole rather than the differently-sized clusters of bright dots on the dark background of the satellite-generated image, allowing the agglomerations and hinterlands to be seen as relational and co-constitutional. This idea goes beyond the statistical inconsistencies that have been failing to capture the uneven spatial expressions of capitalist development (Shaw, 2015). In other words, a planetary urbanisation offers a 'more effective basis on which to investigate the interconnected political-economic, social, infrastructural and environmental transformations that animate both city growth and the evolution of associated "operational landscapes."' (Brenner and Schmid, 2015b:11).

During the past few years, the idea of planetary urbanisation has unsettled the dominant discourse of techno-scientific urbanism and data-driven discussions on sustainable urbanism and development. It has raised heated debates around the new relationship between the rural and the urban which cannot simply be read as the 'rural getting urbanized' (Brenner and Schmid, 2014, 2015; Roy, 2015; Shaw, 2015; Walker, 2015). The progressive scholarly work on developing cities is further broadening the theoretical and analytical framework of urbanisation and development to actively integrate the various spatial scales and diverse social, political, and economic dynamics through which urbanisation influences the life of the world's inhabitants. As Davis notes, further multi-disciplinary study on development and urbanisation requires an increasingly holistic understanding of the intertwined and fluid relationship between the city and its hinterlands, as well as between regional, national, and global transformations that will accompany the continued process of urbanisation (2016). Ultimately, the new wave of scholarship invites us to go beyond generic analyses based on economic development models and rural-urban binaries, and instead seeks to shift the analytical perspective toward perspectives that can address the multidimensional and diverse processes of urbanisation.

These recent calls to update and modify our understanding of rapid urbanisation in the Global South has been the core motivation of this research. Hence, the urbanisation process of Tehran in this thesis is understood as a multidimensional and multi-scalar process that is historically and geographically specific, but at the same time is linked to broader political and economic processes.

2.3 Development Ideas, Practices, and Urban Development Models

Discussions on the meaning and forms of development have historically been led by social scientists, economists, and area studies scholars who have done considerable work theorising development and analysing the ways in which it has been put into practice in less-developed countries. Throughout the last century, development scholars and practitioners have been grappling with questions such as: what is development? How should socio-economic change and development proceed? And how should the success and failure of development projects be measured? The overall aim in this section is to discuss the continuities and shifts in the ways in which development has been understood and practiced throughout the last century and, secondly, to trace the interplay between the shifts in international development discourses and the dominant ideas of how cities in the Global South should grow and change. The objective here is not to focus on the history of development theories through key paradigm shifts, say from Modernisation to Dependency Theory and then to neoliberal concepts of structural-adjustment. Instead, the aim is to look at the ways in which shifts in global political economy have caused new development discourses, institutions, and actors to emerge.

In so doing, the attempt is to uncover the relationship between dominant urban development models in the Global South and global and local power structures. Over the past two decades, research that links development studies to urban studies has become increasingly prevalent, which has contributed considerably to discussions on urbanisation and development, and particularly to debates on the urban economy and the politics of urban development in the Global South.

This section is divided into three sub-sections. Each one depicts a key shift in international development discourse and discusses how changes in definitions, practices, and institutions have been interconnected with the dominant urban development models or city building approaches that have been prescribed for southern cities.

As mentioned in the introduction, the historical analysis of Tehran's urbanisation process has been structured around the key shifts in international development discourse during the 20th century and major socio-political events in Iran. Thus, the theoretical discussions in each sub-section of this chapter are also reflected upon empirically in the body of this dissertation in the next three chapters.

2.3.1 Development of the 'Backward' and the 19th Century Colonial Legacy (1850–1945)

In many studies, the origins of development stories were generally located in the post-Second World War era, alongside the decolonisation, anti-colonial movements, and the rise of the US and the Soviet Union as world superpowers. However, while development as an academic discipline may have begun in this period, many scholars during the past two decades have argued that the origins of the ideas and practices of development go back to the 19th century. Among others, Haripriya Rangan, in her essay '"Development" in Question', notes that multilateral institutions and bilateral development agencies that emerged after 1945 did not 'invent' development, 'but rather refashioned the legacies of 19th century development doctrines to respond to the new geopolitical realities of post-war reconstruction and decolonization' (2008: 566). Similarly to Rangan, several contributors to Power of Development (Crush, 1995) have shown that development has its roots in Europe's history of industrial capitalism and colonialism, and claim that the idea of development is embedded in older idea of progress. These scholars build their argument from the writings of key 19th century French, British, and German thinkers such as Henri de Saint-Simon, John Stuart Mill, Karl Marx, Friedrich Engels, and Friedrich List – all of whom were preoccupied with industrial and political revolutions, as well as the nature of the socio-economic transformation that was taking place in Europe (Cowen and Shenton, 1995, 1996; Rangan, 2008). In fact, the work of these 19th century thinkers demonstrates that the development doctrine emerged from the perceived chaos caused by industrial progress, and aimed to bring order to poverty, rapid urbanisation, social disorder, and unemployment in Europe. As Michael Cowen and Robert Shenton (1995, 1996) note, development emerged in the 19th century as state practice to mitigate the chaos and disorder caused by progress.

7. See Stokes, 1959, for a rich analysis of how the experience of colonial rule in India shaped the discipline of political economy and utilitarian doctrine in Britain.

Additionally, Rangan (2008) compares perspectives in the work of these 19th century European thinkers and demonstrates how their ideas on progress and development were not merely formed by the political events and socio-economic changes in Europe, but rather the colonies and Europe's territorial expansion also played a crucial role in shaping their views. For example, Saint-Simon's ideas were shaped considerably by France's colonial expansion of Asia, Africa, and the Americas and Europe's grand infrastructure projects such as the Panama

and Suez Canals (Berman, 1982; Friedmann, 1987). For John Stuart Mill – who was employed by the British East India Company – his views on political economy and governance were very much shaped by his involvement in colonial administration and revenue generation[7] (Rangan, 2008:568). The German political economist Friedrich List stated in his work that Germany's backwardness in comparison with Britain resulted from its lack of overseas colonies that could provide resources and revenues for investment in industrial development. He notes that the process of transition from agrarian to industrial society took centuries for European powers such as France and Britain, and agrarian nations would not be able to catch up unless they followed the model of the US which, in the mid-19th century, was promoting industrial production through deliberate and constructive intervention by the state. Therefore, in many discussions, state intervention in industrialisation and control of free trade were seen to be critical factors for fostering rapid development of agrarian 'backward' nations (Rangan, 2008). Ultimately, the above views confirm that 'development' is a Western invention, however it is crucial to recognise that the meanings and practices of this Western invention are a product of Europe's interdependence with other regions of the world (Crush, 1995; Rangan, 2008; Mitchell, 1991a, 1995, 2000).

While these 19th century thinkers viewed development in universalist terms, their vision of the development of 'backward' nations, or 'savage states' as List puts it, was very bleak. They openly objected to the independent pursuit of national economic development and industrialisation by nations outside of Europe, and claimed that the development of 'backward' agrarian nations required an authoritarian and interventionist government as well as the guidance of Europe's experts and scientists. Moreover, the language and image in presenting these 'chaotic' and 'traditional' societies were traumatic and, as Timothy Mitchell (1995) shows in the case of Egypt, traditional rural life was presented as unable to change without the external force of experts and technology that could drag the primitive land into the 20th century.

One consequence of this colonial atmosphere, at the turn of the 20th century, was a sense of urgency for agrarian societies outside of Europe to establish an effective 'state' that would control economic and social decisions regarding national development. It was seen as obvious that the state is the most effective agent of a nation's development and industrial progress, and without state-led development the future of these agrarian nations would be bleak. Yet there was no clear idea of what kind of government was needed for these non-Western nations to mobilise development beyond the common view that these societies needed concentrated action through intervention and rational thinking (List, Cowen, and Shenton, 1995). Moreover, as indicated earlier, the language and image of 'chaos' and 'backwardness' created a logical need for intervention and external assistance. Thus, state building, the centralisation of the

administration, and adapting European legal systems, policies, and working practices became critical for agrarian nations and colonies. In the very early years of the 20th century, the national ruling class and intellectuals in many non-Western nations, especially non-colonial countries such as Turkey and Iran, began to internalise these 19th century ideas of European thinkers – that development animates the static (traditional/backward) and brings order to the chaos – and worked to establish modern central states that could manage a chaotic society and slowly bring it into civilisation (Bozdoğan, 2001; Atabaki, 2007). This theme lies at the core of Chapter 3, where it will be more extensively discussed.

Nonetheless, state building and nation building in these supposedly 'static' geographies and 'passive/chaotic' societies was a daunting and complicated task for the local intellectuals and ruling class, as well as Western experts. Among others, one main challenge was that social interactions, economic functions, political processes, and people's lives in these territories had not been confined yet within the limits of the nation-state and its borders (Mitchell, 1995). In order to conjoin peoples with diverse cultures, ethnicities, and socio-economic systems within a sovereign-bounded geographical area, the existing ruling class had to unify the national space through a network of infrastructure that connected urban areas. As Jean-Marc Offner (2000) notes, technical and infrastructural networks (railroads, streets, sanitation etc.) have comprehensive advantages for the places they serve and also enable a homogenisation of space. Hence the local ruling class and European experts considered the standardised character of infrastructure development to be a way to overcome the complexities of the existingsocio-political conditions of these developing nations.

One of the most celebrated conceptions of the integrated infrastructure networks at the time was Baron Haussmann's plan for the 'regularisation' of Paris in the mid-19th century. For colonial and developing countries, Haussmann's Paris became the 'symbol of modernity' and the strategic model for regularising the 'disorderly' and 'chaotic' urban fabric of cities. The idea of free circulation both within and between cities became a key step on the way to achieve the unity of the nation-state. As Spiro Kostof points out:

> Haussmann's treatment of Paris… heralded a technocratically minded, comprehensive approach to town planning in which a rationalised circulatory network would once and for all sweep away [what was seen by the ruling class as] the dross of the community's promiscuous life through time (1994: 11).

The construction of straight streets or a centrally-managed water and sewage system were not the only spatial consequences of state formation and the development mission in developing countries. Rather, the formation of the extensive network of roads and railroads that could

bind together ports, main towns, and primate capital cities was key to politically homogenising a territory and transforming a 'backward' nation into modern, functioning machinery. Ultimately, two types of infrastructural strategies were becoming integral parts of state building agendas and national development missions: the network of straight streets in primary cities and the large scale national road and railway systems connecting either economically- or politically-strategic parts of the nation.

Additionally, for most developing nations, architecture and urban renewal glorified the newly-formed states' and nations' power with monumental public buildings and urban infrastructure symbolising the ideology of modernity, development, and independence (Vale, 1999; Cinar, 2014). New infrastructural, administrative, and educational buildings were constructed to accommodate new functions, new organisations, and new citizens. The architecture and urban form of the major cities, especially capital cities, became a symbol of the new role of government in providing for the public's material wellbeing, and also represented the material advancement of society. For example, in Iran in 1930s new grid of wide streets and monumental government buildings were built first in Tehran and soon after the same pattern continued to develop in other major cities. Yet the change was not limited to the physical fabric of cities, the newly established Pahlavi government obliged all civil servants to follow particular dress code that was directly influenced by French fashion. Men had to wear suits, leather shoes, and follow the 'hat law', called Pahlavi hat, and women had to be unveiled and dress in European style. This Pattern was very similar in Istanbul and Cairo during the same period. Hence, building a network of infrastructure and regularising urban life through straight streets and modern architecture were among the key mechanisms with which the state could establish itself and legitimise its political and economic authority.

Nonetheless, this process of city-making (and nation state-making) in the majority of cases ignored the pluralist nature of these nations, and thus led to uneven development across cities, regions, and nations. Subsequently, the state building process and the ruling class have been persistently challenged by groups who see themselves as underrepresented in the development project of the state. The emergence of resistance from the least-represented groups and their struggle for power (for example among rural notables, peasants, and religious authorities) in multicultural nation states became crucial factors in the foundation of diverse trajectories and the experience of developments that have occurred in the non-Western nations. Examples of this type of resistance and power struggle will be discussed in chapter 3 and 4.

2.3.2 New Modes of Calculating Development and Third World Urbanism (1945-1980)

Many scholars claim that the idea of 'development' first emerged in January 1949 when United States President Harry Truman, in 'Point Four' of his inaugural address, announced the arrival of the era of 'development' (Sachs, 1992; Escobar, 1995). Timothy Mitchell (1995, 2002, 2014), in contrast, provides a compelling discussion of how, by around 1948, a new idea of 'the economy' had emerged which significantly influenced the post-war politics of development and marked the arrival of a new phase of development. Mitchell's argument is that up until the late 1930s, the term 'economy' generally meant 'attaining a desired end with the least possible expenditure of means', and in classical political economy referred to the proper governing and managing of the people and resources of a nation in order to increase its material prosperity (2002: 4-5). However, he describes how in the second half of the 20th century, as a result of the advancement of the discipline itself, 'economy' came to operate as a new governing and political concept. This was made possible by new statistical techniques and ideas for mathematical modelling, such as macroeconomics and national economic accounting, which were introduced by UK and US economists in 1930s and 1940s. In fact, these changes were a response to the dramatic shifts which took place after the First World War: the Great Depression, the creation of the Soviet Union, the Second World War, and the beginning of the end of colonialism (Costanza et al., 2009; Mitchell, 2014). Consequently, the new field of macroeconomics and the invention of new methods of calculating national income and estimating gross domestic product (GDP) greatly influenced the politics of development and made the notion of 'the economy' a central objective of the state in the mid-20th century – a state based on scientific expertise, rational thinking, and vast bureaucratic power. Hence 'the economy', in its new sense, referred to

> the totality of monetarized exchanges within a defined space. The economy came into being as a self-contained, internally dynamic, and statistically measurable sphere of social action, scientific analysis, and political regulations (Mitchell, 2002: 4).

Mitchell shows in detail that the invention of econometric methods for measuring national economies and calculating future economic growth had powerful political effects, in particular by 'bringing the future into the government' (2014: 484). Economists who before 1938 had absolutely no role in speaking about the future and had typically been suspicious of forecasting, became the priests of future (Mitchell, 2014: 491) – the people who could tell governments how actions in the present had to be governed by a future that they could

8. For more on how economists were discussing and measuring growth before the 1940 please see Mitchell, 2014: 491–492.

calculate.[8] Economists became the experts in providing annual and long-term forecasts of the state of the economy – illustrating changes in the nation's budget and productivity with charts and abstracted diagrams that projected national growth into the future. Thus economists became experts in disciplining and controlling the future growth through new methods of estimating national economic progress and productivity. Ultimately, Mitchell asserts that the economists provided forms and formulas for old (European) and new (US) industrialised powers to expand and retain their imperial influence (2014, 2002: 4).

The Americans, with their Western allies, established two key institutions of post-war international development – the International Bank for Reconstruction and Development, known as the World Bank, and the International Monetary Fund (IMF). These institutions employed the new methods of measuring and estimating GDP and national income, and became the global headquarters for forecasting the economic development of countries across the world (Escobar, 1995a; Speich, 2008). They generalized these new calculations and believed the economy of every nation could be mapped with the same set of criteria and in purely statistical terms (Speich, 2008: 33; Crush, 1995). Yet this was not the intention of the economists[9] who had originally developed these techniques; they warned that the existing methods of estimating national income and GDP were specific to the US and could not simply be applied in places where social relations might be organised differently, or value systems and forms of production might be radically different (Mitchell, 2014; Costanza et. al., 2009; Speich, 2008). Moreover, these economists found the comparison of different countries based on abstracted data rather problematic and argued that,

> The measuring procedures of income accounting [...] had to reflect the socio-cultural structure of the entity it wanted to depict. It had to be grounded in local specificities and in the contingency of history (Speich, 2008: 14).

Notwithstanding, the World Bank and IMF largely ignored these warnings and began measuring and comparing different sets of national accounts and ranking the development of countries and regions in terms of GDP. As a result, the world became divided into three categories based on both the level of economic development measured by the World Bank and the political orientation of nations within the geopolitics of the Cold War – the free industrialized nations, the Communist industrialized nations, and the poor, non-industrialised nations, constituting the First, Second, and Third Worlds, respectively.

By dividing the world up based on the level of development and industrialisation, these institutions presented themselves as experts in measuring progress and predicting the future development path for the Third World (Escobar, 1995a; Unger, 2010). The early 20th cen-

9.
Simon Smith Kuznets was one of the influential economists and statisticians who developed the theoretical concept and calculation methods of national income. He helped the US Department of Commerce to standardise the measurement of GNP in the 1940s. For more on his work, see National Income, 1929-1932.

tury language of 'backward' for describing non-Western agrarian nations was replaced by the term 'Third World', which again indicated the need for assistance from foreign experts. This was confirmed with the US president Truman's 'Point Four' of his foreign policy;

> a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas (Truman, 1949).

Truman's 'Point Four' programme marked the beginning of a challenging era for scientists and experts, who were supposed to 'formalize the secret of Western economic success in such a way that it would become applicable across international borders and could help to level the inequalities that had been built up by colonial rule' (Speich, 2008: 7). In these terms, the shift in the politics of development was accompanied by 'the emergence of the "international development expert", who in many instances had simply switched sides; from working for the interests and from the perspective of a single imperial capital they now came offering a sublimated notion of multinational assistance to the Third World' (Hodge, 2010: 25). Many of these Western experts and scholars were becoming more convinced that the exposure of these 'underdeveloped' countries to Western cultural values and practices was crucial for their development – this became known at the time as 'modernisation theory'. In their view, and similar to the scholars and thinkers of the 19th and early 20th century, the state – guided by technocrats and technical experts – was the best way to harness the powers of science, technology, and rational planning for the benefit of humanity and the prosperity of 'underdeveloped' nations (ibid). Yet, as mentioned previously, for the political leaders of these nations, protecting their own sovereignty and building a modern state was a complex task, considering their geographical histories and heterogeneous population.

10. The argument of Mitchell and Rangan opens up the possibility for understanding why nationalist leaders and movements of so many post-colonial and Third World countries, such as Egypt or Iran, irrespective of their political and ideological leanings, uncritically embraced the core assumptions of the new 'economy' and national development in the post-war period.

Rangan argues that the concept of 'national economy' not only helped Western powers to retain their global dominance, but it also offered nationalist leaders in the Third World an alternative method to create a 'national space' determined by a 'character of calculability', rather than by geographical histories (2008: 572). The territorial boundaries of these countries had been established as a result of a series of local conflicts and colonial rivalries and contained a heterogeneous population that could hardly represent a 'nation' (Anderson, 1991: 155; Mitchell, 2002). Given the socio-demographic complexities and ethnic diversities within Third World countries, 'the concept of 'national economy' as a rational object of calculation, control, and intervention became the means of [unifying the nations and] legitimating the [newly established states]' (Rangan, 2008: 572). After all, these nationalist leaders were aware of growing dissatisfaction after years of foreign intervention and economic stagnation. For them, estimating the national income and economic growth 'equalled an act of sovereignty' (Speich, 2008: 32) which could offer them the possibility of transforming their territories

into a homogenous and functional space of national economy – 'free' from the existing 'traditional' constraints and political and geographical differences.[10]

Consequently, during the 1950s, national economic development became the critical instrument for newly established states to achieve territorial integrity and political authority. The nationalist political elite across the majority of the developing world, such as in India, Egypt, and Iran, expanded the economic role of the state and established new planning institutions to calculate the national budget and prepare long-term national development plans with the help of World Bank. Hence, the state and those in power could represent themselves to the nation as experts who could plan and influence the economy in order to realise national development and prosperity. Therefore, the primary activity of local and Western technocrats (mainly economists and engineers) within state institutions was to prepare long-term plans for the development of large-scale and capital intensive projects, mainly in transport, telecommunications, and energy.

In order to achieve these goals, state institutions required not only financial means but also technical and engineering skills. Economists were in need of engineers and their expertise to realise development plans and projects. Consequently, many Third World governments invested in expanding engineering universities to train local experts for future development and free themselves from their dependency on Western technical assistance.[11] For example, from the 1950s to 1970s Iran was home to a proliferation of engineering universities across the country, as well as the institutionalisation of the engineering profession. This theme lies at the core of chapter 4, which shows how long-term national development led to the formation of a professional body of Iranian engineers, architects, and urban planners.

The significant role and involvement of engineers and economists in planning long-term national development projects had important implications for urban planning in Third World cities. Comprehensive urban development became an integral part of national development plans and thus the political project of the state. The early 20th century notion of the uniform, regulated, and networked city, allied with the idea of comprehensive urban development planning, suggested cities must be planned and engineered as a whole for orderly 'progress' to benefit all. Following Haussmann's model for Paris, cities were often described metaphorically as either 'machines' or 'organisms', whose functionality rested on the appropriate connective systems (Graham and Marvin, 2001: 62). The idea of rational comprehensive plans 'would treat the city like a machine, to be planned as an engineer plans an industrial process, breaking it down into its essential functions (housing, work, recreation and traffic), taylorizing and standardising them (in a Master Plan) as a totality' (King, 1998: 23). In this way

11.
Even the World Bank became 'overly concerned with the engineering aspects of projects' (Mason and Asher, 1973: 78), and as Alacevich (2009: 145) notes, it turned into a bank of engineers. This was an opportunity to demonstrate its transformation from a financial institution into what could now be called a development agency.

master plans would perceive the future of cities to be constructed in manageable units that are arranged within a connected system. This was a time when planners and engineers – similarly to economists – assumed that all aspects of a city could be measured, monitored, and addressed in diagrams and charts.

Nonetheless, comprehensive urban planning reflected the political project of the state and was seen as the main tool for navigating the accelerating growth of cities – especially capital and primary cities – toward an apparently stable and prosperous future. In fact, promising a better future through planning became a key factor in shaping the politics of development in the Third World. Yet by the late 1970s, Third World cities more than ever were challenged by rapid urban growth, overpopulation, poverty, and socio-spatial segregation – which formed the basis for serious criticism of comprehensive urban plans and the planners who designed them. Some planners have blamed the state and its ineffective management for implementing the plans, while others increasingly recognise that 'the ideal of master planning' based on abstracted data, charts, and diagrams was an illusion, and that the engineering-dominated ethos of the modern city was incapable of diagnosing real socio-economic problems and accommodating the needs of various social groups (Gandy, 2002).

At the time, what was criticized specifically about comprehensive planning was that 'the supposed "public good" objective of planning had been turned into a tool by the wealthy to protect their property values and to exclude the poor' (Hall, 1988; Watson, 2009: 543). Despite extensive criticism of this approach to planning in many parts of the Global North, comprehensive urban planning continues to be common practice in many developing countries, which shows the persistence of modernist planning and post-war politics of development. As Watson notes, 'traditional forms of planning may thus appear to be somewhat of a dinosaur in 21st-century cities, but their persistence is not accidental and will not be easily changed' (2009: 2262). Chapters 4 and 5 will reflect specifically on the continuity of master planning approaches in Iran and will depict the institutional and spatial consequences of this continuity.

12. Flexible specialization produces highly variegated products that can target different consumer groups and various specialised markets.

2.3.3 Development in Crisis and the Global City (1980–2000)

By the late 1970s the world economy began to experience a serious recession. Many countries faced a decline in productivity and employment, marked by low growth rates and high inflation. Among others, one basic cause of this economic crisis was that the Arab members of Organisation of Petroleum Exporting Countries (OPEC) had doubled the price of crude oil and imposed an embargo on the US and European countries that supported Israel in the 1973 Arab-Israeli War. Moreover, the high unemployment rate during these same years was the outcome of a radical transformation in the industrial production process from mass

production to a process called flexible specialization.[12] In fact, this shift from the Fordist to post-Fordist production system formed a new international division of labour that turned the Western industrial nations into the hub of technology-intensive industry and transferred the low-skilled and standardised manufacturing assembly to other developing nations – mainly the rapidly industrialising economies of Pacific Asia. Yet this transition coincided with rapid population growth in developing countries and the arrival of a large number of post-war 'baby boomers' to the labour pool of industrialised nations, which generated mass unemployment of unskilled workers (Peet and Hartwick, 2009: 77). During the 1970s the mass unemployment in both developed and developing countries, as well as an extensive fiscal crisis, led to a growing consensus that the post-Second World War strategy of state-led economic planning (Keynesianism) and industrialisation had failed.

The US and UK economists at places such as the University of Chicago and the Institute for Economic Affairs in London began to circulate the idea that national governments had become unable to act as the authority on economic planning and social welfare (Harvey, 2006). In this context, a new ideology of the liberal (laissez faire, or free trade) economics of the 19th century was revived, and came to be called 'neoliberalism'. The American economist Milton Friedman (1912¬¬–2006), together with his colleagues at the University of Chicago known as the 'Chicago boys' (hence Chicago Doctrine), were the leading theorists of neoliberal economic reform (Peet and Hartwick, 2009). They found that there are close connections between inflation and money supply and asserted that by limiting the national economy and government's role in guiding the economy, inflation can be controlled (Peet and Hartwick, 2009: 83). These economists used South American countries as the first laboratory for testing their neoliberal (neoclassical) ideas of economic development (Harvey, 2006; Klein and Smith, 2007). The first experiment was in Chile after Pinochet's coup in 1973, backed by the CIA, against the democratically elected and leftist social democratic government. After the coup and in the midst of world economic recession, the 'Chicago boys' were assigned to reconstruct the Chilean economy (Harvey, 2006; Klein and Smith, 2007). In doing so, they privatised public assets and encouraged foreign direct investment and free trade deregulation in the interest of corporations. Export-led growth replaced the previous policy of import substitution that had formerly dominated Latin American economies. The quick recovery of Chile's economic growth provided convincing evidence upon which the neoliberal model could be implemented in Britain, the US, and in other parts of the world (Harvey, 2006). The use of Chile as the testbed of neoliberal policies shows the continuity of the colonial practice of testing theories in colonies.

The collapse of the post-Second World War economic order in the mid-1970s and the emergence of a new consensus on the role of the state in economic activities marked the beginning

of a new era for development. Following leading neoliberal theorists such as Friedman and Friedrich Hayek, the new consensus viewed the state as the agent that facilitated the necessary peace and security for the functioning of a market of 'free' individuals. In these theories the state is presented 'either as "predator" or as a vehicle for politically powerful groups (including the politicians and bureaucrats themselves) to advance their sectional interest' (Chang, 2003: 76). Thus, the neoliberal theorists opposed the technocratic view of the state that prevailed in 1950s and 1960s, and aimed to 'free' the economy and market by limiting the role of state. In fact, the neoliberal ideology became widespread and popular as it aspired to depoliticise the national economy by preventing untrustworthy and corrupt politicians and the state from holding too much power over national economies and development. Nigel Harris, a leading urban economist at the time noted that 'by the seventies there was no such confidence in the capacity of governments to control their domestic affairs; the market, the invisible hand of a benevolent deity, was everywhere to be seen as the only means of allocating resources efficiently' (1987: 155).

Subsequently, from 1978 to 1983 neoliberal policies like the privatisation of public assets, decentralisation, and economic deregulation became generalised and the IMF and World Bank began to force them on developing and industrialising nations that were desperate for new ideas to bring them out of the economic recession. These high-profile multi-lateral development agencies sought to reform developing nations and made neoliberalisation a pre-condition for distributing loans (Davila, 2014: 476). The World Bank and IMF imposed neoliberal reform policies, namely the 'Structural Adjustment Programs (SAPs)', without considering the significant differences among developing countries in defining state intervention and market mechanisms. Moreover, while homogenising programs such as the SAPs identified the state as an inefficient actor, they could hardly show what was the appropriate role of the state in developing nations with newly established modern public institutions, a large agrarian population, and complex socio-political ties.

The 1983 World Development Report of the World Bank, titled 'World Economic Recession and Prospects for Recovery', evaluates the early attempts of developing countries to apply SAPs and decentralise development planning. The report shows diverse outcomes and acknowledges various problems. Yet it suggests that the failures or difficulties in implementing decentralisation were mainly due to weak political leadership and a lack of political commitment and long-term strategy for institutional development (1983: 116, 126). In its final sections the report asserts, that 'decentralisation is probably best seen as an incremental process of building up the capacity of organisations to assume greater responsibility' (1983: 121). Evidently the report implies a particular vision of the role of the state with particular institutional assumptions that can hardly be generally applicable. Hence the 1983 World Bank report imposed a universalising vision on the role of the state that is contradictory in its nature.

On the one hand the state is recognised as a weak institution which is incapable of effectively delivering on its responsibilities and hence has failed to generate economic growth. And on the other hand, the success of SAPs is in the hands of the state's strong political leadership is pivotal in institutional transformation. For three decades this contradictory view on the role of the state and its interplay with non-state institutions has had significant implications for the planning apparatuses of the countries in the Global South.

As the state lost its credibility in the early 1980s, planning as an institutionally embedded practice was side-lined and recognised as an inflexible and inefficient tool for managing resources and provisioning public goods and services (Healey, 1999; Friedman, 2005). People increasingly questioned the capacity of formal government planning institutions to articulate their concerns, and challenged planners and experts who tended to overlook the majority and plan for the benefit of particular social group (Healey, 2016: 148). For example, in Iran in the first years after the 1979 Islamic Revolution, planning and planning institutions were viewed among the young educated and experts as Western, secular and elitist that served a small group of society. Therefore, Iran's 'Plan Organisation' was shut down only one year after the revolution due to serious scepticism towards technocratic experts and planning systems in general. In Chapters 4 and 5 I will discuss how the 'Plan Organisation' professionalised and institutionalised planning in Iran in the 1960s and 1970s, and further explore the ways in which it was marginalised and lost its agency within planning apparatus.

The rise of a deep mistrust for the state and planning in the 1980s was accompanied by globalisation and a technological revolution (especially in telecommunications) which reduced the power of nation-states and had considerable territorial and political implications for countries worldwide, but especially for developing and underdeveloped ones (Pieterse, 2008). As Healey notes, the challenge for planning in the 1980s and 1990s was not only to 'adapt' to these global changes, but also 'to address new ways of thinking about the relation of state and market and state and citizen' (1992: 412). Subsequently, it became apparent that a comprehensive approach to development and planning could not address the complexity of political, economic, and technological changes, and thus planning lost its legitimacy to plan comprehensively and long-term (Prior, 2005). Moreover, critics have argued that master planning proved to be inappropriate in rapidly urbanising countries with weak administrative frameworks, where it failed to address unexpected changes in the economy and informal growth (Healey et al., 1997; Harris, 2014). In response, planners and planning departments of major cities had to reconsider and reorient their approach and seek alternative forms of planning to replace the supposed 'inflexible' and 'centralised' planning system.

Consequently, the planning system in many countries has drifted away from a comprehensive economic and social agenda (Healey, 1992) and became 'increasingly driven by entrepreneur-

ial imperatives of making specific spaces "competitive" within the metropolis' (Graham and Marvin, 2001: 112). The pressure on every metropolis to become a hub in the global economic network has encouraged planners to adopt a 'negotiated project-based practice dominated by development-market value.' (Healey, 1992: 430). In this context, planning retreated from modernist city schemes to become a tool for mediating between the public and private sectors in implementing large-scale urban and infrastructural projects (Graham and Marvin, 2001; Tasan-Kok, 2008). Increasingly, planners were forced to see their cities as fragmented spaces that are subject to a widening array of urban governances defined by multiple identities, aspirations, and socioeconomic circuits (Fillion, 1996: 1640). Hence, in many cases urban planning often became an enabler of development concerned with generating growth more than redistribution. As Paul Knox puts it,

> [planning became] fragmented, pragmatically tuned to economic and political constraints... It became increasingly geared to the needs of producers and the wants of consumers and less concerned with overarching notions of rationality or criteria of public good. The outcome has been a disorganised approach that has led to a collage of highly differentiated spaces and settings (1993: 12).

Additionally, in the context of cities' competitiveness at the national and global scale, planning authorities and public officials have had to simplify the planning process for property investors and developers. As Sandercock argues, 'to fast track many of these mega projects governments have short circuited established planning processes and removed these developments from public scrutiny and democratic politics, creating such entities as "special exemptions" and the like' (1998: 28). The kind of mega-development projects that became common were mostly monumental projects, such as large-scale waterfront developments, high-tech transport nodes, logistics hubs around airports, high-rise up-market residential blocks, downtown pedestrian shopping malls, art and culture districts, techno parks, etc. (Sandercock, 1998; Jacob, 2004; Smith, 2008; Sager, 2011). These interventions have the ambition to attract local and international investors and showcase the image of progress and modernity to the outside of world (Dávila, 2014). Yet these interventions have in many cases involved the relocation of low-income or marginalised communities and small businesses to less connected and less valuable sites on the outskirts of cities.

Ultimately, the consequences of privatisation and liberalisation for cities in developing countries were not limited to the marginalisation of planners, the fragmentation of urban spaces, the shift from core-dominated cities to polycentric urban regions, and extensive growth of the urban 'periphery' (Keil, 1994; Graham and Marvin, 2001). Rather, with the collapse of the idea of the unified city and the unified state came the 'expansion of the urban political system from 'government' to 'governance', which… [led to the growing complexity of planning and

governing urban development] and involvement of a range of non- state actors in the process of governing' (Watson, 2009: 2266). Watson notes that, as the central government lost control in directing urban development, local government came under pressure to promote 'urban economic competitiveness on the one hand, while on the other dealing with the fall-out from globalisation in the form of growing social exclusion, poverty, unemployment and rapid population growth, often in a context of unfunded mandates and severe local government capacity constraints' (Watson 2009: 2267; Beall, 2002).

In almost all developing cities, municipal authorities were forced to act in corporate manner and instate new policies and of downsizing and outsourcing municipal services, which financially buttress the cash-strapped local governments (Murray 2013: 295). In this context, municipalities relied heavily on zoning, density, and land use control as a source of income (Harris, 2014). Moreover, with an incentive to promote development, municipalities have made alliances with landowners, developers, lenders, and builders which in many cases have led to corruption and speculative development. In Chapter 5, I expand this discussion by examining the transformative role of the Tehran municipality in shaping the city's urban development trajectory, and show how its particular alliances or conflicts with the state and non-state actors have led to specific urban outcomes.

2.4 Conclusion: A Conceptual Framework

This chapter interrogated the intertwined relationship between urbanisation and development, and problematized the nature and direction of the relationship between these discourses. In fact, analysing the history of urbanisation in the global south, and theorising the interconnection between international development discourses and dominant urban planning models have helped this study to arrive to set of conceptual questions. These conceptual questions offer an analytical framework to study Tehran urbanisation in the 20th century as an intertwined local and global process.

These conceptual questions are threefold. The first of these concerns the relationship between politics and urban development or in other words how political power operates in the organisation of space on the national and urban scale. The second question focuses on how state-making processes and national political and economic development have influenced planning practices and urbanisation processes of cities in the Global South. The third revolves around the role of local and Western urban planners and experts in the modernisation and development trajectories of non-Western cities. These three conceptual bridges provide a multi-scalar approach for understanding urban change and offer a possibility to examine the

role and involvement of various actors and agents that shaped urban planning practices and transformed Tehran urban territory.

The first conceptual question on power and urban space provides a lens to uncover the link between certain forms of urban development and power structure of the regime that was behind building Tehran as a capital city. Hence each empirical chapter (3,4 and 5) will focus on the number of key urban development plans and projects and investigates the ways in which these plans and projects became a main tool for the state apparatus at different stages of 20th century to consolidate its power and sovereignty and maintain legitimacy. The main attention will be given to large-scale infrastructure projects, land and zoning regulations, master plans, and urban renewal or mega-development projects. Each Chapter looks into specific plans and projects and explores the role of various local and international actors and institutions that were involve in preparing and implementing them. Lastly, we investigate in what ways the success or failure of these plans or projects have influenced Tehran's trajectory of urban development.

The second conceptual themes that emerged out of the theoretical discussion of this chapter is what is the relation between national political and economic development and urban change. Through this conceptual lens we are able to link development discourses to urban space, and investigate how different Iranian states and ruling elites with their particular political characteristics and preferred models of development, both economic and political, have influenced the urban dynamics and process of city making. In doing so, in different historical stages we focus on planning institutions and national development policies, and the ways in which they responded to dominant international development discourses (such as state-led development or neoliberalism), and attempted to nurture a locally interpreted version of what it meant to build a 'developed' nation and a 'modern' city.

Lastly the third conceptual lens helps to investigate what role do local and western planners and experts play in shaping urban development trajectory of Tehran. Moreover, how their profession and practices has been directly influenced by national and international development discourses throughout the 20th century. As discussed in this chapter the idea of planning, development and progress are historically intertwined and the origins of planning as a tool for ordering the present in the interest of a prosperous and improved future has its origin in the Western project of modernity. Hence in the following analytical chapters we examine how this modern narrative of order and progress have influenced the Iranian planning practices and profession. In doing so we seek to show what is the role of the planners in urbanisation of Tehran. Ultimately these three conceptual discussions constitute the analytical framework which used in this thesis. Each of these perspectives – or themes – have structured the empirical study at different dimensions and scales.

CHAPTER 3.

A Modern Capital for a Modern Nation: Nation Building and Industrialisation of Tehran (1906 – 1945)

3.1. Introduction

> Tehran is one of those numerous cities between the Near and the Far East which calls for a modification of Kipling's oft-quoted line: for here East an-West have met, but have not mixed' (National Geographic, 1921: 371)[13]

Part of this chapter is published by the author in 'Tehran the Scene of Modernity in the Pahlavi Dynasty: Modernization and Urbanization Process of Tehran 1925-1979'. in F. Arefian and Moeini (eds) (2016), Urban Change in Iran, Urban book series, Springer: 103-12.

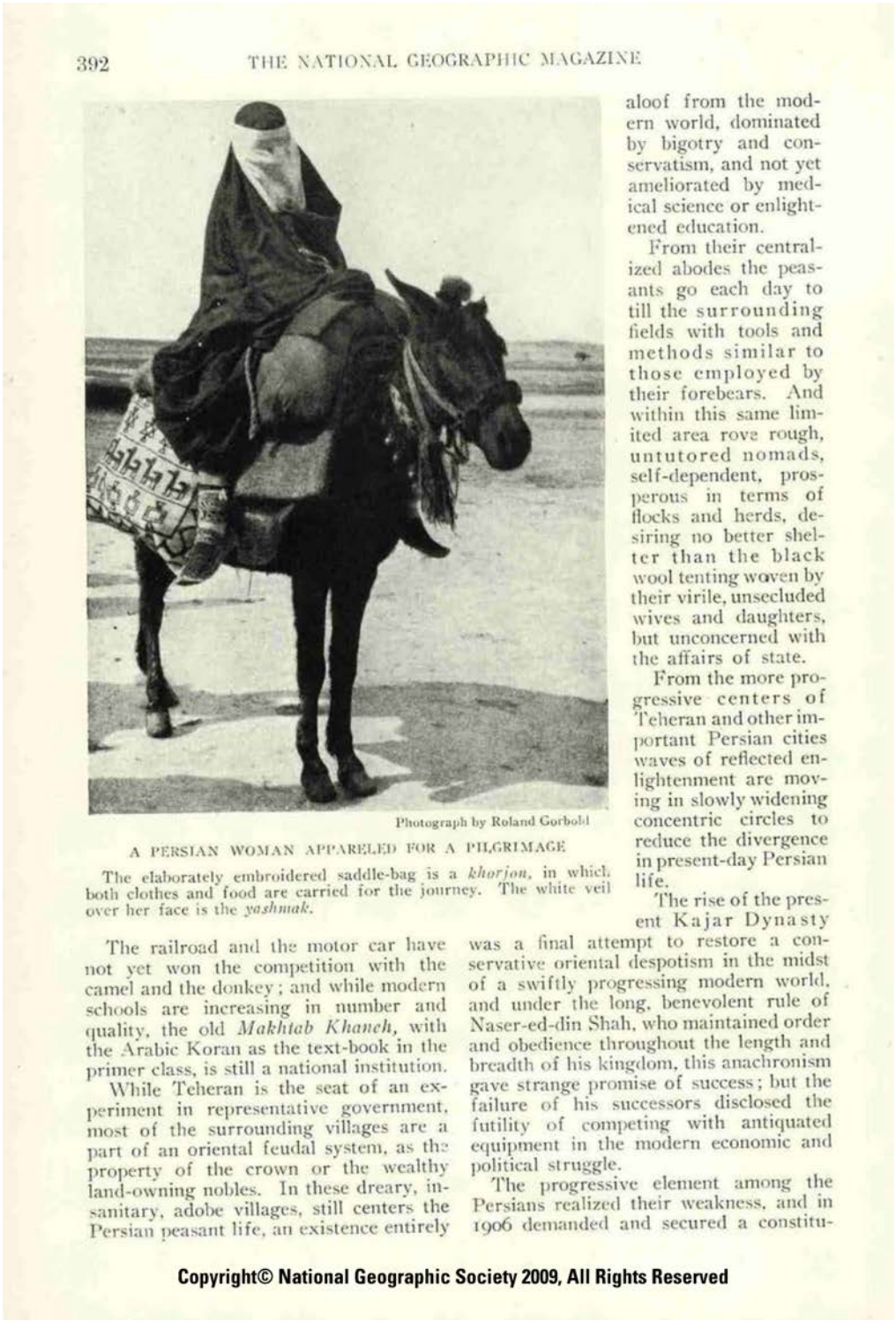
The above statement was published in National Geographic, in its April 1921 issue devoted entirely to Iran (referred to then as Persia). During the first two decades of the 20th century, Iran experienced a series of events which rendered the country socio-politically unstable and economically poor: the 1906 Constitutional Revolution; internal political instability; the occupation of the country by British, Russian and Ottoman forces during WWI; a famine; and a cholera epidemic. Given the colonial and imperial atmosphere of the time, Iran became an appropriate example for National Geographic to demonstrate the poverty and 'backwardness' of non-western countries. However, this was also a period where the value of Iran to the West changed radically, due to the 1908 discovery of a very large oil field in Masjed Soleyman, in the southwest of the country close to Iraq. In fact, the publication of the April 1921 issue of National Geographic is evidence of this change. The images and texts depicted a poor country struggling with the 'backwards' tendencies of its past, in desperate need of development, and trying to transform into a modern state. Under the title 'A Complete Panorama of Developing Civilization' the text begins:

13. Rudyard Kipling, British Journalist (1865-1936)

> Within a twenty-five-mile radius of Tehran a complete panorama of developing civilization unfolds. Perfectly illustrating the whole shifting scale of human existence from the primitive to the modern stage. In the city itself are the conflicting institutions of modern society and Mohammedanism, along with an underlying stratum of unchanged primitive customs. The railroad and the motor car have not yet won the competition with the camel and the donkey; and while modern schools are increasing in number and quality, the

old Maktab Khaneh, with the Arabic Koran as the text book in the primer class, is still a national institution (ibid: 391–392).

Figure 3.1. A page from National Geographic special issue on Modern Persia and Its Capital – April 1921



392 THE NATIONAL GEOGRAPHIC MAGAZINE

Photograph by Roland Gorbold

A PERSIAN WOMAN APPARELED FOR A PILGRIMAGE

The elaborately embroidered saddle-bag is a *khorjon*, in which both clothes and food are carried for the journey. The white veil over her face is the *yashmak*.

The railroad and the motor car have not yet won the competition with the camel and the donkey; and while modern schools are increasing in number and quality, the old *Makhtab Khaneh*, with the Arabic Koran as the text-book in the primer class, is still a national institution.

While Teheran is the seat of an experiment in representative government, most of the surrounding villages are a part of an oriental feudal system, as the property of the crown or the wealthy land-owning nobles. In these dreary, insanitary, adobe villages, still centers the Persian peasant life, an existence entirely aloof from the modern world, dominated by bigotry and conservatism, and not yet ameliorated by medical science or enlightened education.

From their centralized abodes the peasants go each day to till the surrounding fields with tools and methods similar to those employed by their forebears. And within this same limited area rove rough, untutored nomads, self-dependent, prosperous in terms of flocks and herds, desiring no better shelter than the black wool tenting woven by their virile, unsecluded wives and daughters, but unconcerned with the affairs of state.

From the more progressive centers of Teheran and other important Persian cities waves of reflected enlightenment are moving in slowly widening concentric circles to reduce the divergence in present-day Persian life.

The rise of the present Kajar Dynasty was a final attempt to restore a conservative oriental despotism in the midst of a swiftly progressing modern world, and under the long, benevolent rule of Naser-ed-din Shah, who maintained order and obedience throughout the length and breadth of his kingdom, this anachronism gave strange promise of success; but the failure of his successors disclosed the futility of competing with antiquated equipment in the modern economic and political struggle.

The progressive element among the Persians realized their weakness, and in 1906 demanded and secured a constitu-

Source: Available online at http://www.chaonix.com/DL/National_Geography_April_1921.pdf.

While the article acknowledges the country's, and in particular Tehran's, progress, throughout the whole issue there is a scepticism that progressive Persians (Iranians) would be able to modernise their country. Despite these doubts, the section 'Modern Persia and its Capital' ends with the suggestion that prosperity might be achieved through resource extraction and foreign investment:

> But now a new factor has appeared, as though Aladdin had rubbed his magic lamp, portending a rapid change in Persia's status – oil, which has brought wealth and progress to many an unpromising region. This, as well as undeveloped stores of copper, lead, iron, and other products, has attracted the foreign capitalist; and in these days of dollar diplomacy there are bound to be railways and valuable concessions for this most-sought-for of all present-day commodities of commerce… The old Persia is swiftly passing. The new Persia is bound to be economically prosperous (Ibid: 393).

Following the discussion in the section 2.2.1, the special Iran issue of National Geographic is one of many examples from the early decades of the 20th century that demonstrate the linear understanding of 'development' perceived by industrialised nations. This chapter will present the ways in which this early 20th century narrative of development, together with the surge of nationalism in Iran during the same period, had deep-seated implications for urban planning and development in Tehran. The study of Tehran's urban planning and development in this period shows how planning is not limited to the domain of local politics, but rather should be understood in the context of national (as well as global) political economy. This chapter explains the formation of Iran's modern state and its planning system from the Iranian Constitutional Revolution of 1906 to the end of Second World War in 1945. The Constitutional Revolution, discovery of oil and the WWI are crucial for understanding what triggered the regime change and why the new Pahlavi government had to force modern urban planning and development. The imperative to develop Iran into a modern nation-state defined the objectives of its urban planning policy, which in turn shaped the urban form and social structure of Tehran as its capital.

The aim is to demonstrate how the interplay between global and domestic political economy in this period (1906-1945) have important implications for formulation of Iran's spatial development policies and plans. Moreover, this chapter examines the ways in which these key spatial development policies have enabled certain urban visions and plans that significantly shape the urbanisation trajectory of Tehran in the first half of the twentieth century. The role and involvement of key government institutions, local and foreign experts, and the way they operated in this process is of particular interest. Using the conceptual lenses developed in

chapter 2, this study shows how ruling political elite - with the support of educated middle class- deployed certain development policies and urban plans in order to build a modern nation and strong state. In doing so, the next sections trace the rise of certain state institutions that emerged in the early decades of the twentieth century which formed the basis of modern development planning and consequently influenced the urban planning practices and city building processes in Tehran and other cities.

Scholars of early 20th-century Iranian urban planning and architecture such as Hushang Bahrambeygui, Mina Marefat, Ali Madanipour, Mohsen Habibi, Bernard Hourcade, Azam Khatam, Pamela Karimi, and many others have written extensively on how the nation building and urban modernisation policies of the Pahlavi dynasty during the first half of the twentieth century resulted in decisive socio-spatial changes to Iranian cities and, in particular, to Tehran. Madanipour, Hourcade, and Habibi have studied the ways urban planning was exercised through infrastructural design and direct borrowing from the West. Marefat and Karimi have mapped out ways in which urban transformation and the architecture of new residential and public buildings corresponded to the nationalist atmosphere of the time. Khatam carefully traces the socio-spatial consequences of the nation-building strategies adopted by the newly established dynasty and newly formed local professional bodies. This chapter benefited considerably from these valuable studies and aims to offer a multi-scalar analysis of Tehran's urban development in this period to show how the interplay between local, national and global actors and institutions—such as the Tehran municipality, well-known landowners and merchants, the newly established Ministry of Interior, and Western experts—shaped urban planning practices and thus produced the contested and specific practice of urbanisation in Tehran.

The first section (3.2) begins by explaining the connections between the colonial narrative of development in the first half of the twentieth century, the motives for Iran's 1906 Constitutional Revolution, and the rise of nationalism in Iran. It continues by showing the origins of the modern Iranian nation state and the formation of new institutions for national development and urban modernisation. Sections 3.3 and 3.4 show how certain institutional changes and the nature of state spatial development policies aspired to and enabled three main urban development plans, the implementation of which have significantly transformed Tehran's urban form and social structure. The last section (section 3.5) traces the urban and social outcomes of these plans and discusses how the problems that arose from these transformations and the expansion of the city revealed to local architects and engineers the need for urban institutional reform and an official planning agency.

3.2 European Colonialism and the Local Formation of a Modern State

As discussed in the previous chapter (section 2.2.1), the idea of development emerged in the early industrial capitalism of mid-eighteenth century Europe as a way to transform an agrarian society to industrial one and 'to create order out of the social disorder of rapid urbanisation, poverty and unemployment' (Crush, 1995: 10). The colonial atmosphere of the late 19th century and early 20th century expanded that idea to argue that industrialisation was the only true path to development that would end the 'backwardness' and 'chaos' of non-Western territories and colonies. As a consequence of this condition of 'backwardness', the state becomes the strategic receiver of, and the immediate responder to, external colonial and capitalist pressure (Ibid). Thus 'development' became a state practice in non-Western countries, suggesting that without state-led development the future of agrarian nations would be bleak. This meant that, for many of these nations, there was great urgency to establish a strong state in order to be able to develop and catch up with industrialised nations. Moreover, the language of 'chaos' and 'backwardness' created a logical need for external intervention and assistance. Thus, the centralisation of the government, state building, and adopting European legal systems, policies, and working practices became essential for the ruling elites in many developing and colonial countries. The next subsection will describe the ways in which the Iranian ruling class began to internalise the global idea of development and establish a modern state that could bring order to their perceived 'chaotic' society and could help them 'develop' or 'civilise' their backward nation.

3.2.1 The 1906 Constitutional Revolution and the Nation State in the Making

14. For more on the impact of Japan's victory in the war with Russia and its impact on social movements across Asia and other non-Western countries please see Ankaj Mishra, From the Ruins of Empire: The Intellectuals Who Remade Asia, p.5- 11

Throughout the nineteenth century, Iranians struggled to maintain their territorial independence in the face of growing colonial pressure from the Ottomans, the British, and the Russians. At the end of the century, a group of Iranian reformist intellectuals, inspired and influenced by Western thought, and other Islamic reformists, advocating political and moral reform, began to criticise the arbitrary rule of the Qajar monarchy (1789–1925). By the turn of the twentieth century, the decisive victory of Japan in the Russo-Japanese War (1904–1905) – the first non-European country to defeat a European power – had been widely reported in the Iranian newspapers. Japan's success illustrated its transformation from a feudal society into an

industrial nation.[14] This generated both hope and despair among Iranian reformists: hope in that they themselves could reform and develop a strong industrialized nation, despair because other nations such as Japan were already so far ahead (ibid: 6; Matin, 2013). In 1906, the revolutionary reformists for the first time called for a 'constitutional monarchy', as opposed to the pre-existing despotic monarchy. They wanted representative government, social justice, and to resist the encroachment of imperial powers through a conscious nationalism, popular activism, and economic independence. With the great help of the clergy (namely, Islamic reformists) and merchants (the Bazaaris, or the traditional middle class), the Constitutional Revolution (1905-1911) led to the establishment of a 'State House of Justice' (Parliament) in 1906 that would draft laws, help establish a modern bureaucracy, and centralise government control (Figure 3.2). The parliament consisted of five classes of people: the Qajari princes, the clergy, aristocrats, merchants, and landowners.

Simultaneously, similar uprisings spread throughout the region into neighbouring countries like Turkey and Egypt. The Iranian Constitutional Revolution ¬– like other political uprisings in the region – was aimed at dislodging the traditional order by means of popular action and through advocacy for liberalism, secularism, and nationalism (Amanat, 1992).

However, during the First World War (1914-1918), the constitutionalists faced serious political and economic difficulties. The Anglo-Russian invasion of Iran divided the country into Russian and British zones of influence, with a neutral zone in the centre. The north and south-western provinces of Iran turned into a battlefield between Ottomans and Russians, and Ottomans and the British. Thus, vast regions of the country were devastated by war and major famine, posing a significant threat to feudal and mercantile property and power. in

Figure 3.2. Mass demonstration in Sabzeh Maydan (in front of the Tehran bazaar)

Source: postcard, 1905, The National Archives and Library of Iran

Tehran alone 90,000 people died of famine, cholera, and typhus epidemics (Majd, 2003). As Lord Curzon, former British Secretary, wrote: 'Persia, during the war, had been exposed to violations and sufferings not endured by any other neutral country' (cited in Nicolson, 1934: 129).

The wounds of the Anglo-Russian occupation of Iran, deadly famine, and cholera and typhus epidemics, exacerbated socio-political problems and the economy, and affected the development of Iranian nationalism. This situation left the revolutionary nationalist elite and secular reformists – who had originally championed constitutional democracy – 'no other option than to look for a 'man of order' who, as an agent of the nation, to modernise society, and install a centralised, powerful (though not necessarily despotic) government capable of solving the country's growing problems of underdevelopment' (Atabaki and Zurcher, 2004: 15). The constitutionalists were seeking to restore Iran's political and economic independence by creating a strong state capable of governing a modern nation.

It was in this context that the nationalist liberal elite – composed of notables, aristocrats, the Islamic reformists, military leaders, educated people, and all progressive factions of the parliament –endorsed Reza Khan, by then minister of war, as a strong ruler who could end the chaos and rebuild the nation (Katouzian, 2003: 20,25; Khatam, 2015). In 1921, the British government aimed to halt the Bolsheviks' invasion of northern Iran because of the threat it posed to British possessions in India. The British provided material and financial supported for Reza Khan's military forces to help him overthrow the Qajar dynasty and create a new, centralized power. Ultimately, in 1925, with the help of the army, the British government, and the support of the nationalist elite, Reza Khan established the Pahlavi Dynasty – a military-monarchical dictatorship named after Reza Khan Pahlavi.[15]

15. Readers can find a short treatment of the varying narratives and debates on this historical period in Amir-Ahmadi, 2012, Chapter 2. For the social and political history of the Reza Shah era, see: Abrahamian 1982, 2008; Bayat, 1993; Atabaki, 2007; Cronin, 2007, 2003; Chehabi, 1990; Tavakoli-Targhi, 2001; Mahbubi-Ardakani, 1992.

When Reza Shah came to power the country was thinly populated – its 1.6 million square kilometres of territory had only 12 million inhabitants, with a large nomadic population and

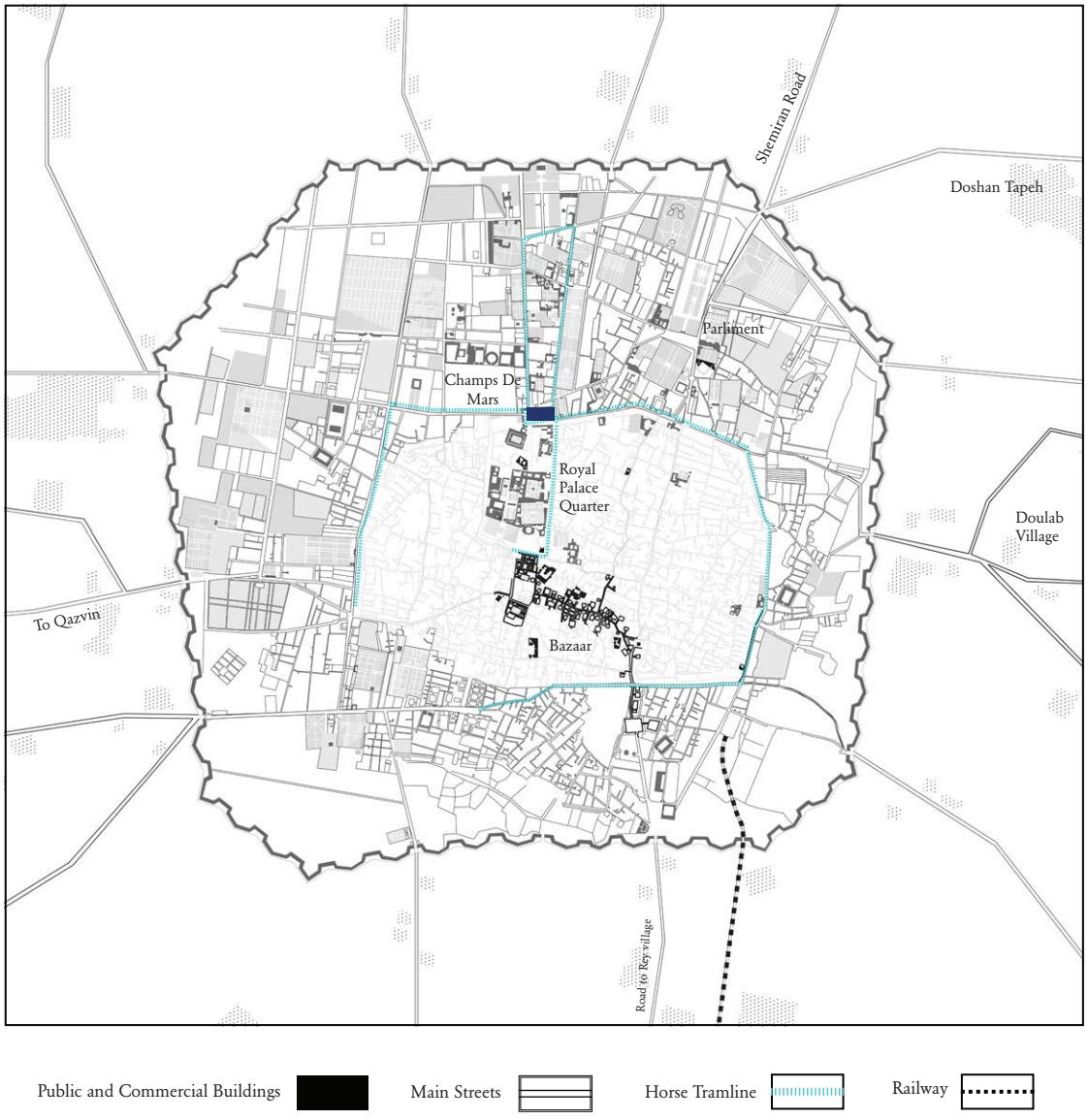
Table 3.1 The population of Iran and its urban-rural distribution (Millions) from 1900-1940

Year	Total	Urban	%	Rural	%
1901	9.92	2.08	21	7.84	79
1911	10.66	2.24	21	8.24	79
1921	11.47	2.41	21	9.06	79
1934	13.32	2.8	21	10.52	79
1940	14.55	3.2	22	11.35	78

Source: from 'Modernisation of Iran, 1921-1941 (Banani, 1961)

only 21 percent of the population living in urban centres (Table 3.1) (Abrahamian, 2008). In 1925, only 2.47 million Iranians lived in cities, and 9.3 million in rural areas (Floor, 1984). In fact, Reza Shah took over a country still lacking a central bureaucracy and with an economic system dominated by agriculture (Cornin, 2003). Tehran as a capital city was nothing like Cairo or Istanbul. Tehran at that time was a walled city of only 16 square kilometres with twelve gates and one horse tramline (Figures 3.3 and 3.4). Its population was only 200,000 inhabitants, while Istanbul and Cairo each had populations over one million. Reza Shah and his elite supporters felt their nation was straggling behind neighbouring countries and desired immediate administrative and industrial reform. In 1927 Reza Shah and the reformist political elite began to modernise the state and create ministries modelled after nineteenth century European ones, leading to the formal organisation of eleven ministries: Foreign Affairs,

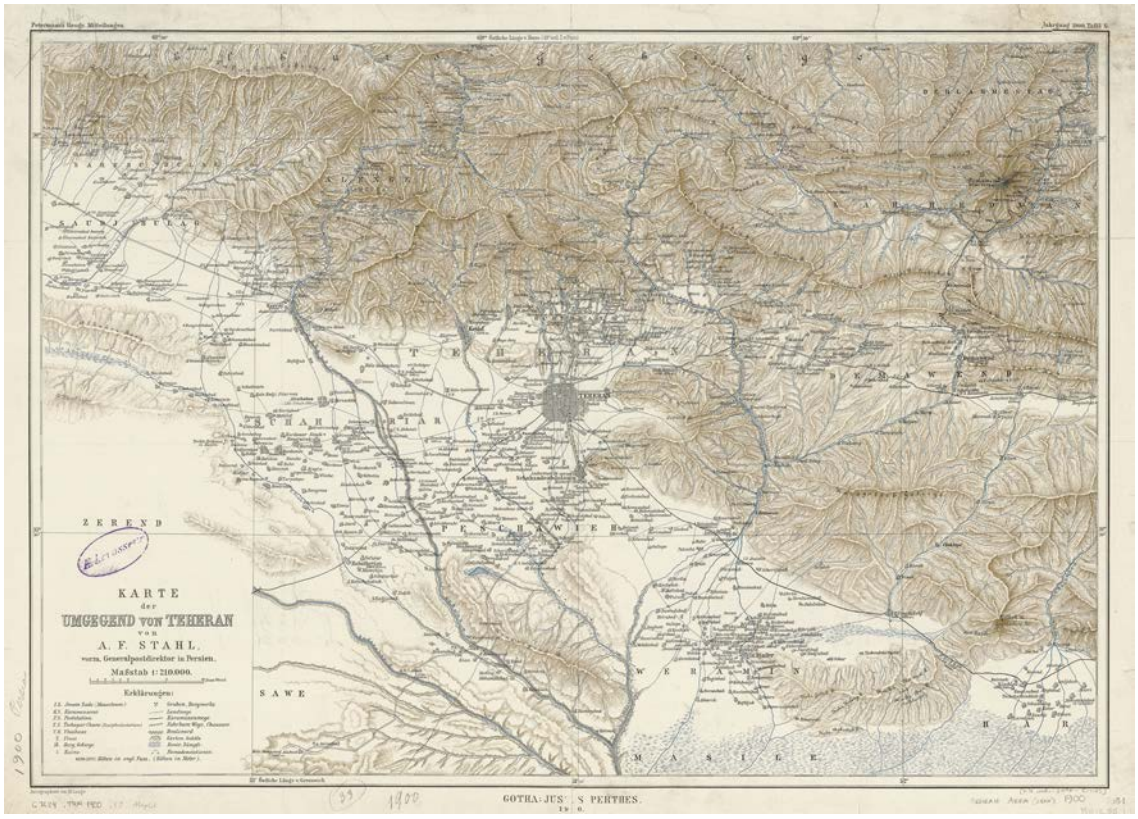
Figure 3.3. The map of Tehran in 1900



Source: Author - Compiled from: map of Tehran in 1891 Sahab Cartography in Tehran; Atlas of Tehran Metropolis, (see bibliography)

Interior, Finance, Justice, Commerce, Post and Telegraph, Endowments, Education, Roads, Industry, and Agriculture. According to Abrahamian (2008: 75), half of the fifty technocrats who worked as minsters with Reza Shah were educated abroad, almost all were masters of multiple languages, and three quarters were sons of titled nobles. This new breed of technocrats created a substantial bureaucracy for the country.

Figure 3.4 The map of Tehran region in 1900



Source: Archive of Iran Cultural Heritage Organisation, accessed July 2012

The seat of the state and the new ministries, as well as military facilities, were all located in Tehran, as will be explained further in Section 3.4.2. The emergence of a full-fledged central government led to the concentration of new public activities and state monopolies in Tehran, along with a relative decline in administrative and economic urban centres elsewhere in the country, especially in Kashan, Isfahan, and Tabriz.

The second major element of Reza Shah's state building policy and legal reforms, which had significant impact on the urban development process of Tehran and other cities, was the 1929 Land Law, which 'concerned the formal consolidations and legal codification of the inviolability of private property in land' (Matin, 2013: 88). Specific legislation required the legal registration – as opposed to the hitherto customary titles – of property and title-deeds. At the same time, the new law strengthened the notion of absolute ownership of land. Following the

1929 Land Law, a new form of land ownership emerged that enabled a group of wealthy merchants, traders, contractors, and high-ranking military officers to become landlords. Thus, a small class of mega-landlords, including Reza Shah himself, rapidly consolidated rural land ownership on a massive scale. By 1941, 37 families owned 20,000 villages (Matin, 2013: 88). All this meant that, in effect, the landowning class ceded the central state to Reza Shah and supported his modernisation and secularisation policies in the parliament against other groups, such as the Shia clerics and Bazaari merchants, in return for protection of their landed interests around cities and in the countryside. The political power of the landlords in the vast countryside was legally consolidated in a 1937 law that enabled landlords to appoint the village-headman as the executive representative of government (Tai, 1974; Matin, 2013: 89). This created two different forms of governance in urban and rural areas, and left the agriculture and trade economies in rural areas relatively unchanged. Therefore, the countryside remained outside of any state development plan and continued to be governed by landlords, while urban centres began to develop substantially under state intervention. The following section discusses the process by which the new state institutions and new urban development projects were established as part of a larger nation-building project.

3.2.2. Institutional Reform and the Emergence of State Agents of Development

Before 1906, the government's role was geographically limited to the citadel area of Tehran (Figure 3.4), and many public services in the city were delivered at the local level, with little interference from the government. For example, wealthy merchants would build mosques, public baths, and water reservoirs to serve the public on a charitable basis. The Shia clergy controlled the judiciary system, supervising local legislation and policing of the city. The government's role was to collect taxes and keep the city clean and hygienic, under the overall control of a governor, who was usually a military officer appointed by the king. The Constitutional Revolution of 1906 marked the beginning of the modern Iranian bureaucracy, which had a significant influence on the urban development of Iranian cities. The national legislation had been formed based on a number of European countries constitutions – especially France and Belgium, who had relatively neutral political position towards Iran (Shafiei, 2011: 82). This resulted in the introduction of certain urban administrative mechanisms of European origin. Thus, immediately following the revolution, the first parliament passed the 1907 Baladiyeh (Municipality) Act, which established municipal governments (Madanipour, 1998) with the aim 'to protect the interests of cities and to respond to the needs of the citizens' (Ibid: 66; Mozayeni, 1974).

This was a turning point, as for the first time the public's political rights were acknowledged. According to the Baladiyeh Act, the management of cities was to be transferred to elected city councils, who would monitor municipal performance and institutionalize citizen participation in city administration (Shafiei, 2011: 82). Municipal and city council responsibilities, according to the new Act, were wide-ranging, including the management of urban affairs, control over distribution of food and water, street cleaning, sanitary regulations, crime prevention, building regulations, promotion of cultural activities, conservation of historical buildings, and town planning. The municipality's sole income would be the gate tax charged to carts and beasts of burden entering the city. Municipality was therefore to be established as a relatively autonomous organisation (Ibid: 67). Tehran was the first to establish a 'Baladiyeh' or municipal government, and nine others quickly followed (Hamshahri Newspaper, 1994). Nevertheless, since the very beginning of the municipal establishment, the national government interfered in Tehran's affairs directly or indirectly, instead of only supervising it. The state included a system of provinces with governors appointed by the national government and within this system the regulations of municipalities and city council decisions had to be signed by the governor in all cases. In the case of a dispute, the Ministry of the Interior or Parliament arbitrated (Karbaschi, 2013). As a result, the Baladiyah Act underwent several revisions and modifications in the following decade. Ultimately, the proper city councils described in the law were never formed, and as with the other democratic aspirations of the revolutionary parliamentarians, municipal autonomy was first watered down and then removed altogether in the centralisation of the Pahlavi government in 1925 (Tajbakhsh, 2005; Tehran Municipality Bulletin, 1993, No.3).

In 1930, the 1907 Municipal Act was replaced by new legislation, which eroded the relative autonomy of municipalities set out in the 1907 law, and turned municipalities into local agencies of central government (Khatam and Keshavarzian, 2016). The Ministry of the Interior became the main actor in establishing municipalities, in appointing their management, and in supervising their affairs. Matters of budgeting, city regulations, and development projects all required authorisation from the Interior Ministry (Shafiei, 2011: 83). Reflecting the growing reach of the central authority, the total number of municipalities across the country increased from 16 in 1924 to 136 in 1940, resituating municipalities as an arm of the central government (Khatam and Keshavarzian, 2016). Thus, the municipality – instead of directly responding to the need of citizens – transformed into an agent to implement state development policy.

The centralisation of the Pahlavi government reorganized power relations at the national level such that the ruling elite – consisting of landlords, high-ranking military officials, and educated technocrats, many from aristocratic families and having graduated from European colleges and universities – was distributed across different sectors of the government, taking

prominent positions in the state apparatus. While the majority of this political elite were invested in the national project and were champions of Iranian independence from foreign powers, they also strongly believed that they had to follow the same path as industrialised Western nations in order to become civilised and modern.

One such example was the Mayor of Tehran, General Karim Agha Khan Buzarjomehri (1886 – 1951), a leading Iranian military general in the 1920s loyal to the Pahlavi Shah. Immediately after the establishment of Pahlavi administration, he was appointed mayor of Tehran. At that point, Tehran was still confined by twelve gates, with the winding streets of the Bazaar and the former Qajar Palace at the centre of the cit. Buzarjomehri would play a key role in the transformation of the city under the direction of the Shah and the Ministry of the Interior.

During the mayoralty of General Buzarjomehri, the municipal government hired architects and engineers to design new buildings and streets. By 1930, a number of engineers and architects from Europe, such as Max Otto Schunemann from Germany, Andre Godard and Maxime Siroux from France[16], and a few Iranian architects who had graduated from European universities, were hired to design a new street system, government buildings, hospitals, a university campus, schools, museums, and factories. Many of these urban reconstruction projects and new buildings required the participation of several architectural and engineering firms.[17]

16.
Andre Godard designed the first archaeological museum of Iran in Tehran, together with Maxime Siroux, an architect and archeologist, working in Iran during 1930s. For more on this topic see Marefat (1988) and Memari va Farhang (2013).

3.3 The Ministry of the Interior and the First Municipality of Tehran

The centralisation of political power under Reza Shah Pahlavi (1925-1941) and later under his son, Mohammad Reza Shah (1941-1979), was accompanied by state developmentalism and a state-led 'scale-making project'. In the late 1920s, the newly established Pahlavi government became a major investor in health and welfare services, educational facilities, infrastructure, and industrial and agricultural development programmes. The ministries and state institutions of the new bureaucratic system were important players in this state developmentalism. The Ministry of the Interior and Ministry of Transport in particular played a key role in the country's urban development process up until 1950, when new state planning institutions started to appear.

In 1930, in the absence of any specific planning institution within the Pahlavi state, the Ministry of the Interior became responsible for all internal administration, provincial governance, urban renewal, policing, sanitation, medical services, census, registration, and conscription (Elwell-Sutton, 1941: 78). Thus, the Ministry was in charge of a wide range of tasks crucial to

17.
It is interesting to mention that the Western companies involved in the railway project of Iran introduced many of the foreign engineers and architects for various urban and architecture projects in Tehran and other cities. The Danish engineering firm Kampsax and American company American engineers ULEN&Co. were among those firms.

national development. The Technical Bureau of the Ministry of the Interior was established in the late 1920s to prepare national and urban development policies. The Technical Bureau was also responsible for executing development projects, and supervising and controlling local governments of different scales: villages, cities, provinces. Hence, a whole range of activities related to national, urban, and rural development were concentrated in one office.[18] In 1930, The Ministry appointed the Austrian engineer Karl Frisch as the head of the Technical Bureau, and employed a number of Iranian and foreign engineers and architects for projects such as the planning and construction of a new street system, schools, hospitals, parks, and government buildings (Farivar Sadri, 2014).

Until the mid-1920s – before the reorganisation of 1927 – the 'General Bureau of Roads', under the Ministry of Public Benefit, was responsible for the construction of roads and bridges across the country. In the first two decades of the 20th century much of Iran was settled sparsely; the major cities were hundreds of kilometres apart, with some roads running through deserts and mountains to connect them. Since there are no rivers in Iran suitable for transportation over any distance, transport through the country was overwhelmingly by land and through difficult terrain. These natural barriers were the main reason why Iran's economy was limited for many centuries to a series of local or regional markets. In 1928 the General Bureau of Roads became a separate 'Ministry of Transport' and began to prepare comprehensive plans for new motorways and a Trans-Iranian railway project (1928-1938). These would unify the nation and become a symbol of the nation's progress and prestige (Devos, 2014). The massive road and railway system was expected to connect major ports to the capital and create a Tehran-centred national economy that fostered domestic circulation of commodities as well as international trade (Farivar Sadri, 2014).

The construction of new railway system in late 1930s together with new motorways supported the state plan for building a national market in Iran. According to Abrahamian, in 1925 the country had no more than 3,200 kilometres of motorway, much of it in disrepair. By 1941, the Ministry of Transport had constructed 22,500 kilometres of motorways and 1,364 kilometres of railways (Grigor, 2014: 107; Abrahamian, 1982). Although these roads were built primarily for military reasons, they laid the infrastructure for economic, and especially industrial, development (Abrahamian, 1982: 146). This construction of roads and railways brought significant changes to Tehran. By 1940, Iran's economy had grown considerably as a consequence of the development of modern industries, a rise in exports, and an increase in agricultural output.

The following section explains in detail the preparation and implementation of a number of state development projects and spatial policies, such as the transnational railway project, the Street Widening Act of 1933, and the plan for a new administrative centre in Tehran, and explains the ways in which these policies and projects transformed Tehran socially and spatially.

18. Most of the documentation concerning the design and execution of these projects was lost during the reorganisation of Ministry of the Interior after the 1979 Revolution. Thus, it is very hard today to find any records of these projects at the archive of the Ministry. Despite this lack of archival material, there are a series of secondary sources, published memoirs, and interviews from professionals who worked at the Technical Bureau, which together are enough to demonstrate how the Ministry of the Interior, its Technical Bureau, and the Tehran Municipality became the main agents of urban modernisation and development in Tehran during this period.

3.4 Urban Policies and Plans to Build a Modern Capital

Only a few years after Reza Shah came to power, the parliament passed a number of national development policies. The ultimate objectives of urban development in Iran were twofold: (1) building a modern nation through the development of infrastructure and (2) making modern city centres consisting of public buildings, boulevards, parks, cinemas, and commercial facilities built with state of the art material and technology. However, trained managers, engineers, town planners, architects, and skilled personnel were lacking at all levels. Therefore, the municipality, the Ministry of Transport, and the Ministry of the Interior became highly dependent on foreign expertise and technical assistance. Only a small group of Iranian professionals who had graduated from European universities were qualified to participate in these projects, and they still worked in relatively junior roles under the supervision of foreign experts (Marefat, 1988).

This section studies three major national development projects from between 1925 and 1945, traces the influence of these projects on Iran's planning system, and considers the ways in which they shaped the urban modernisation and development of Tehran in particular. The first project was the construction of the Trans-Iranian Railway (1928-1938), which was intended to facilitate the development of trade and industry, to establish a national market, to connect Tehran to different parts of the country, and to consolidate the unity of the nation. The second was the 1933 Street Widening Act, which was meant to modernise Iranian cities and prepare them for the arrival of new institutional buildings, new spaces, and new modes of transport – primarily trains and motorized vehicles. Lastly was the urban renewal plan for the centre of Tehran, which was intended to build a modern administrative centre. The ambition of the plan was to transform the 19th century centre of Tehran into a modern seat of government and a symbolic representation of state power.

3.4.1 Railway Infrastructure and the Transformation of Southern Tehran

Discussions around building a railway system in Iran had existed since the late-19th century. Railways were seen as an essential component of industrialization and as tools for the movement of goods and labour, and thus figured prominently in the international development narrative. Percy Sykes, a British diplomat in Iran in 1921, wrote:

> The only satisfactory solution of the problem of transport lies in the construction of railways… Their influence would probably help the country to pass quickly from the civilisation of the Middle Ages to that of the twentieth century, and would make for progress, wealth, and stability… Her friends earnestly hope that within the next decade Persia may be crossed by a railway system linking her to Europe on the one hand and to India on the other; for it is not too much to say that until the problem of transport has been solved by the construction of railways, there will be little material progress (Sykes, 1951: 480).

Britain had also expressed an interest in railway lines that could connect various oil-producing regions in the Middle East. However, these projects were put on hold due to the complicated relationship between Britain and Russia and the Russo-Japanese war in 1905 (Spring, 1976). Yet in 1912 Russian, French, and British financiers formed a Société d'Etudes to again plan a trans-Iranian railway (Ibid). The proposed system would link Tehran with the Torkaman Port on the Caspian Sea in the north and the Shahpur Port on the Persian Gulf in the south, both of which were industrial centres for textiles and oil.

19. There was opposition to the trans-Iranian railway project and the decision by Reza Shah to build a north-south railway rather than one from west to east. The decision was highly politicized, especially due to the pressure from the British and Russians. For more on this issue see Clawson, 1993: 235-250.

In the late 1920s Reza Shah revived the long-delayed idea of building a trans-Iranian railway, but this time it was specifically framed as a nation-building project, independent of foreign interests. The construction of the railway in Iran turn out to be the most important transportation project of the time. Until 1928, the railway was politically obstructed due to the Russian and British rivalry for domination over Iran, as well as the insistence of the Iran nationalist elite on a state-led trans-Iranian railway project (Koyagi, 2015). The political elite feared foreign domination via an imperial railway project, but they could not find enough capital to construct the project themselves (Ibid). By the time that the Iranian parliament approved construction of the railway in 1928, many Asian and African countries – especially the ones under colonial rule ¬– had already undertaken extensive railway construction, and railway technology was no longer the latest symbol of modernity.

The railway was funded by taxes imposed on sugar, tea, and other goods – without resorting to foreign loans. Preparation for the trans-Iranian railway was undertaken by the Ministry of Transport beginning in 1928, with the technical assistance of a large number of European and American engineering companies. In 1927, the American engineering firm Ulen & Co formed an international syndicate with a German consortium (consisting of Philipp Holzmann, Julius Berger, and Siemens Bauunion) called the 'Syndicat pour Chemins de Fer en Perse' to carry out construction. Despite framing the railway as a nation-building project, the route was similar to the one proposed by the Société d'Etudes 15 years earlier, travel-

Figure 3.5 Trans Iranian railway connecting Shapur Port on the Persian Gulf to the Torkaman Port on the Caspian Sea via Tehran

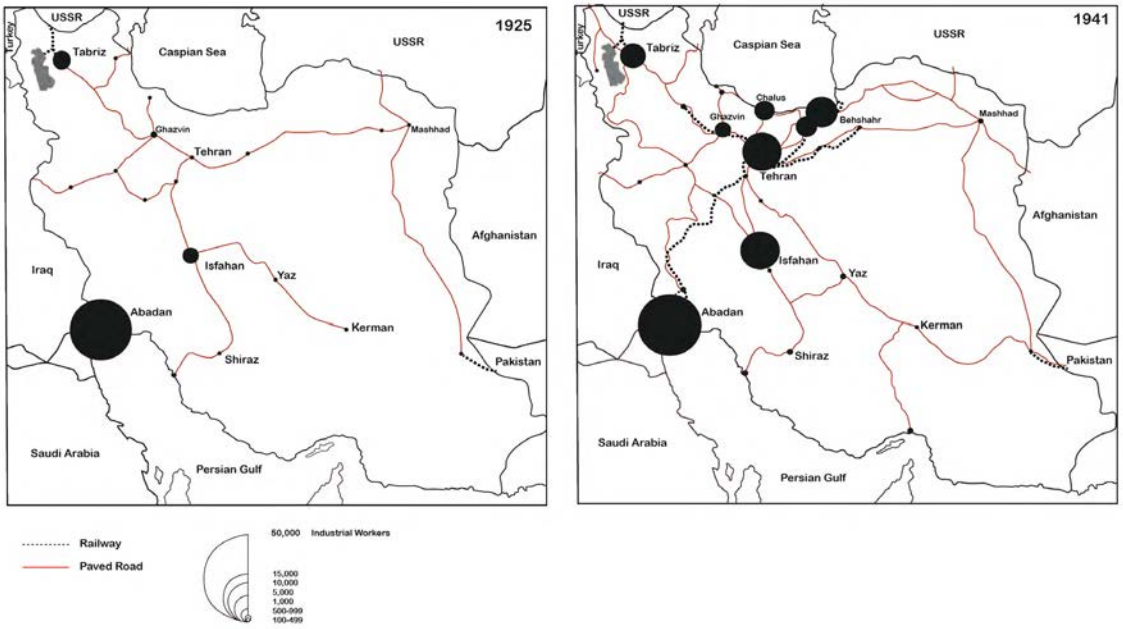
Source: Ajam Media collective, open access, available here https://ajammc.com/2015/12/07/mikiya-koyagi-trans-iranian-railroad/

ling 1,400 kilometres from the Torkaman Port through Tehran to Shahpur Port (Figure 3.5) (Clawson, 1993).[19]

Figure 6 shows how the centre of economic gravity moved from Abadan (home of the largest oil refinery in Iran) to Tehran within a span of 16 years (between 1925-1941), primarily due to the railway. The new railway linked Tehran to seven major cities and two major ports, resulting in a high concentration of industry and trade in the south of the city, where the main station was located. The arrival of the station – as well as new factories for tobacco, cement, textiles and a power plant ¬– brought a large migration of workers from rural areas to the south of Tehran. Yet no new residential housing complexes were planned to accommodate workers. Working class families mostly moved to the area south of the Bazaar and to older residential districts, leading to an increase in population density. The lack of housing there caused major problems in the coming years.

The Tehran railway station was among the first stations to be built in the early 1930s. Rather than passing through the centre of the city, the line skirted the city's southern edge, south of the Bazaar. The station was sited next to the ruins of the former city gates, far from the main commercial and social areas of the city (Figure 3.7). The area around the station became a major industrial area, populated with storage depots, repair shops, and offices. The station itself was designed by Wladyslaw Horodecki, a Polish architect who graduated from

Figure 3.6. Main urban industrial centres and connecting infrastructure in 1925 and in 1941



Source: Author. Compiled from the EnCyclopedia Iranica, available www.iranicaonline.org. Copyright Dr.Ludwing Reichert Verlag, Tauernstrasse 11, D-6200 Wiesbaden).

St. Petersburg Academy and who previously worked with Ulen & Co on infrastructure projects in Warsaw. During 1935 and 1936 the station was built by the German Company Philipp Holzmann. The building was one of the first major pieces of modern architecture designed by a foreign architect in Tehran (Figure 3.8). As Grigor notes, the Tehran train station was a good example of the link between technology and avant-garde architecture, with its simple forms, lack of ornamentation, adaptation of glass, and use of concrete and steel construction (2014: 107). While the building was intended to signal the progress made during the Pahlavi dynasty, its seclusion in the south – distant from the political and economic

Figure 3.7. View of the railway line arriving in the southern part of Tehran

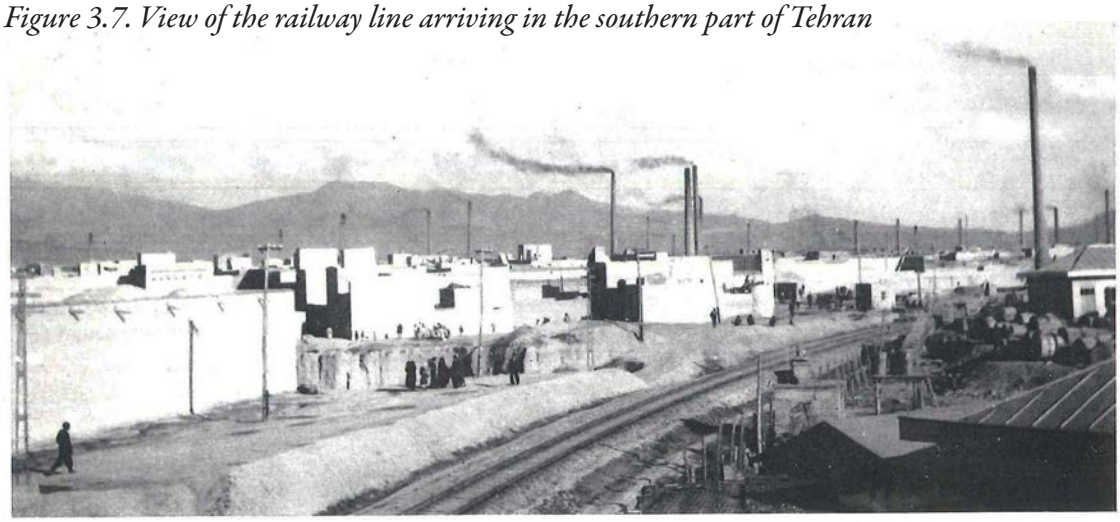
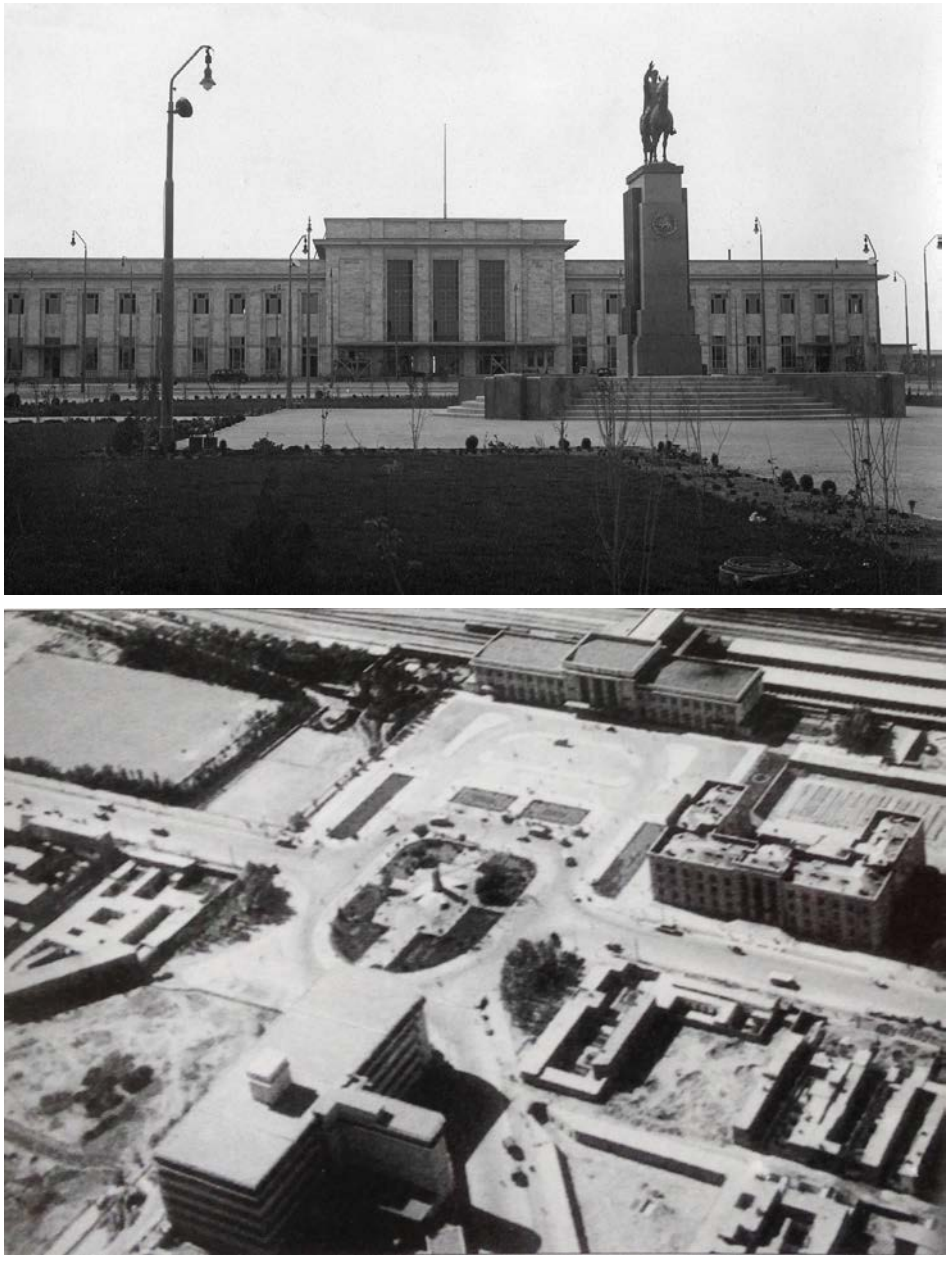


Photo by: Peter Georg Ahrens, published in his book Die Entwicklung der Stadt Teheran (Tehran urban development), Schriften des Deutschen Orient-Instituts

centre of the city – and the subsequent development of industry around it meant that it never achieved the same kind of civic grandeur as train stations in other major capitals.

Figure 3.8 Tehran railway station building 1935-136



Source: the top photo, Archive of 1936 Bildarchiv der Philipp Holzmann AG. https://holzmann-bildarchiv.de/bauhistorische-forschung/bahnhof-teheran/
The bottom photo by: Ali Khadem, published in Architecture of Karim Taherzadeh: Architecture in Transition, 2005, Tehran, Iran

3.4.2 Physical Development and the 1933 Street Widening Act

The 1933 Street Widening Act was the first national urban policy for the modernisation of Iranian cities. The Ministry of the Interior was responsible for preparing a set of regulations for the implementation of this policy in different cities (Farivar Sadri, 2014). The act aimed to rebuild, enlarge, and widen old narrow streets and encourage the construction of new wide and straight streets, all with lighting and pavement. This was done under the rationale that the narrow passageways of older neighbourhoods had to adapt to the arrival of new industries, commerce, and transport. This echoed many urban planning projects in European cities carried out in the nineteenth century, such as in Paris and Barcelona, which aimed to deal with rapid urbanisation and clear old dense quarters in favour of a rationalized, geometric street system. However, the population of Iranian cities was nowhere near population of Paris or London, and even in the early 1930s industrialisation had just begun (Hourcade, 2008). Therefore, the 1933 Street Widening Act was in essence a state-led project with the ambition to fundamentally modernise Iranian cities, in particular Tehran.

The Ministry of the Interior provided technical assistance to the Tehran municipality and supervised the planning and implementation of the street system. The municipality was obliged to prepare the survey and map the intended streets, as well as determine landownership alongside them. Moreover, the municipality had to value the lands and buildings alongside the planned streets and buy them from their owners. In order to construct new streets or widen existing ones, the municipality had to: select the path, measure the length and width of the street, survey and map the buildings and land alongside the street, prepare the blueprint plans and technical drawings, determine the total area of buildings that had to be demolished, and lastly determine the compensation owed to the owners (Farivar Sadri, 2014). In the following section I describe in more detail the process of buying land from citizens for the construction of the street system and other urban projects. After the preparation of plans, maps, and documents, the municipality would send them to the Technical Bureau at the Ministry of the Interior for final review and approval.

The Technical Bureau consisted of five departments: mapping and street widening, urban services, parks, architecture, and urban infrastructure. All five departments were mostly run by German[20] , French, and Austrian engineers, rather than architects or planners. As the name of the department indicates, the 'mapping and street widening' department was in charge of the supervision and implementation of the Street Widening Act. In its division of departments,

20. Iran and Germany, both experiencing anti-British sentiments, developed a strong relationship during the inter-war period. Hence, until the Second World War, Germany provided many advisors and much of the technology for Iran's industrial and infrastructural projects. The relationship with Germany ended with the Allied occupation of Iran in the Second World War. The only development project that was granted to Britain (to the firm Sir Alexander Gibb and Partners) between 1925 and 1954 was a large irrigation and hydro-electric project on the River Lar to divert some water onto the Tehran plain and provide a modern water supply for Tehran. For more on this project see: Kingston, 2002.

the Technical Bureau reflected the urban planning culture and development mentality at the time.

The physical and technical approach to the city and urban development even appeared in the organisation and formation of Tehran University and its faculties in 1935. Priority was given to the five major faculties – Industry, Science, Art, Medicine, and Law. There was no planning school and the school of architecture was established a few years later as part of the faculty of Fine Art in 1941. André Godard, the French architect and archaeologist appointed dean of the architecture faculty, and Mohsen Foroghi, an Iranian graduate from the École des beaux-arts and a son of a famous statesman, together with the French architects Roland Dubrulle and Maxime Siroux and the Swiss architect Alexandre Moser were all instrumental in establishing the faculty of architecture and fine art. These architects closely modeled the architecture faculty on the École des Beaux-Arts syllabus; the projects taught there were translated into Persian and used for teaching Iranian students (Marefat, 2002: 106). Yet engineering was the dominant field of study, and compared to art and architecture it operated at a much larger scale. Various engineering programs and laboratories were established as part of the faculties of both Science and Industry. A few foreign professors were employed in these faculties, and many of the Iranian teachers had been trained in Europe.

21.
For a good discussion of the Shah's attitude toward the West, see Elwell-Sutton (1978): 42-43.

The Overhaul of Tehran's Street System

Western perceptions of Tehran's urban form and infrastructure were significant factors in Reza Shah's state urban reconstruction policies. He was keenly aware of the attitudes of the West, even as he resented the image of Iran as a backward nation without a future.[21] He set out to prove the falsity of this view by modernising the city. Thus, the old pattern of Tehran's residential neighbourhoods (mahallas), that had been criticised by many western visitors for their narrow dusty paths and unsanitary conditions, had to change.

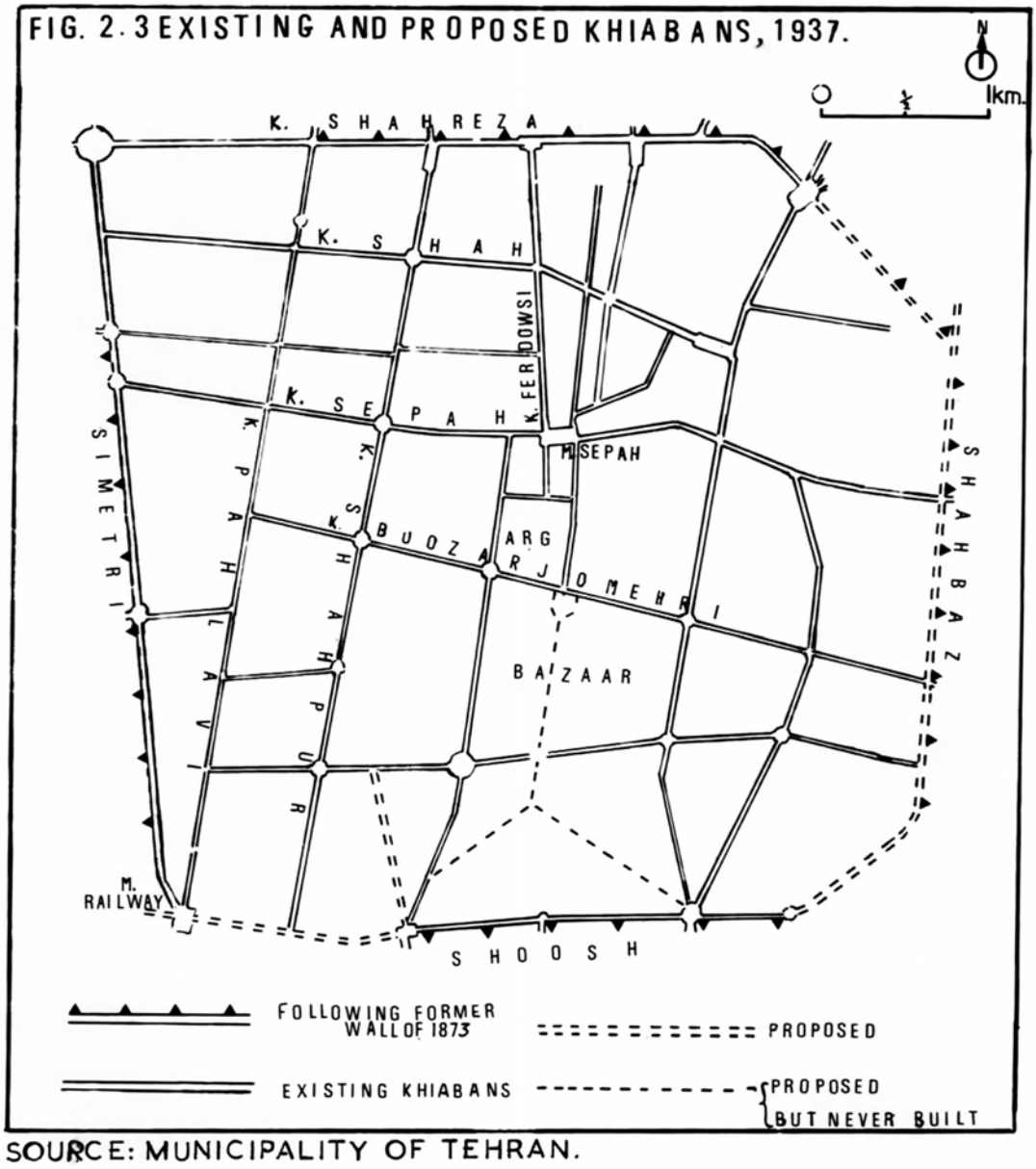
The Tehran municipal government prepared a new bilingual (Persian and French) 'Street Layout Plan' for the city, designed by a French engineer, Francois De Romeiser, who was working at the municipality at the time (Figure 3.9) (Shirazian, 2013). The date on the plan is 1930, which shows that the Tehran municipality had already begun preparing a street plan for Tehran few years before the Street Widening Act. Nevertheless, based on Hushang Bahrambeygui's research in 1977, planning and construction was happening simultaneously until the plan was finalised in 1937. Figure 3.10 shows the 1937 scheme of the street layout plan and the general structure of the street system, while Figure 3.11 shows how the maze of alleys and cul-de-sacs that formed the old quarter of the city was ruthlessly divided by new, straight avenues that had little respect for even the mosques and the Bazaar. The street plan encouraged motor traffic, and thus it soon became obvious that the city's gates and walls

could not be preserved. The gates were used previously only to tax carts and beasts of burden entering the city, but the new taxation system made the gates little more than historic monuments, with no particular function for the city. Thus, the gates had been neglected and were gradually demolished in the second half of 1930s. The moat was filled in and the rampart levelled, giving space for new avenues and new buildings to line them. Only later was the loss of the gates regretted, when rapid modernisation had deprived Tehran of many of its historic monuments.

Figure 3.9. Tehran Street Layout Plan 1930 - The Black dotted line shows the new streets and the red dotted lines show widening of the existing streets

Source: Published in Architecture and Culture Magazine, Vol (15): 52. 2013 - Originally from the Archive of Houd Firm

Figure 3.10. Tehran Street Layout Plan 1937



Source: Tehran Municipality - Published in Bahrambeygui, "Tehran Urban Analysis' in 1970

22.
The street plan not only provided modern transportation and easier circulation but also transformed Tehran into a more hygienic and secure city. The municipality developed new amenities, such as a formal water supply and drainage, sewage, and electricity. In the southern part of the city, Tehran's electric power plant was built to provide electricity and, for the first time, street lighting. Due to water shortages, a 52-kilometre canal was built bringing water from the Karaj River, entering the city from the northwest. Consequently, the city's water supply increased. However, the sewage and water system was not completed at the end of the first Pahlavi period.

The Street Layout Plan that began in early 1930s provided the framework for the urban expansion and modernisation of Tehran for more than two decades. The new system imposed a degree of geometric regularity on the city, while monuments of national heroes were strategically placed to emphasise significant intersections (Figure 3.12) (Takmil Homahyoun, 2000). This new grid of boulevards superimposed on top of the old walled city was meant to improve the quality of the city by making it look more modern and European.[22] The new street system was implemented in a short period of time and forced many people to relocate to newly developed areas. Consequently, within less than a decade, around 30 percent of the city was bulldozed, with some buildings replaced by open squares, wide avenues, and municipal parks (Grigor, 2013).

Figure 3.11. The aerial photo of Tehran historic core in 1937 after implementation of new Street system

Source: Archive of National Cartographic Center of Iran (NCC), Tehran, accessed August 2014.

While the inhabitants of residential neighbourhoods in older quarters of the city resisted the changes, Tehran's military-governed municipality had no tolerance for citizen participation in shaping the city. Many Tehranis questioned the plans, but the only successful opposition came from the clergy and influential merchants at the Grand Bazaar (Tehran's central market place), who saved the bazaar and a small number of residential neighbourhoods around it. Therefore, as we see in Figures 3.9 and 3.10, the street that was supposed to cut through the Bazaar was never implemented, and instead the Bazaar was caged by wide and straight avenues connecting it to different parts of the city.

New asphalt avenues were built within a short period of time and old streets became wider. Houses or shops that were in the way of the new boulevards received a red flag on their door from city hall and were demolished forty days later (Takmil Homahyoun, 2000). The new avenues were named after the king, the military, and other powerful international political figures, for instance Avenue Reza Shah, Avenue Churchill, or Avenue Pahlavi.

Figure 3.12. Mokhber-al Dowleh crossing in late 1930s

Photo by: Mahmoud Pakzad, postcard-1930s – Iranian Institute for Contemporary Historical Studies

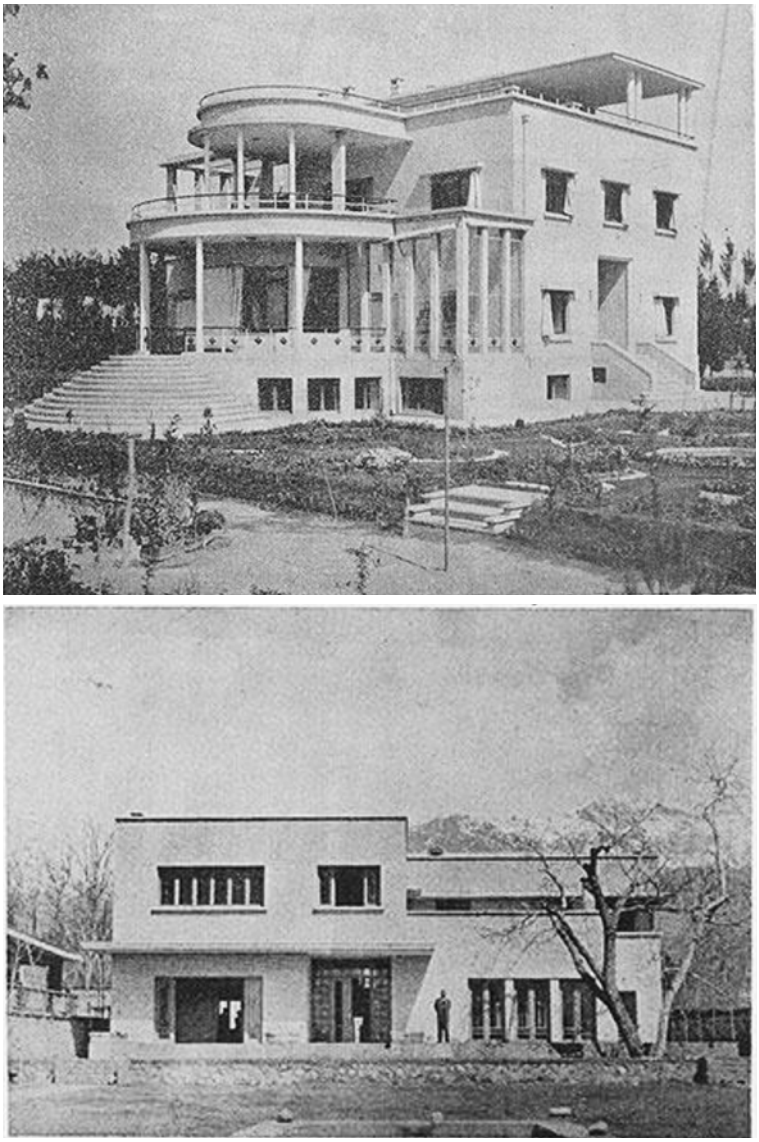
The State Mortgage Bank (Bank Rahni) was established in 1938 with the support of the National Bank (Bank Meli) and the Ministry of Finance. Offering £2.5 million in support, the initial role of the bank was to help the displaced to re-build houses in the spaces remaining after the street widening campaign (Bostock and Jones, 1989). The support of the Mortgage Bank and the newly built transportation network facilitated public and private investment in Tehran and other cities, resulting in urban growth in nearly every direction (Habibi and Salimi, 1997: 43). New western-style streets and buildings rose at their curbs, extending the city and producing entirely new neighbourhoods.

The geography of the city also shaped the social and physical characteristics of these new neighbourhoods. In the north, for example, Tehran is surrounded by a high mountain range. The northernmost part of the city is some 640 metres higher than the southernmost parts, which border the central desert of Iran (Madanipour, 1999). Thus, the northern parts of the city had a more moderate climate, with cooler summers and more rain fall, and consequently were colonised by affluent and well to do families.

The avenues and districts in the northern parts of the city enjoyed the highest standards of living, due to the better climate, the presence of Europeans, and more affluent residents (Figure 3.13). This concentration of wealth left the area with better infrastructure and services

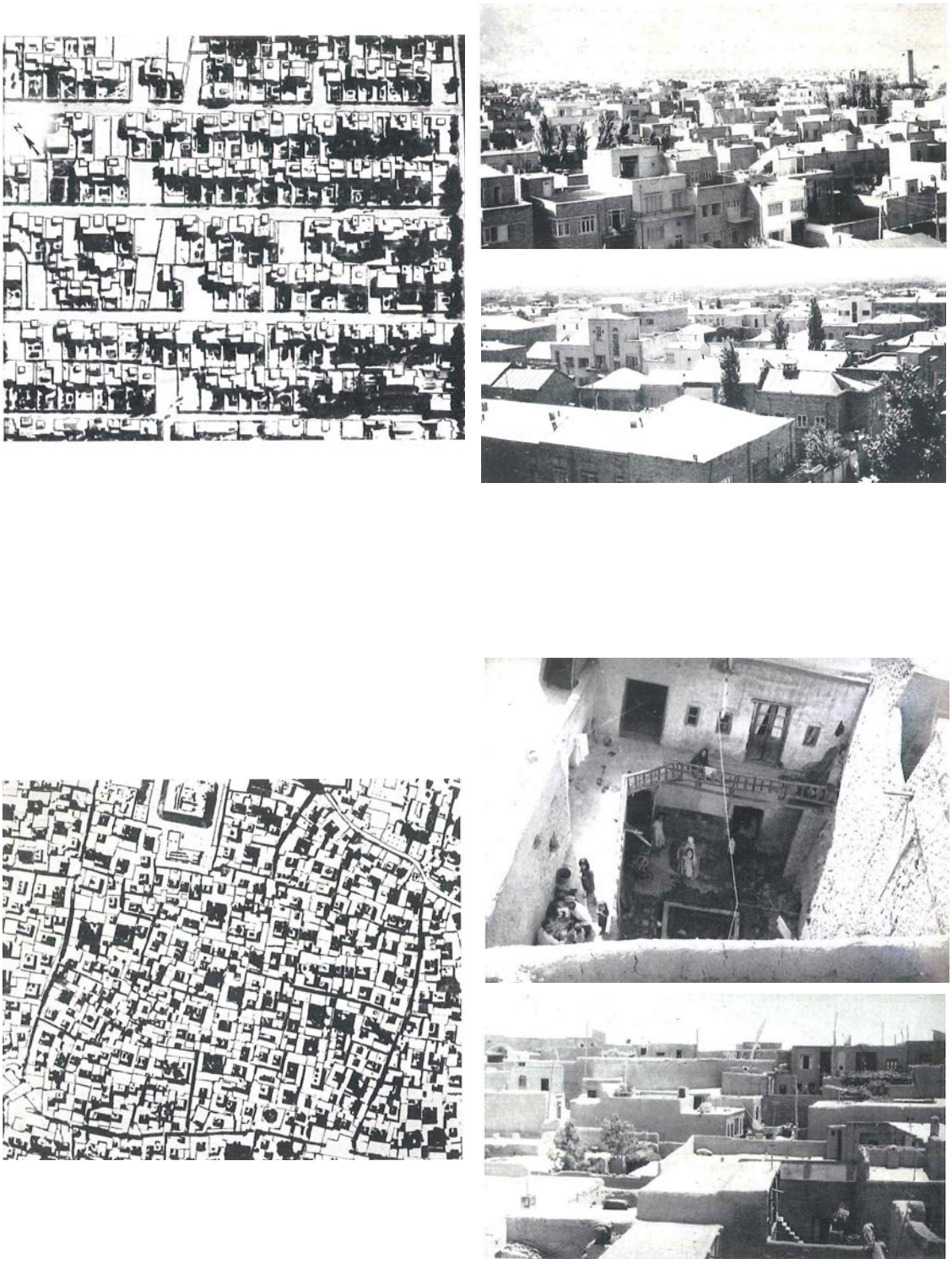
than elsewhere in the city. Tehran was left with a distinct pattern of segregation: the rich and upper middle class in the north, and the poor and working class in the south, close to the new train station and industrial area (Figure 3.14). The working class was concentrated in older neighbourhoods around the Bazaar and the poor were settled in two districts, Qanatabad and Mohammadabad, south of the railway station, where brick workshops, slaughterhouses, and new factories cropped up (Khatam, 2015: 69). The names of many of the streets and alleys in these poor neighbourhoods – like Zoghalforush-ha (coal sellers) Alley, Qaterchiha (mule drivers) Alley, and Sabunpaz (soap makers) Neighbourhood – is indicative of the importance of an industry to the identity of the neighbourhood (ibid). Ultimately, a new class of bureaucrats and the working class that began to emerge in Tehran, and their different ways of life, became embedded within distinct parts of the city.

Figure 3.13. Villas of Affluent and rich Tehranis in the north parts of the city early 1940s



Source: Memari Novin Magazine, fall issue, 1948, Private archive of Ali Farivar Sadri

Figure 3.14 Top images illustrates the residential apartment building developing towards the north parts of Tehran and images on the bottom show areas of south of Bazaar and housing condition of poor and working class



Source: Archive of The Iranian Ministry of the interiors, published in Peter Georg Ahrens (1966) 'Die Entwicklung der Stadt Teheran' (Tehran urban development), Schriften des Deutschen Orient-Instituts

The new streets and boulevards of Tehran showcased its transition to modernity, and became the main public spaces where middle and upper class residents displayed their wealth and style – and, consequently, their values. Annie Boyce[23] called the new boulevards in Tehran the 'Mecca of the dandies' and Lalehzar Avenue in the centre of the city became 'a promenade for the perfumed youth of the city who were now dressed according to the "national style."' (Boyce, 1923: 1-5; Karimi, 2009: 104). In the writings of local authors, the dandies of Tehran in this period are referred to as fokoli (the man with the suit and bow tie), who in some literature is compared with the 19th century dandies of Paris or flaneurs, as Walter Benjamin called them (Milani, 2004). Therefore, the new boulevards became the embodiment of modernity in the city, displaying new forms of life and citizenship. They displayed the social habits of the emerging bourgeois lifestyle adopted from European cultures, with cafés, restaurants, cinemas, and shop windows – all of which had the effect of excluding the poor from these spaces. The boulevards revealed the symbiotic relation between Tehran citizens and these new cultural and commercial spaces, and became very important in shaping the nature of public space in the city.

23. Annie Boyce was an American missionary teacher in Tehran from 1906 to 1949.

Ancient and Modern: A New Architecture Style for the Nation

As part of his larger nation-building ambition, in the 1920s and 30s the Shah set about reviving Persian cultural heritage, with a focus on the pre-Islamic era and the Achaemenid Empire (550-330 BC), when Persia was a strong and united empire under Cyrus the Great, one of the most respected kings of the ancient world (Marefat, 1988). The Shah – with his nationalist and secularist aspirations – named his dynasty 'Pahlavi' after the language of the Achaemenids, and encouraged all people to think of themselves as pure Aryans, like those who had lived in the region before the Arab, Mongol, and Turkish invasions (Ashraf, 2006). Thus, he changed the name of the country from 'Persia' to a derivation of 'Aryan' – 'Iran' – and declared that the people were to be known as Iranians (Ibid).

24. In 1922 a group from the nationalist elite founded the Society for National Heritage (Anjomane-e-Asar-e Meli) in Tehran. According to its declaration, it was established 'to enhance public interest in ancient knowledge and crafts and to preserve antiquities and handicrafts and their ancient techniques'. For an extensive study of how the Society of National Heritage developed see Grigor, 2004.

The Pahlavi state promoted the idea that Iranians belonged to a modern nation with a glorious history spanning more than 25 centuries. Architecture and, in particular, archaeology became a convenient instrument for advocating for nationalistic and modernising agendas.[24] It is no accident that two of the most influential French architects in Tehran – Andre Godard and Maxime Siroux – were actually prominent archaeologists. Iran's archaeological history, developed and written primarily by French and German experts, provided the vocabulary and material necessary for shaping new, symbolic state architecture. Ancient kings and warriors were cast in stone on the facades of new civic buildings, as well as symbols of Zoroastrianism, such as the Eagle of Ahura Mazda, and of Persian mythology, like the winged lion and

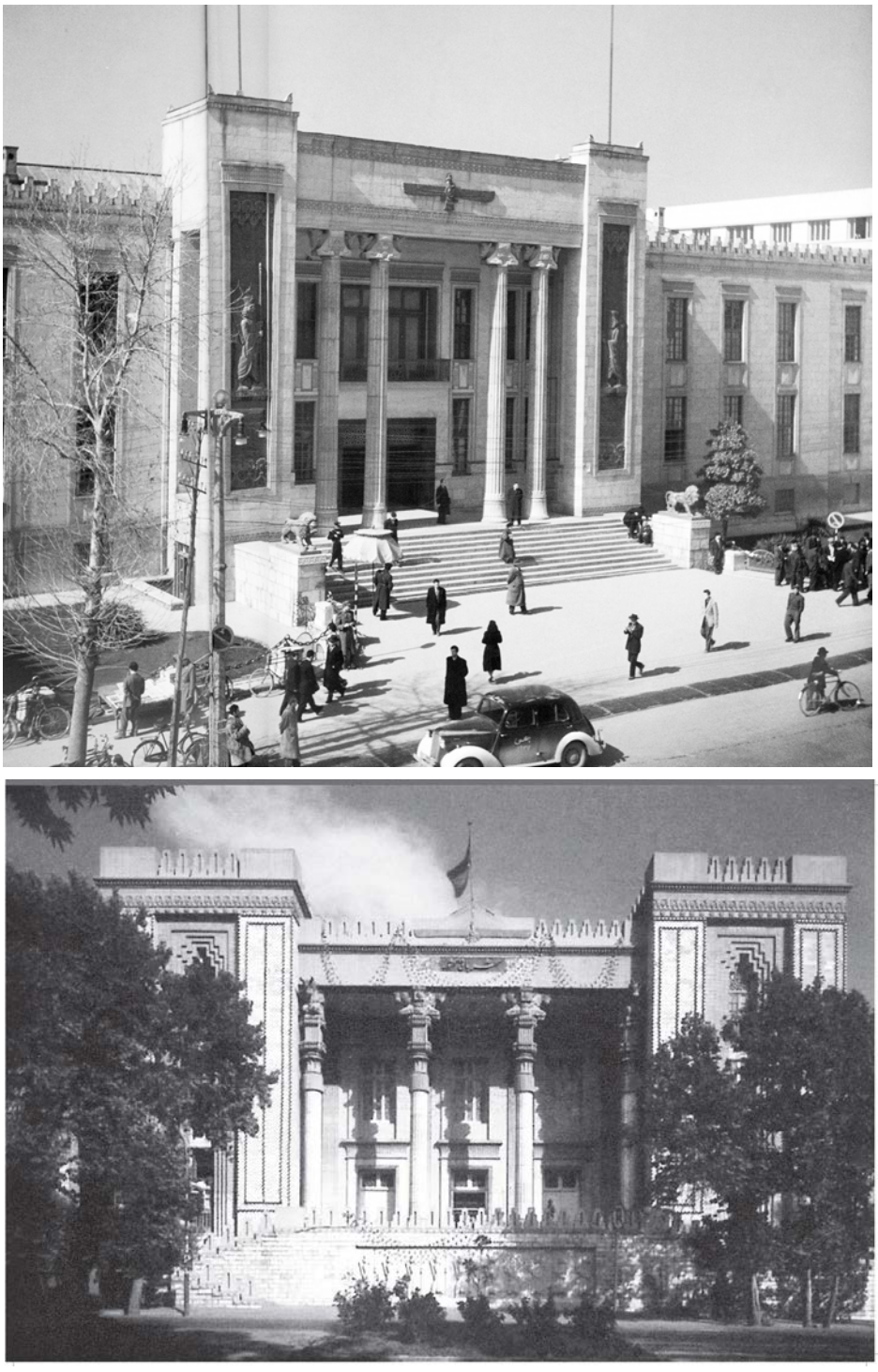
bull-headed capitals (Figure 3.15) (Marefat, 1988)[25]. Historians of modern architecture in Iran, such as Marefat, Grigor, and Mokhtari have identified two main characteristics of state architecture in the first half of the 20th century: the 'pre-Islamic', with its Ancient Persian characteristics, and the 'post-Islamic', with its international, rational, functional, and secular characteristics. The ambition was to create a hybrid architecture that combined modern construction techniques and materials with ancient architecture and culture.

To help form this new architecture, the municipality hired Armenian-Iranian avant-garde architect Gabriel Guevrekian as the city's Chief Architect in 1933. Guevrekian was born in Istanbul, grew up in Tehran, studied in Vienna, practiced in Paris, spent five years as the general secretary of CIAM, and a year later moved back to Tehran to supervise and design the government enclave in central Tehran. Despite his short stay in Iran (1933-1937), he is considered one of the main protagonists in the shaping of modern Tehran (Marefat, 2002). He had a functionalist approach to architecture in the same spirit as his fellow CIAM members. For him, architecture was distinct from art – it was a science that must respond to the requirements of the user (Guevrekian, 1929). However, he and his colleagues were under pressure from the state to create buildings that would revive and promote the architecture and culture of the Achamenenids Empire.[26] This tension between modern ambitions and references to the past was manifest in the architecture of a new administrative centre in Tehran.

25.
For more on how archaeology helped materialize political power and sense of national identity in Iran see: Abdi and Kamyar, 2001.

26.
Among the architects who participated in various projects in Tehran are Nikolas Markov (Russian architect, graduate of Saint Petersburg College), Andre Godard (French architect and archaeologist, graduate of the École des Beaux-Arts of Paris), Maxime Siroux (French archaeologist and art historian, graduate of the Paris National School of Fine Art), Mohsen Foroughi (Iranian architect, graduate of the École des Beaux-Arts of Paris), and Keyghobad Zafar (Iranian architect, graduate of the Royal College of Art in London). They collaborated with each other and with other companies. Among others, Godard, Foroughi, and Siroux collaborated on Tehran University. Siroux, Godard, and Markov worked together on the Iranian Bastan Museum (the ancient history museum).

Figure 3.15. The image of Meli (National) Bank in 1946 (on the top) and the Building of Ministry of Foreign Affairs (on the bottom) - Both buildings were designed by Gabriel Guverkian the head architect of Tehran municipality



Source: Top image, Life magazine photo gallery. Open access -
bottom image, Archive of Iran Cultural Heritage Organisation.

The Urban Renewal Plan for the New Administrative Centre of Tehran

The plan to build an enclave of government buildings began simultaneously with the street widening in the 1930s. The new administrative district was designed by the municipality and executed on two sites adjacent to the 'Place des Canons', which was the centre of late-19th century Tehran, just north of the Bazaar (Figure 3.16). As the map shows, the two sites – the former walled Qajar Royal District and the former military parade ground, 'Champs de Mars' – were selected and converted into new ministries and public buildings, such as the Ministries of Justice, Foreign Affairs, and War, and the Iran National Museum (Figures 3.16 and 3.17). The wall and a large area of the former Royal District were demolished, except for the two most significant Qajar palaces: Golestan Palace and Shamsolemareh (Figure 3.17). These former palaces were converted into the national bank, a military university, and offices. The second site, Champ de Mars, was an open space that had formerly acted as a polo-pitch, racecourse, airfield, and football ground. Nearly all of the old buildings on the site were demolished for the creation of a new government quarter, including the police headquarters, the National Post Office, the Ministry of War, and army headquarters. On the west side of the site various cultural establishments were built, such as the Iran National Museum and a library.

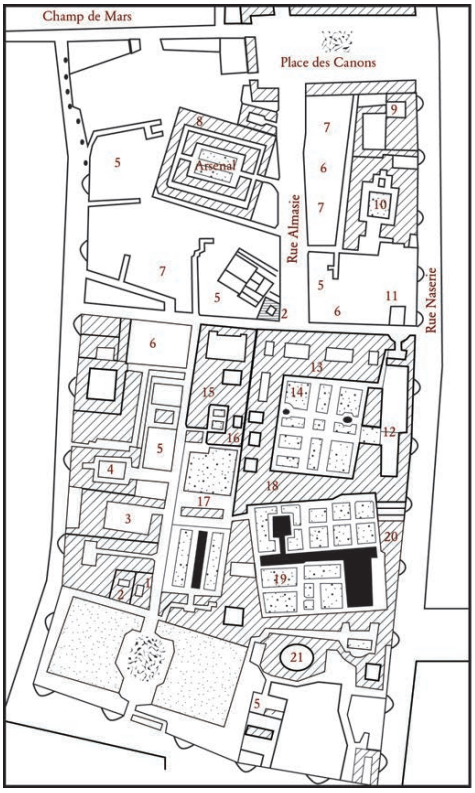
Figure 3.16. Designated areas for building new administrative centre for Tehran

Source: Author, compiled form Sahab Cartography maps and Atlas of Tehran Metropolis.

Like the former Qajar royal seat, the administrative quarter was sited in the very centre of Tehran to represent state power.

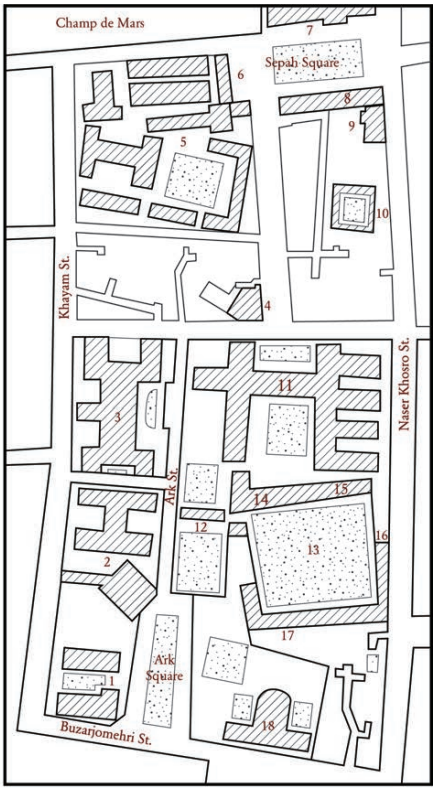
Figure 3.17. Transformation of Qajar royal district into the modern administrative centre of Pahlavi government

The Map of Royal Seat in the Center of Tehran 1891



1. Archives
2. Mosques
3. Stable
4. Barracks for Royal Guards
5. House of Courtiers
6. Workshops
7. Peasant houses
8. Arsenal
9. Telegraph office
10. Darl-ul-Funun College
11. Quarters for eunuchs
12. Orangery
13. Andaroni (Royal Haram)
14. Workers rooms
15. The House of the Qajar Queen
16. War Ministry
17. Hall of the Marble Throne
18. Royal Museum
19. Gulistan Royal Garden
20. Shams ul Imarat Palace
21. Royal Takiyeh (Opera House)

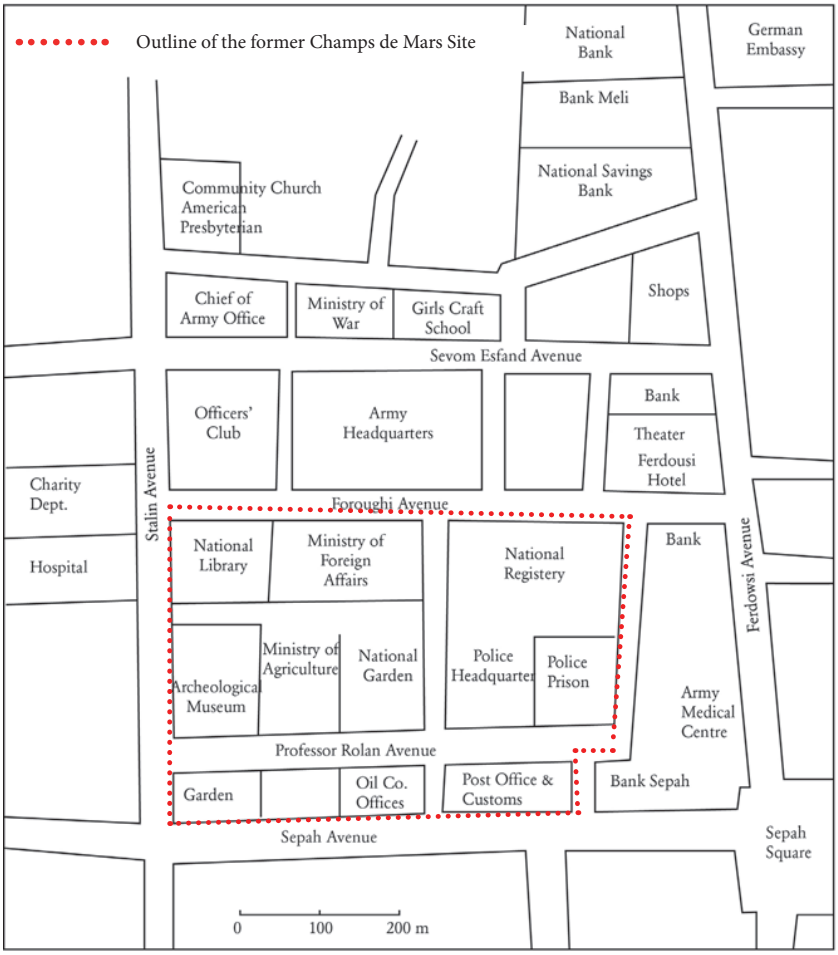
The Map of Tehran Administrative Center 1950



1. Ministry of Interior
2. Ministry of Press and Propaganda
3. Ministry of Justice
4. Mosque
5. Military workshops and Arsenal
6. Police Station
7. Tehran Municipality
8. Former Ministry of Post and Telegraph
9. Telegraph Office
10. Dar-ul-Funun College
11. Ministry of Finance
12. Hall of Marble Throne
13. Gulistan Palace
14. Museum
15. New guest wing
16. Shams ul Imarat Palace
17. Ministry of Court
18. Bank Meli (Bazaar branch)

Source: Author. Data collected form Historical Geography of Tehran (see bibliography)

Figure 3.18. Shows the new modern administrative and cultural functions were formed in centre of Tehran by early 1940s



Source; Author. Data collected from the Historical Geography of Tehran and social and Cultural History of Tehran (see bibliography)

27.
He also built number of villas and houses for affluent officials and well-known elite of Tehran where he was able to exercise higher degree of freedom. The design of villas in comparison with government building shows the level of freedom he had for the private projects.

As mentioned above, the architects of these government buildings were tasked with referencing ancient Persia in the new state buildings. Guevrekian designed and built the headquarters for three ministries (Foreign Affairs, Justice, and Industry), as well as the Tehran Officer's Club and the Tehran Theatre. Most of these buildings were monumental in scale and symmetrical in plan, had distinct Persian references on their facades, and echoed different contemporary architectural styles, including neo-classicism, art nouveau, and even fascist and totalitarian architecture (Figure 3.19).[27] With this modern national style, the state was formulating a specific genre of Iranian identity that was simultaneously ancient Persian and European. Obvious examples can be seen in the Ministry of Justice, whose classical façade contains reliefs that depict the court of Khosrow Anushiravan from the Sassanian Empire (531 to 579), and the Iran National Museum, which incorporates a monumental arch that references Taq Kasrar, a massive Sassanid arch of unreinforced brickwork (Figure 3.20).

Figure 3.19. Tehran Ministry of Justice 1940 - designed by Guevrekian

Source: LIFE magazine archive, open access

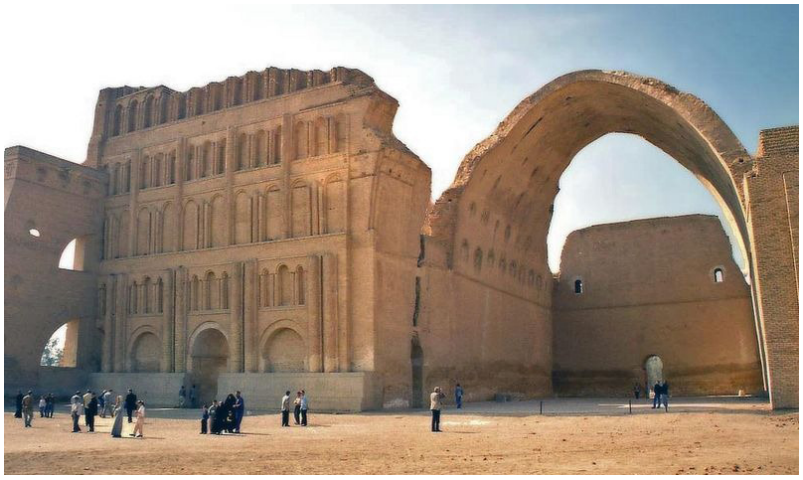


Figure 3.20. (on Top) Tehran National Museum 1937
(on the bottom) Taq Kasra built 6th century AD

Top Photo by; Kamran Adle and Bottom Photo by, Nick Maroulis

3.5 Urban and social transformations

In Figure 3.21, the map of Tehran in the late 1940s shows urban transformations and rapid territorial expansion in different stages. The Street Layout Plan, the urban renewal of central Tehran, and the construction of the government enclave symbolize the nation-building and state-building programmes of Reza Shah. The close proximity of the state administration to the Bazaar created a powerful political and economic centre for Tehran. Despite the secularisation programme of the Pahlavi state and the anticlerical acts of the Shah, the rich merchants and powerful clergies operating around the Bazaar were able to save the Bazaar and its surrounding neighbourhoods from demolition as part of the street widening plan.

Figure 3.21. Map of Tehran in 1948

Source: Tehran National Monument Council, by Yahya Zoka 1970.

Figure 3.21 also shows the development of the central parts of the city, a series of changes that reshaped the urban fabric into the centre of a modern nation state. While these changes created a strong centrality for the city, they also produced strong divisions and imbalances. The administrative enclave emerged as a coherent, unified statement about Iran's new power, yet it was developed in very close proximity to the old centre of the city, with the Bazaar at its heart, which remained the most powerful commercial centre and was relatively unchanged

by the Shah's modernisation projects. In fact, the central state not only failed to weaken the Bazaar but instead the improved urban infrastructures transformed the Bazaar into the most important location in the Iranian economy. The adjacency of the Bazaar and the central mosque with the new government enclave created a contested space between two forms of urban modernity. The influence of these dual spaces of modernity vibrated in two different directions: the urban middle-class in the north and urban working-class in the south. The avenues in the north became the 'Mecca of dandies' and the dusty alleys of the south were filled with an industrial working class living in 19th century courtyard houses.

The Bazaar became the heart of a divided city. To the north of the Bazaar, we see impressive government buildings and straight avenues with modern shopping streets, new cinemas, theatres, universities, cafes, restaurants, and modern apartments and villas. The majority of the growing urban middle class, including civil servants, settled in the northern parts of the city, and they were among the first in Tehran to adopt the modern way of life. However, to the south of the Bazaar, the urban fabric served an increasingly dense working class and poor population, mostly employed in the new factories that had cropped up in the industrial belt around the train station. The majority of the population in the south was living in traditional courtyard housing and shanties. In contrast to the modern activities and lifestyles displayed in the north, here the traditional modes of life were still dominant, with public baths, tea-houses, workshops, and mosques.

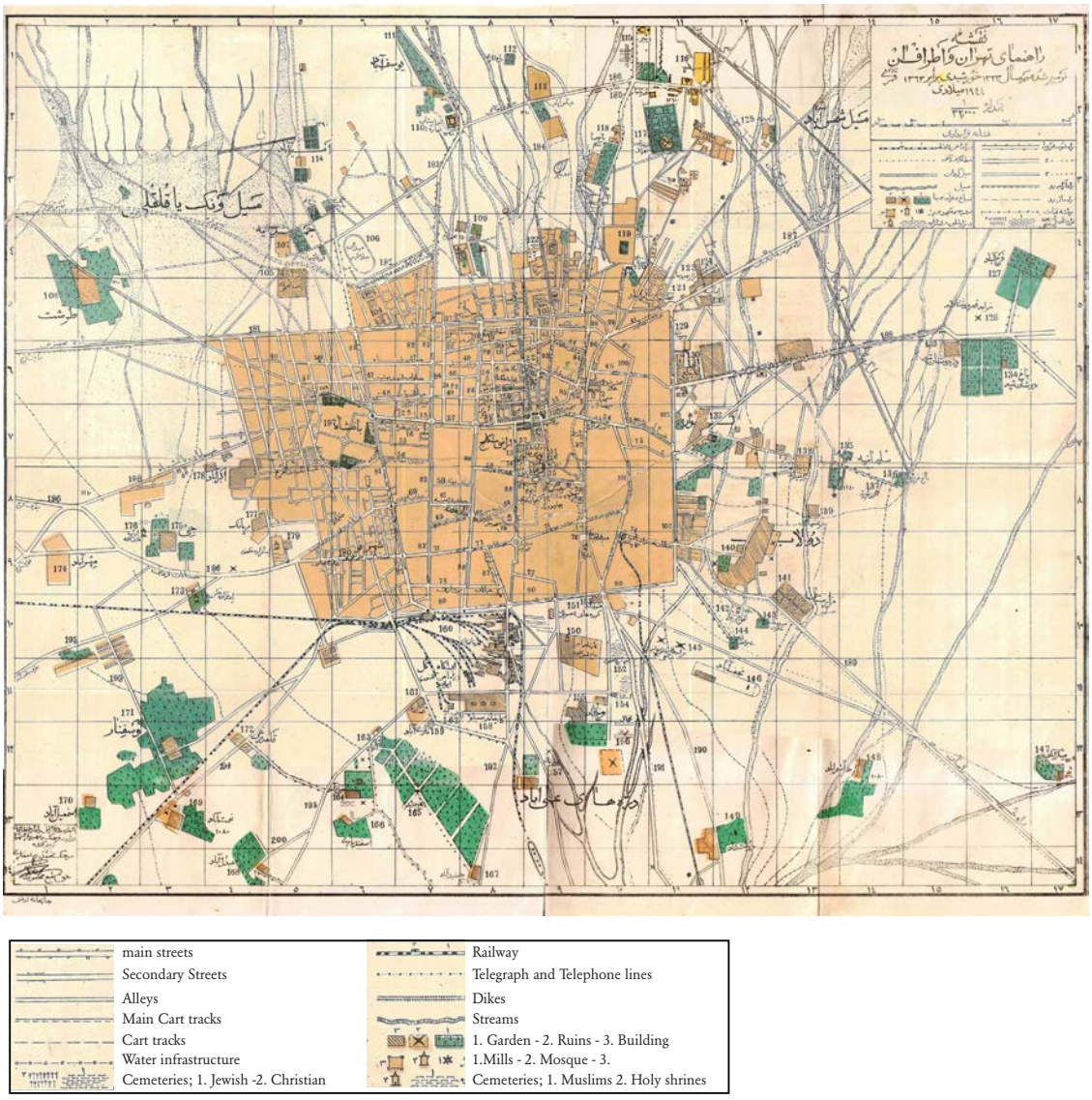
In the mid-1940s, Tehran comprised an area of around 46 square kilometres, which was 2.5 times larger than during the Qajar period. The population grew from 210,000 to 540,000 in only two decades (1925-1945). Streets and avenues covered 1.8 square kilometres, or 9 percent of the whole area of the city. Prior to the Second World War, however, there was no significant rural migration to urban areas. It was only after the Second World War, with the increase of industry in Tehran, that was an increase in rural-to-urban migration, drawing peasants to the city. Therefore, during the end of the First Pahlavi period, the urban middle class formed the majority of Tehran's population. By 1940s, 70 percent of Tehran's working population was comprised of government employees, including administrative officials and teachers (Bahrambeygui, 1977). This concentration of the middle class would dramatically affect the further development of the city to the north, through an increased demand for new homes that would reflect their modern lifestyle.

The Transformation of Scale

By the 1940s urban growth was no longer bound to inner city areas, and with the increase in population new developments began to appear outside of the city boundaries (Figure 3.21, 3.22). A considerable amount of land on the periphery of Tehran (outside of the former wall) was either owned by Reza Shah or a group of private landowners (many of whom were politically linked to the Shah) who had managed to register large areas of undeveloped land under the 1929 Property Law. The law facilitated and legalised the process of private land ownership, but failed to stipulate that landowners wishing to develop and improve their land should first seek permission from the authorities concerned. As a result, this group of landowners had the autonomy to develop their land outside of the state authority, and the municipality was obliged to pay heavily to buy land for urban development projects, such as public buildings, urban facilities, or housing projects. On many occasions these landowners held high-ranking positions in different ministries and other decision-making organisations due to their wealth, social status, and political influence. This meant that any uniform or integrated urban land policy was difficult to achieve. In fact, the Property Law protected the power and autonomy of the landlord class, allowing them to influence future urban development plans and urban policies, housing policies in particular.

Ultimately, in the absence of any specific urban land policy, building permit system, or limit to landownership, the city developed rapidly and the Street Layout Plan, which did not extend to the periphery, was still the main tool and model for urban expansion. Significant quantities of land outside of the city began to be subdivided, as landowners and developers initiated new urban development project (Figure 3.21, 3.23). Developers used the same rational, geometric street grid implemented in the Street Layout Plan, and divided their land in rectangular lots of uniform size, on which modern townhouses, apartments, and villas with direct street frontage were erected. By the late 1940s, many of these areas were incorporated into the jurisdiction of the city. Gradually, owning land became a new ambition for the growing mercantile middle class and military and bureaucratic elite, and developers were able to profit from this demand for housing. Escalating housing costs and the ambiguous legal rights of large land owners influenced the pattern of urban development and the implementation of urban policies in the decades after the Second World War, especially concerning housing for lower income groups.

Figure 3.22. Tehran development pattern in mid-1940s



Source: Shahab Cartography, Tehran, Iran.

Figure 3.23. Areal photo of development outside of city boundaries in mid-1940s

Source: Archive of the Ministry of the Interior – published in Die Entwicklung der Stadt Tehran, Eine Stadtebauliche, Untersuchung ihrer zukunftigen Gestaltung (1966).

Emergence of Professional Autonomy

The occupation of Iran by the Allies during the Second World War forced the pro-German Reza Shah to abdicate and pass the crown to his 22-year-old son, Mohammad Reza Shah Pahlavi, in 1941. The following decade was associated with the rise of the nationalist movement in Iran that aimed to nationalise the oil industry and limit the power of the Shah. This process sought in tandem to strengthen the institutions independent of the Shah and the central government and to democratize state institutions. Before the war, Iranian architects and urban planners had not yet fully institutionalised their professional status, but that changed in the mid-1940s. In 1946 the Society of Iranian Architects and the professional journal Architecte were established. The Society of Iranian Architects was formed by 38 young Europe-trained architects (primary graduates of the École des Beaux-Arts) who sought to advance the profession of architecture and raise awareness in both the general public and among government officials of urban planning and modern approaches to urbanism. They took a strong stance against unregulated urban growth and the lack of policy to control land speculation and construction (especially for housing projects). Since there were neither integrated urban development policies nor any requirements for architecture plans and building permits, the Society of Iranian Architects proposed using international regulations. They also called for urban institutional reform and sought to establish a centralised planning agency run by urban planning specialists. They wrote several articles and letters to the Tehran Municipality and to government officials proposing the urgency of urban planning and explaining that the laissez-faire conditions in the city were no longer sustainable. They also promoted the idea of low-income mass housing projects in anticipation of the working-class growth caused by rural to urban migration. They introduced the British and French urban planning approaches as well as European models of low-cost housing projects built after the Second World War.

While their efforts had no significant results, they did succeed designing the first low-income housing project for government employees in eastern Tehran. The municipality, with the investment of the Mortgage Bank and National Bank, constructed 400 units for low-income government employees (Habibi, 2015). Most significantly, though, this transition period signalled an assertion of professional authority amongst Iranian architects, who were globally engaged and educated, and helped shift Iran away from its reliance on foreign architects. The next chapter will investigate how the awareness of the urgency of planning and a more rational, efficient form of urban development among Iranian architects and the ruling elite led to the emergence of new planning institutions and practices in Tehran in the second half the 20th century.

3.5 Conclusion

This chapter has reflected upon the many ways in which colonial narrative of development, the state-making process, and Iranian and foreign expertise were involved in shaping Iranian city planning and Tehran's urban development in the first half of the 20th century. This study has shown that Tehran's urban plans and development projects – although predominantly inspired by Western models – came into being in response to specific national and local conditions, and were hardly the product of unified histories or singular rationalities. The nationalist elites and experts, religious groups such as merchants and clergies, and foreign intervention and assistance all influenced the trajectories of Tehran's urban development in different ways. Yet for the ruling elite and educated middle class the only way to change the perceived 'backward' condition of the country was to build a strong state and unified nation which led to radical industrialisation and modernisation of the country, and especially of Tehran as its capital. In fact, the findings of this chapter reveal how national and urban development in this period has been one of the key mechanisms with which the Iranian state has formed its power and sovereignty.

Through implementing large-scale infrastructural projects such as transnational railway network and the 1933 Street Widening Act the Pahlavi state organise its territory and dictates the meaning of 'modern' urbanity and 'developed' nation. As shown earlier, the urban renewal of Tehran with a new street system and new administrative district replete with monumental buildings was not simply for building a capital for a full-fledged state to govern the country. Rather the re-building of Tehran was to represent the newly formed Pahlavi state as the builder and engineer of the new modern space of Tehran, who defines the public sphere, and supress opposing ideologies - coming from Shia clerics and Bazaari merchants – who sought different ways of organising the urban space and national territory.

Nevertheless, as shown in this study, the formation of modern state and modern capital city didn't mean that all other contending ideologies were silenced and eradicated. On the contrary, as shown in this chapter the Pahlavi development project was not the only project and other social groups and forces such as merchants and clerics have challenged the Pahlavi's development plans and policies. For example, the resistance of Bazaari merchants towards the street layout plan, has protected the Tehran Bazaar from demolition and fragmentation. Moreover, despite the state's intention to weaken the bazaar – perceived as traditional and dated form of commerce - the improved infrastructure and close proximity to the new administrative centre have added to its centrality and significance.

The formation of the modern state coupled with secularisation disempowered the clergy and merchants who were influential in governing the city in the 19th century and, instead, landlords and military officials received significant support from the state. This transition of power became evident when Pahlavi state passed the 1929 land law, which revived the land registration system that mainly benefited big landlords and thus formed a strong alliance between state and landowners who were supportive of state modernisation and secularisation policies. This law politically empowered big landlords and resulted in unregulated urban development outside of the city's boundaries. Landlords had the freedom to increase land value by converting it to more profitable uses, as there were virtually no regulations or restrictions on land-use conversions from farm to residential use, or factory/office use. Furthermore, these landlords, who often held key roles in the state apparatus, came to acquire greater political power as major supporters of Pahlavi state. This situation created two different forms of governance in rural and urban areas. On the one hand, a concentration of state power in the city and, on the other, the autonomy of private landlords outside of the city. This situation complicated the role of state institutions, such as the municipality and the Technical Bureau at the Ministry of Interior, as the authority on development and planning. These agencies contributed remarkably to the modernising processes of Tehran, but they made very modest advances in preparing any coherent framework or codified development regulations. In fact, the infrastructure plans – such as Street Widening Act – designed by these institutions lacked an overriding vision and ethical or aesthetic concerns, and were instrumental in enabling the land market to grow and develop beyond official city boundaries.

The experience of Tehran development in the first half of the twentieth century suggests that urban planning and renewal projects were in the end equated with state and nation building, and served the interest of the powerful and elite at the cost of the under-represented and marginalised groups. Thus, Iranian planning culture's relationship to state and nation-building continued to linger during the 20th century, as we will see in the next chapters. The next chapter will show how the idea of nation building and the urge to develop further continued to shape and transform Tehran's urban development and planning practices. Moreover, we will discuss how the technical expert culture from the 1950s onward had a great impact on urban institutions involvement in modernising and developing Tehran.

CHAPTER 4.

The 1968 Tehran Master Plan and the Politics of Planning Development in Iran (1945-1979)

4.1. Introduction

At a conference held in Tehran in 1977 entitled "Toward an Architecture in the Spirit of Islam," Jaquelin T. Robertson, the American planner of Tehran's grandiose new city centre, began:

> "Many of us at this conference are what I would have to call cultural or technocratic mercenaries, hired intellectual 'guns' who move about the world from one country to another giving counsel, doing 'quick study', relying on accumulated knowledge, on too weak-data and too little experience and too often only on intuition; over programmed, rushed, and beneath it all, dreadfully unsure of ourselves and our various medicines and recipes. Yes, mercenaries, without uniforms or guns, but potentially just as lethal. Traveling medicine men." (Robertson, 1978:44)

What is remarkable about these opening words is that they show a recognition of the tenuous position of Western planners involved in modernising Third World cities, and the ethical dilemmas they faced – questioning their rational, apolitical and universal problem-solving position. Since the end of WWII, the international flow of knowledge and expertise had extended across the world, particularly with President Truman's announcement in 1949 of the Point Four Program to help poor countries to develop and improve their quality of life. The Truman doctrine advised 'Third World' countries to replicate certain characteristics of 'developed' nations – namely, high levels of urbanisation and industrialisation, and a rapid growth in material production, in order to solve the problem of 'underdevelopment' (Escobar, 1995 ;4). This paper shows how the Cold War geopolitical context, and agendas of multilateral and bilateral development agencies and their expertise (i.e. the World Bank, and the Ford Foundation), together with the specific circumstances of the national modernisation of Iran, had deep-seated implications for the urban planning practices and development of Tehran. This study shows that the imperative to form Iran into a progressive, modern nation-state and

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regional superpower defined Iranian planning policies and practices, which in turn shaped the trajectories of urban development in Tehran. The rise of the nationalist government in Iran after WWII, the nationalisation of the oil industry, and the 1953 CIA-led coup d'état are all crucial to understanding why the Pahlavi government implemented modern planning and development with such zeal.

To support the above statements, this paper focuses on the formation of 'Plan Organization' as the first modern urban planning institution in Iran, which was established in 1949 and played a key role in shaping the Iranian planning administration, planning practices, and expert culture. Over the next three decades, up until 1979, the Plan Organization became a 'technocratic headquarter' of Iran, and played a key role in linking Iranian political elite and professionals to international experts and agencies. This paper demonstrates the political and ideological interplay between international development agencies, 'Plan Organization', and Iranian and foreign experts in preparing and implementing national development plans and adapting comprehensive master planning as the best model for state building and modernizing Tehran.

There has been an extensive effort among scholars to offer in depth analyses of post-WWII Iranian planning history, and the ways in which dissemination and adaptation of planning ideas and models have shaped planning practices and the built environment of Tehran (Amirahmadi, H. and Kiafar, 1987; Amirahmadi, 1986; Ahrens, 1966; Habibi, 1997; Hourcade, 1974; Hourcade, and Adl, 1996; Seger, 1978; Madanipour, 1998; Emami, 2014; Mohajeri, 2016). Nevertheless, the focus of these studies has mostly been on certain areas of research namely, critical analyses of the top-down role of the state and inefficiencies of planning administrations and practices; evaluating the success and failures of the comprehensive master planning approach in decentralising Tehran and controlling urban growth; and investigating the role and involvement of individual foreign planners/architects (such as Victor Gruen or Louis Kahn) in urban planning and architecture projects. Additionally, recent studies of Madanipour (2010) and Khatam (2015) offered important contributions to these existing scholarships by reflecting on the national and global ideas of development and planning, and the role of planners within the planning apparatus.

Madanipour in his seminal research on Tehran Action Plan by Constantinos Doxiadis, critically reflects on the post-war adaptation of modernist planning approaches in Iran, and shows in detail how the dominant modernist planning ideology and strong faith of both local and international planners in scientific and rational planning had long-lasting effects on Tehran's planning practices and development trajectories (Madanipour, 2010). Moreover, the urban sociologist Azam Khatam examines, the history of Tehran's urban reforms through the lens of political economy and critically discusses the intertwined processes of urban modernisation

and arbitrary rule in the cities of the global south, and confirms the interconnectedness of the global, national, and local actors and forces in planning and shaping major urban renewal projects in Tehran (Khatam, 2015).

This study draws on these key pieces of recent scholarship, which have challenged the common views on planning processes of Tehran, and argued that urban development and modernisation emerged as part of a political agenda, where geopolitical relations, state building, national imaginations and political desire of the Iranian ruling class have influenced the planning policies and practices, and thus urban development and lived spaces. The current study seeks to contribute to the work of these scholars by examining the transformative role of 'Plan Organization' in shaping the planning of Tehran's urban development, and linking local planners with their professional body and the state. The interplay between global development agencies, Plan Organization, as well as local and international planners has had important implications for the Iranian planning administration and profession, receiving somewhat less attention by scholars of Iranian planning history.

This paper divided in three main sections, the first section depicts, how the shifts in the post-WWII global political economy and Iran's socio-political condition have caused new discourses, institutions, and actors of development to emerge - bringing important implications for the formulation of state-led economic development policies in Iran. The second section traces how national political incentives - in conjunction with economic imperatives, the rise of a professional urban middle class, and international aid and assistance - led to the formation of the first modern planning institution in Iran – where a comprehensive master planning model and 'consulting engineering' firms emerged as part of the economic development planning strategy and became vital means in shaping the urban development of cities across the country. The last section focuses on the design and implementation process of the 1968 Tehran master plan by planners and state institutions, and reflects on the role and involvement of planners in this process. Ultimately this paper concludes with a discussion on the socio-spatial consequences of the professionalization of urban planning, and how a new form of alliance between state and urban experts had long lasting impact on the planning and development process of Tehran.

4.2. The Political Economy of Development after the WWII

The end of the Second World War profoundly transformed the world order. The rise of the anti-colonial and nationalist movements across the Third World, led to a new political rearrangement, opening up pathways to nation building, development, and modernisation (Escobar, 1995: 31). In these terms, national economic development became central to establishing independence from imperial powers and gaining 'freedom to manoeuvre within the international economy and geopolitical constraints'(Ibid). Timothy Mitchell notes, that by the 1950s the word 'economy' referred to 'the totality of [monetized] exchanges within a defined [geographical] space' (Mitchell, 2002; 83). By embedding a national 'economy' into new models and measurements, it became possible to conceptualise a national space abstracted from its history and geographical realities (Ibid; Rangan, 2008). Moreover, Mitchell argues that this new meaning of 'economy' provided forms and formulas for old (European) and new (US) industrialised powers to retain and expand their imperial influence (Mitchell, 2002: 83,4). Nevertheless, the new definition became particularly useful for nationalist leaders in the Third World trying to establish political and territorial control in the absence of a homogenous population (Rangan, 2008; 572). As a result, the new idea of 'economy' offered an alternative method for Third World leaders to create a 'national space' determined by a 'character of calculability', rather than by geographical histories (Ibid).

The contest over the economic development of the Third World began in the 1950s, when it became the site of struggle between the capitalist west and the Soviet bloc. Yet the US and its Western allies were much more systematic in promoting the hegemonic objective of 'development', and in funnelling aid to the governments of the Third World in exchange for political allegiance. In 1944, the US and its allies established two key institutions of post-war international development – the International Bank for Reconstruction and Development, known as the World Bank, and the International Monetary Fund. These institutions adapted the new idea of 'economy', and began for the first time to classify development in terms of gross domestic product (GDP), ranking countries and regions according to their level of economic development. Charting the future development path for Third World nations, these organizations presented themselves as experts in measuring progress (Unger, 2010). Together, they maintained a strong faith in technology and science as neutral tools for improving standards of living across the Third World as a means toward global political stability.

By the 1950s, these multilateral development agencies with their legion of engineers and experts, had become important players in shaping trajectories of development in the Third World. State-led industrialisation and economic development through local (and newly established) government institutions became central to their approach (Avermaete, 2015). Long-term economic development planning was treated as a path for 'underdeveloped' nations to catch up with industrialised nations and improve the welfare of their citizens, and urban planning was an integral part of that (Ibid). In fact, the interplay between international development agencies and state institutions has had important implications for the planning culture and administration in many of these nations. Iran provides a very good case study to demonstrate how various global and local actors and agencies participated in shaping Iranian planning institutions, and thus particular urban planning practices and development.

The Allied occupation of Iran in 1941 – with the Soviet Union occupying northern Iran and British and American forces in the south – radically changed Iran's domestic political situation when the Allies forced the pro-German Reza Shah Pahlavi to abdicate and pass the crown to his 22-year-old son, Mohammad Reza Shah Pahlavi. The abdication of Reza Shah opened up a democratic space that lasted for twelve years, and had a significant impact on international and domestic relations. The rise of separatist movements during the Soviet-Iranian Conflict in 1946 'inflamed the nationalist sentiments of Iran's bureaucratic elite, senior army officers, and a section of secular-nationalist intelligentsia', who aimed to strengthen the nation-state and protect Iran's territorial independence and democratic nationhood (Matin, 2013: 90). As a result, the newly founded National Front brought together a coalition of nationalist and reformist groups, attracting support from the urban bourgeoisie and the newly formed professional middle class (Ibid). The National Front's objective was to reduce Western dominance in Iran and reassert the authority of the parliament, reducing the Shah to a constitutional monarch.

By 1950, the anti-imperialist and anti-colonialist atmosphere prompted the National Front to question the British dominance of Iranian oil revenues. In 1951, when National Front leader Mohammad Mossadegh became Prime Minister, the new administration immediately nationalised the Iranian oil industry. For the new administration, oil was viewed as central to development and the solution to Iran's perceived underdevelopment. They believed that the nationalisation of oil would help the government acquire a certain degree of autonomy: to 'free' the national economy from the ruling class of big landowners, Shia clerics, and rich merchants in the Bazaar. Up until the mid-twentieth century Iran remained largely rural and under the control of major landowners. From 1943 to 1962, landowners and bureaucrats held a large advantage in parliament, even over merchants and the clergy (Ashraf and Banuazizi, 1992). It was under these circumstances that the nationalist government began to rely

heavily on oil revenue to develop the country, and to embrace the idea of national economic development planning as a rational process of calculation, control, and intervention for nation building and territorial integrity.

4.3. The Plan Organization as an Agent of Nation Building and Development

In 1953, less than two years after the oil industry was nationalised, the American CIA and British MI6 organized a military coup and overthrew Mossadegh's government. The Shah was reinstated and like his father promised a glorious future and quality of life superior to those promised by both communism and capitalism. Yet the coup was devastating for Iran's urban population, specifically the elite and educated urban middle class, who had high hopes on nationalist government to develop national resources in the interest of the country's progress and independence.

Though the nationalist government had been overthrown, primary administrative changes had already been founded through concentrated efforts by political elite and technocrats who were part of Mossadegh's government. Many of these bureaucrats were educated in Europe and "came from old land-owning and capital-holding families, [who] knew the Iranian economic mode of operation and society well" (Khatam, 2015;96). They believed that without "a new organization with full authority and free of traditional fetters," (Bostock and Jones, 1989: 97) development projects could not be planned and implemented. Thus in 1949, they laid the foundation of the 'Plan Organization' to monitor the national budget, and prepare national development plans, as well as supervise their implementation.

By the early 1950s, the Plan Organization had become 'Iran's technocratic headquarters' and a base for both Iranian and international economists and engineers (Figure.4.1) (Schayegh, 2012). The Plan Organization pressed for governmental reform and held a firm belief that they were best equipped to improve Iranian society and economy through planning and development. Among the Iranian technocratic elite, Abolhassan Ebtehaj, a forceful banker-economist was one of the key actors behind the formation of the Plan Organization (Figure.4.2). As the Governor of the Mortgage Bank (Rahni Bank), he helped make home ownership possible for civil servants. In his role as President of the Central Bank he had first-hand experience of governmental inefficiency, and strongly believed that Plan Organization should operate independently from the government. In its early years, the Plan Organization operated with exceptional autonomy, a reflection of both its founders' ambition and the democratic atmosphere of the early 1950s. As the Head of the Economic Bureau later observed:

Figure 4.1. Iranian technocratic elite and member of Plan Organization

Members of the High Council of Plan Organization
Top, left to right: Fatollah Nuri-Esfandiari, Chairman; Salman Asadi, Kazem Sayah, Soltanmorad Sardarian.
Bottom, left to right: Reza Bushehri, Ebrahim Afkhami, Sadeq Vasiqi.

Members of the Board of Control of Plan Organization
Top, left to right: Soltan Mohamad Ameri, Abol Hasan Jalili, Emade Hekmat.
Bottom, left to right: Javad Emami, Mohamad Saidi, Mahmud Salamat, Ali Asqar Khashayar.

Source: Historical Review of Second Development Plan. Archive of British Library, London.

'It [the Plan Organization] had its own substantial financial resources earmarked. It had the authority to disperse directly. It could hire consultants to study projects or it could study the projects itself. It could tender out or directly choose the contractors for construction. … It had the responsibility for the implementation or execution of the projects it had decided upon. It could borrow from abroad. It had its own separate auditors appointed by the parliament.' (Farmanfarmaian, 1982)

Figure 4.2. Abolhassan Ebtehaj, director of Plan Organisation

A. H. Ebtehaj

Managing Director
Plan Organization of Iran

Source: Historical Review of Second Development Plan. Archive of British Library, London.

The Plan Organization was financed by oil revenue and significant loans from the World Bank, and American-backed Ford Foundation, and the Truman Point Four Program (Cody, 2003;149; Madanipour, 2010). Yet its first years coincided with political conflict arising from the nationalisation of the oil industry and British embargoes imposed on Iranian oil. As a result, the first seven-year plan (1948-1955), prepared by Morrison-Knudsen International (an American consulting firm), never really moved forward. Compounding the delay, emerging international development agencies, such as the World Bank, were still in the early years of their overseas operations and did not yet have clear policies for allocating funds and development aid to the Third World.

It was in this tenuous context that Ebtehaj was appointed as managing director of the Plan Organization, and began to restructure it. Ebtehaj and his colleagues represented the nationalist technocrats and were aware of growing dissatisfaction with the government after the 1953 coup. They believed that the Plan Organization, as an independent agency, could once again revive hope and the promise of a better quality of life. Despite Ebtehaj and his colleagues' somewhat naive belief that the planning authority could be insulated from politics and the state apparatus, the Shah maintained the right to appoint its managing director, and in later years he occasionally interfered in plans or vetoed projects. Moreover, the Plan Organization was beset by suspicion from the landed and mercantile elite, who held key posts in the government and perceived it as a threat to their economic and social supremacy, as well as by conservative clergy members, who saw industrialization as a threat to traditional ways of life (Bostock and Jones, 1989: 112).

In 1954 Ebtehaj was able to rearrange the bureaucratic structure of the Plan Organization, and established three main departments: the Technical Bureau, the Economic Bureau, and the Statistical Department. Each department played an important role in preparing plans and budgets, and each received considerable support from bilateral and multilateral development agencies. First, Ebtehaj established the Technical Bureau and appointed Safi Asfia, an Iranian engineer who had graduated from the École Polytechnique in Paris, to lead it. The Iranian scholar Abbas Milani calls Asfia the 'technocrats' technocrat' (Milani, 2008: 92). The Technical Bureau recruited a large number of American and European engineers and architects under the supervision of Robert Black, then the president of the World Bank, and William E. Warne, the head of development in the Point Four Program for Iran (Ebtehaj, 2010). The Harvard Advisory Group, founded by the Ford Foundation, supported the establishment of the Economic Bureau, headed by Khodadad Farmanfarmaian, a Princeton-educated economist from an Iranian aristocratic family. Lastly, the Statistical Department was founded to compensate for the lack of sufficient data about the country's natural resources, financial situation, and manpower. Later in early 1960s, the US Peace Corps had assisted the Statistical Department to survey and gather data across the country (Sadri, 2015). The young Ameri-

can volunteers in the Peace Corp were helped by their Iranian counterparts, who at the same time learned how to make surveys, collect information, and archive (Sadri, 2014).[28] Ultimately, the Plan Organization became not only the headquarters of the Iranian technocracy, but also the headquarters of American and European expertise in Iran.

4.4. Global vs Local Development Agendas and their Influence on Urban Planning Practice

Between 1948 and the 1979 Islamic Revolution, the Plan Organization produced two seven-year plans and three five-year plans for the development of large-scale, prestigious, and capital-intensive projects – including dams, airports, major railroads, highways, ports, and telecommunications. This section shows how the foundation of planning in Iran was laid during the implementation of the Second (1955-62) and Third (1962-1968) Plans. Furthermore, it investigates how the politics and ideologies behind these plans, as well as certain involvement and interaction of local and international actors and agencies have formed Iranian urban planning practice and profession, and thus Tehran build environment.

28. Interview with Farivar Sadri, September 2015 - former director of design and urban planning at the Technical Bureau of the Ministry of Interior, 1970-1973.

In the 1950s and 60s, the technocrats were most concerned with industrialisation and modernisation happening as quickly and efficiently as possible (Amuzegar, 1996). Like most development experts at the time, they strongly believed in the power of science, technology, and rational planning, putting immense trust in the benevolent power of experts. To escape the undignified condition of 'underdevelopment' as fast as possible, the ruling technocrats pushed for urban infrastructural projects with immediate results that could be easily understood as symbols of modernity and economic progress. However, the political power of landowners in rural areas was a considerable barrier for both local and foreign experts—it was impossible to plan or implement any development projects in rural areas without the cooperation of the landed ruling class (Ibid). Aware that intervention in the agriculture sector and rural areas would be politically challenging and slow, the Plan Organization chose to divert their efforts elsewhere. Yet this approach clashed with that of experts in the Point Four Program and the Ford Foundation, who were both worried about Soviet influence on agrarian society, and saw economic development as a tool for political stability (Ibid). Despite the ambition of advisors from the Point Four Program and Ford Foundation to reform the agricultural sector and develop rural areas, Iranian planners did the opposite, instead emphasising industrialisation and development in urban areas (Mofid, 1987).

The Plan Organization prepared the Second Plan (1955-1962) in only nine months, and obtained $75 million from the World Bank to pay for it (Ibid). The Second Plan took a project-based approach to development, focusing on industrialisation and urbanisation. This was based not only on the technocrats' desire for industrialisation, but also due to the World Bank's philosophy of project-based lending, which helped orient national planning efforts towards infrastructure-related projects and physical planning. Ironically, the World Bank policy contradicted the Point Four Program's and Ford Foundation's strategies in support of rural development.[29] The result is that agricultural expenditure in the Second Plan was limited to the construction of three dams (Mofid, 1987; 44). As Mofid noted, urban populations benefited most from these dams - for example the Karaj Dam chiefly supplied electricity and water for Tehran's rapid urban growth in response to growing demands from the Tehrani middle class (Ibid).[30]

29. Amzugar argues that the inconsistency among policies of aid agencies began to complicate the decision-making processes at the Plan Organization.

Table.4.1 shows the sharp difference between the number of urban and rural projects in the Second Plan, revealing the significant quantity of urbanisation projects. Another striking point is the lack of public housing. This was due both to the power of the landed elite, who saw public housing as a threat to their income, and to the World Bank's lending policy (Ramsamy, 2006: 69). Before the 1970s, the bank 'viewed housing as a social expenditu rather than productive investment', (Ibid) and was therefore reluctant to support housing projects or urban poverty programmes.

30. For more on this topic see Schayegh, Iran's Karaj Dam Affair

Table 4.1. List of urbanization projects of Second Development Plan (1955–1962) and the list of rural development projects.

Urbanization projects

Projects	Projects in planning stage	Projects approved	Projects ready for bids	Projects not commenced	Projects finished	Total
Water system	88	36	7	3	3	137
Electric system	145	41	30	2	–	218
Street asphalting	22	29	38	1	10	119
Public health institution	41	9	44	7	–	91
Agricultural projects	71	17	4	11	–	54
Miscellaneous	58	12	5	4	–	79
Education	123	34	81	7	38	291
Industrial	8	4	10	1	3	26
Communications	2	1	–	2	–	5
Total	558	183	187	38	54	1020

Rural improvements projects

Project	Constructed	Under construction	Repaired
Elementary and secondary schools	33	34	9
Bath houses	10	22	26
Clinics	7	5	–
Rural roads	15	79	4
Rural houses	36	–	–
Mosques	4	4	5
Concrete bridges	5	5	–

Source: Historical Review of the Second Development Plan, 1955. The Plan Organization of Iran. Sciences, Shelf mark S.S.300/5.

Over the first twenty-five years (1945-1970) of its operation, the World Bank became increasingly active in urban lending programs concerned mainly with economic productivity, and no funds were available for 'socially-oriented development projects' (Ibid: 46; Pugh, 1996). As a consequence, from the 1950s until the mid-1960s, "the bank placed an overwhelming emphasis on infrastructure-related projects…only a small fraction of funds was made available for agriculture, and no funding was allocated for education, health, or other 'social' needs" (Ibid:43). This restrictive lending program led to many cases of borrowing countries changing their policies, affecting broad sectors of the economy and society (Mason and Asher, 1973: 421).

In the second half of 1950s, the piecemeal approach of the Second Development Plan was particularly influential in both the urbanisation of Tehran, and the promotion of the engineering and architecture professions. The Plan Organization commissioned private firms, architects, and engineers to design and construct large-scale urban projects such as the Tehran Radio Station, Mehrabad International Airport, and Tehran University's Faculties of Science, Literature, and the Fine Arts Art. With the long list of urban projects to be implemented, the Plan Organization gave precedence to local engineers and architects - Mohsen Forughi, Vartan Hovanessian, and Abdol Aziz Farmanfarmaian were among many who played key roles in shaping the professional and academic bodies of Iran's architecture and planning culture.

The implementation of the Second Plan (1955-1962) and the corresponding rapid industrialisation and modernisation of Tehran was accompanied with an unprecedented urban growth and construction boom. The piecemeal approach towards urban development allowed different agencies and stakeholders to engage in production of urban space without any coordinating mechanism. For example, landowners were free to divide and register their land, and determine the size and form of streets in and around the city (Madanipour, 1998).[31] By the early 1960s the city was growing in every direction, despite both housing and infrastructure developments remaining completely unregulated. Tehran's population jumped from 1.7 million in 1956 to 2.7 million in the mid-1960s (Ibid). As Figure.4.3 shows, within a decade the structure of the city had rapidly expanded outwards. The lack of regulation led to severe congestion in the city centre and the migration of the wealthier classes to the northern suburbs. This meant that the quality of urban spaces and the provision of social infrastructure in poorer areas were grossly neglected. As a result, Tehran was becoming a divided city both socially and spatially: the rich and the middle class in the north, versus the poor and working class in the south.

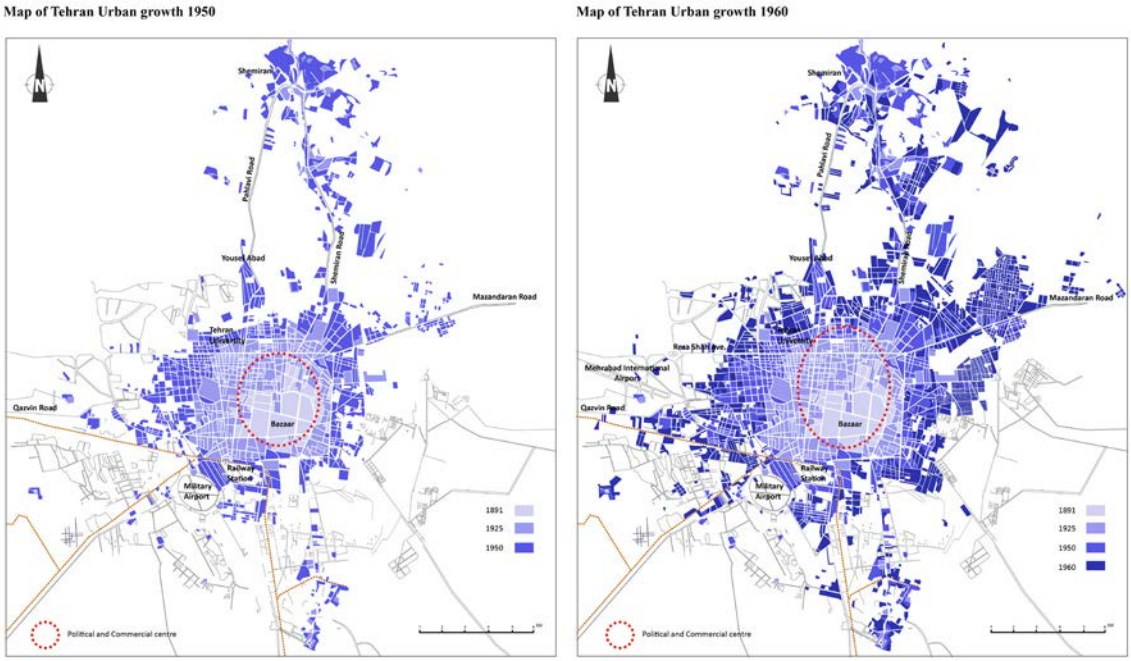
Additionally, during the implementation of the Second Plan, the Plan Organization obtained significant executive power, causing tension with other ministries and well-known landlords (Khatam, 2015:99). Fearful of the increasing power of the Plan Organization and of Ebte-

31.
Madanipor argues that the new form of land plot and street pattern produced by landlords in the city was regarded as a 'rationalisation' of form in order to maximize profit through making this commodity affordable to the emerging urban middle class.

haj's growing power, the Shah forced Ebtehaj to resign in 1959. In fact, Ebtehaj was critical about the interference of the Shah in government decision making and his dismissive attitude towards rational economic measures. The Shah transferred the power and responsibilities of the head of the Plan Organization to the Prime Minister, who was subordinate to the Shah. Consequently, from 1960, development planning was brought under the direct control of the state and the Shah, and the Plan Organization lost much of the authority and autonomy that many young technocrats had championed (Majidi, 1982).[32]

32. Majid was director of Plan Organisation from 1972–77.

Figure 4.3. Shows the rapid urban expansion of Tehran from 1950 to 1960.



Source: Author, compiled from: Tehran urban growth map in 1970, and Cultural Atlas of Tehran (see bibliography).

The absence of a rural development plan

While the Plan Organization and its experts were reluctant to invest in rural areas, and busy drafting the Third Plan (1962-68), the Shah arbitrarily devised the Land Reform policy to abolish the traditional feudal system, and extend state authority in the countryside (Hooglund, 1982:45; Khatam, 2015). The steady rise in oil revenues, and the support of the Point Four Programme gave the Shah confidence to confront powerful and influential landowners, clergies, and merchants. This radical reformation firstly took place independent from Plan Organization's development plans, and secondly, incited vast opposition from the clergy and landed elite (Khatam, 2015:100), as it reduced their power and influence in favour of state-led industrialization and a shift toward capitalism. The land reform programme was implemented in three phases between 1962 and 1972. However, the reform has never im-

plemented properly due to the presence of major landowners in key governmental positions within the state apparatus who negated the impact of the reform by influencing the process of decision making.

Eric Hooglund has shown that by the end of the third phase, a significant amount of land remained under the control of a relatively small group: "the amount of crop land owned by absentees following redistribution was about 50 per cent of the country's total of 16.6 million hectares" (1982:79). Nevertheless, the other half was distributed among 2.1 million former sharecroppers, who on average became owners of 3 hectares of land. Statistic about Iranian rural development estimated that each village household averaged five members, thus the actual beneficiaries of the programme numbered more than 9 million people (Ibid:72). Additionally, Hooglund argues that a minimum of 7 hectares is necessary for subsistence farming, and any less only aggravates poverty.[33] Consequently, in the early 1970s, land speculators began buying agricultural lands cheaply from indebted peasants who had decided to instead seek employment in cities. The economic downturn in rural areas in early 1970s resulted in the migration of roughly three million villagers to cities, and in particular, to Tehran (Bayat, 2010). Ultimately the government never intended to eliminate large-scale ownership of agricultural land, while it did want to limit the amount of land any individual might own (Ibid). Consequently, the land reform not only failed to abolish the large ownership of land but also led to the rise of a new form of land speculation at the periphery of cities, rural degradation and rural-urban migration. The outcome of the land reform had significant implications for urbanisation processes across the country, and more specifically in Tehran, which raised serious challenges for experts at Plan Organisation.

33. There is disagreement among scholars on the consequences of land reforms on peasant inequality, agricultural productivity, and the peasantry who didn't work on estates (for more on Land Reform see: Hooglund, Land and Revolution in Iran ; and Lambton, The Persian land reform.

4.5. The Third-Plan and the Emergence of Comprehensive Urban Planning

> "[…] Comprehensive urban planning has evolved out of the traditions of architecture and design, its gradual convergence with national economic planning has gone unnoticed or, at least, uncommented". (Friedmann, 1971: 316)

The Third Five-Year Plan was implemented beginning in 1962, with the assistance of the Harvard Advisory Group funded by the Ford Foundation and the Economic and Technical Bureaus of the Plan Organization. The Third Plan was more comprehensive than the previous two, in the sense that "instead of listing projects to undertake, set policies for all economic

and social sectors and laid out steps and schemes to implement projects" (Khatam, 2015:99; Bharier, 1971:95). Moreover, the Third Plan was intended to help decentralise the planning process, allowing for more local decision-making and engaging a larger section of the population in the development process (Farmanfarmaian, 1982). The Plan Organization viewed the Third Plan and the comprehensive planning approach as necessary devices to strengthen the planning administration, and overcome the interference of the Shah and ruling classes, namely landlords and clerics.

32. Majid was director of Plan Organisation from 1972–77.

Within the framework of the Third Plan, comprehensive urban planning was introduced as a model for guiding urban development, as well as a means of controlling rapid and unregulated growth of Iranian cities (Farhoodi et.al, 2009). As a result, the Third Plan included sixteen comprehensive master plans for cities across the country (Farivar Sadri, 2014). For the first time, a legal structure set qualifications for Iranian engineers and architects to establish their own engineering firms, and to take part in preparing plans and other state-sponsored urban projects. Another new law required that all public sector development projects had to involve a qualified Iranian engineering firm, and in the case of foreign partnerships, the Iranian partner had to have a minimum 51 per cent share (Ibid). The combined establishment of Iranian firms and the insistence that they be responsible for the design of urban plans and be involved in projects demonstrates the ambition to form a local planning profession, and gain independence from Western organizations to further develop Iran without foreign assistance.

These firms were labelled 'consultant engineering' firms, and architecture and urban planning was subsumed within them. The three fields were understood to be intimately connected: urban planning was seen as architecture and engineering on the scale of a whole city (Taylor, 1999; Madanipour, 1998). In other words, architects and urban planners were seen as 'technical experts', under the supervision of the Plan Organization's technocrats and economists. The formation of these new Iranian consultancy firms provided a base for the establishment of a professional body for Iranian architecture and urban planning, and set the standard for a remarkable degree of exchange and collaboration between Iranian and Western experts. Table.4.2. shows the list of designed master plans in 1970, and highlights the dominance of Iranian firms.

The Plan Organization maintained the right to select and approve the consulting engineering firms and contractors for each project, tempting more and more Iranian architects and engineers to return from abroad. The Plan Organization successfully cultivated respect for local professionals at the same time as they encouraged the next generation of architects, planners, and engineers (Roudbari, 2016). These ambitious professionals, familiar with modern management and technology and fluent in English and French, were seen as great innovators at home and as great negotiators abroad. The Third Plan initiated a new phase where Westerners

Table. 4.2. The list of approved Master Plans in 1971.

Urban Area	Population 1966	Approved Phase a/	Plan Preparation Iranian Agency or Consultant	foreign Partner
1. Tehran	2,719,730	B	A.Farmanfarmian	V. Gruen
2. Esfahan	424,045	A	Organic	Haudoin
3. Mashad	409,616	A	Architect Coop.	Frei
4. Tabriz	403,413	B	Moghtader-Androff	Ecochard
5. Abadan	272,962	A	Bourbour	
6. Shiraz	269,865	A	University of Tehran	
7. Ahwaz	206,375	B	Ali Abidi	
8. Rasht	143,557	A	Sardar-Afkhami	
9. Hamadan	124,167	A	Marjana	
10. Khorramshahr	88,536	A	Bourbour	
11.Ghazvin	88,106	A	Manda	
12.Arak	71,925	?	Housing Organization	
13. Babol	49,973	B	Miplan	
14. Karaj	44,243	A	Hirbod	
15. Bandar-e-Pahlavi	41,785	A	Sardar Afkhami	
16. Behbehan	39,874	A	Bourbour	
17.Bandar-e-Abbas	34,627	B	Ali Adibi	
18. Shahpur	21,703	?	High Council for Urban Planning	
19.Chalus	14,837	B	Bourbour	
20.Babolsar	11,781	B	Miplan	
21.Nowshahr	9,016	B	Bourbour	
22. Bandar-e-Langeh	7,218	B	Ali Adibi	
23. Ghorveh	5,256	?	High Council for Urban Planning	
24. Caspian Region	?	B	EMCO	Doxiadis
25. Dashteh-Nazir Area	?	A	Amir Sharifi & Associates Architects Coop.	
26. Farahnaz Dam area	?	?	Ministry of Housing and Development	
27. Kelardasht area	?	A	Amir Sharifi & Associates Architects Coop.	
28. Kerend Area	?	A	Amir Sharifi & Associates Architects Coop.	
29. Marivan area	?	?	High Council for Urban Planning	
30. Sarbandar area	?	?	?	

a/ phase A refers to general outline, and phase B refers to general outline plus specific proposals.

Source: Secretariat, High Council for Urban Planning, Ministry of Housing and Development, Published in World Bank Report in 1972, 'A Program of Reinvestment Studies in Iran' – Report No. SA-28a.

were no longer advisors and mentors but partners and collaborators. This era saw the rise of a culture of 'consulting engineers,' and 'comprehensive planning' that has lasted until today.

While the Third Plan left the preparation of the comprehensive master plans to Iranians, it also established the High Council of Urban Planning and Architecture to guide the preparation of master plans and set policies for their implementation. The Prime Minister was the head of the High Council of Urban Planning and Architecture, which also included members of the Plan Organization, the Cultural Heritage Organization, and the seven cabinet ministries most concerned with urban affairs.[34] This 'blueprint' approach to urban planning excluded consulting engineering firms and the urban planners who were mostly architects or engineers from the implementation and decision-making processes. Instead, the Third Plan granted municipalities the responsibility for executing the comprehensive plans to empower the local government (Karbaschi, 2013:83).

34. The ministries involved are: The Ministry of Justice with its special division for land registration; the Ministry of Energy with the provision of water and electricity supply; the Industrial Development Organization with the location of new industries; the Ministry of Health; the Ministry of Education.

Prior to 1960, Tehran (like other municipalities) had limited responsibilities and no political, financial, or technical resources to initiate urban development projects. A 1968 reconstruction law obliged municipalities to manage land-use in their own inner-city areas and suburbs, and Tehran was the first one to take advantage of that new power.[35] They could now decide the height, construction quality, and safety of buildings according to master plans, zoning plans, and other criteria issued by the Ministry of the Interior and the High Council of Urban Planning and Architecture (Karbaschi, 2013:84).

35. In 1968, the "Urban Renewal Law" (URL) confirmed the obligatory purchase of properties for implementing public projects in the built-up areas as well as undeveloped lands. Municipalities were thus authorized to intervene with property rights and land ownership.

While the introduction of comprehensive urban planning helped to develop the planning profession and planning institutions, there were still no policies or regulations regarding collaboration and coordination between them. In the case of the 1968 Tehran master plan, for example, the links between the municipality and the consultant engineers were still unclear (Farhoodi et.al, 2009). The resultant lack of coordination and their common absence from decision making at the High Council of Urban Planning and Architecture led to serious problems in the implementation process of Tehran's master plans. In fact, by looking at the implementation of the Third Plan and the emergence of master planning and new planning administration one can find that the technocratic elite at the Plan Organization used planning more as a tool for state building, rather than regulating or controlling urban development.

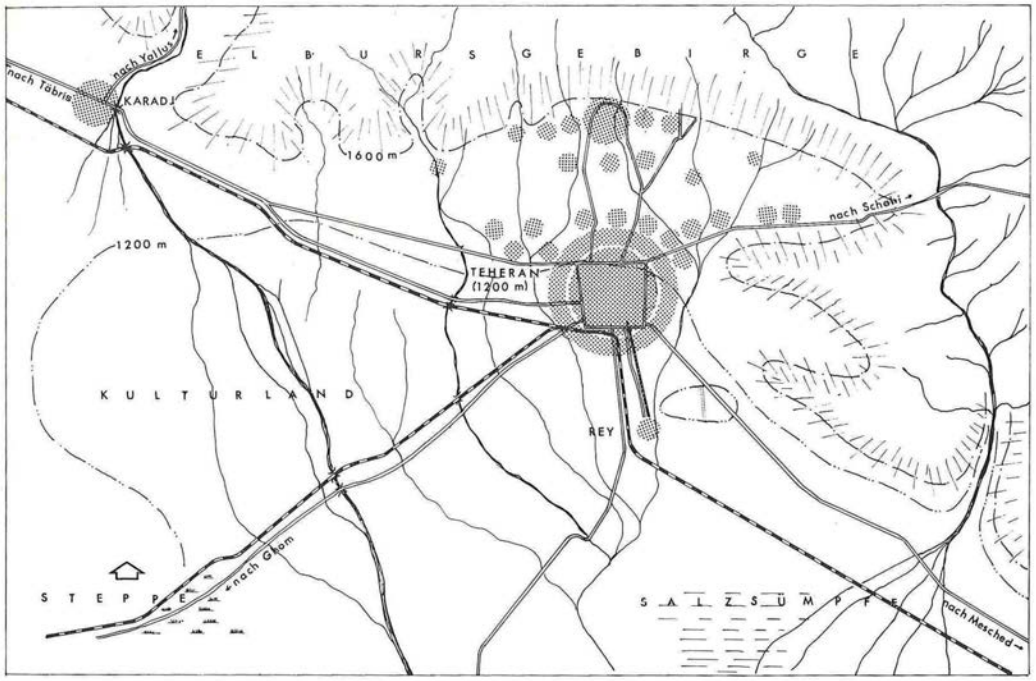
4.6. 1968 Master Plan and Staging the New Tehran

In 1964, Abdolaziz Farmanfarmaian and Associates (AFFA) (an Iranian consulting engineering firm) was selected by the Plan Organization to design the first comprehensive master plan for Tehran, together with Victor Gruen as the American partner. Farmanfarmaian was the cousin of the head of the economic bureau and had graduated as an architect from the École des Beaux Arts in Paris and moved to Tehran in 1950s as an employee of Tehran's mayor's office (Milani, 2008:151). He was among the first architects who established consulting firm for architecture and engineering in the country, and by 1975 became the biggest architecture/planning firm in Iran with four hundred architects, engineers, and service employees in its offices in Tehran. Gruen was an Austrian-American architect and planner based in Los Angeles, known as the 'Mall Maker' for giving an architectural shape to American consumerism (Hardwick, 2004). By the early 1960s, he had shifted from designing shopping malls to city planning, publishing a critique of the suburbanization and deterioration of many once vibrant downtown neighbourhoods of the United States in his book The Heart of our Cities, published the same year the project began (Ibid:214).

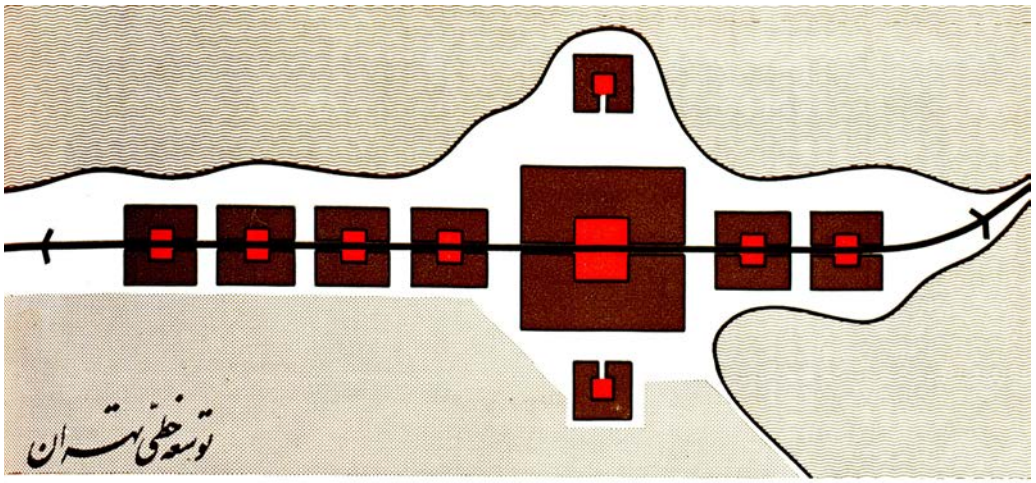
The Tehran Comprehensive Plan was designed to bring new order to the irregular urban expansion of the city and respond to the growing number of rural migrants and the congested city centre. The Tehran Comprehensive Plan (TCP) that was approved in 1966 entered the implementation phase in 1968. At the time, more than 30% of Iran's urban population lived in Tehran (Amirahmadi and Kiafar, 1987). The TCP was inspired by a post-war modernist idea of planning that sought to create the 'ideal city' through 'comprehensive' development (Hall, and Tewdwr-Jones, 2011). The plan's aim was to reduce the density of the city centre by proposing a series of centres to reorient growth and reorder social structures. Tehran's growth is restricted by mountains to the north and the east and by desert to the south, making expansion in those directions physically and economically impractical. Instead, the TCP proposed a linear decentralization, stretching the city westward (Fig.4.4). This way 5 million inhabitants – the maximum that the city could supply with water – could be accommodated over 25 years, expanding the city from 180km2 in 1966 to 650km2 in 1991, but this time with rigid boundaries and carefully defined districts and neighbourhoods.

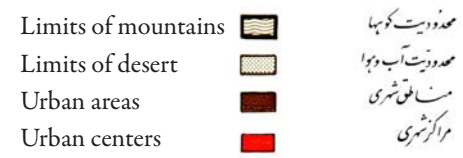
Figure. 4.4. Diagram (A) shows the existing pattern of growth in Tehran in 1960, and Diagram (B) shows the proposed strategy of Tehran masterplan in 1966.

A



B

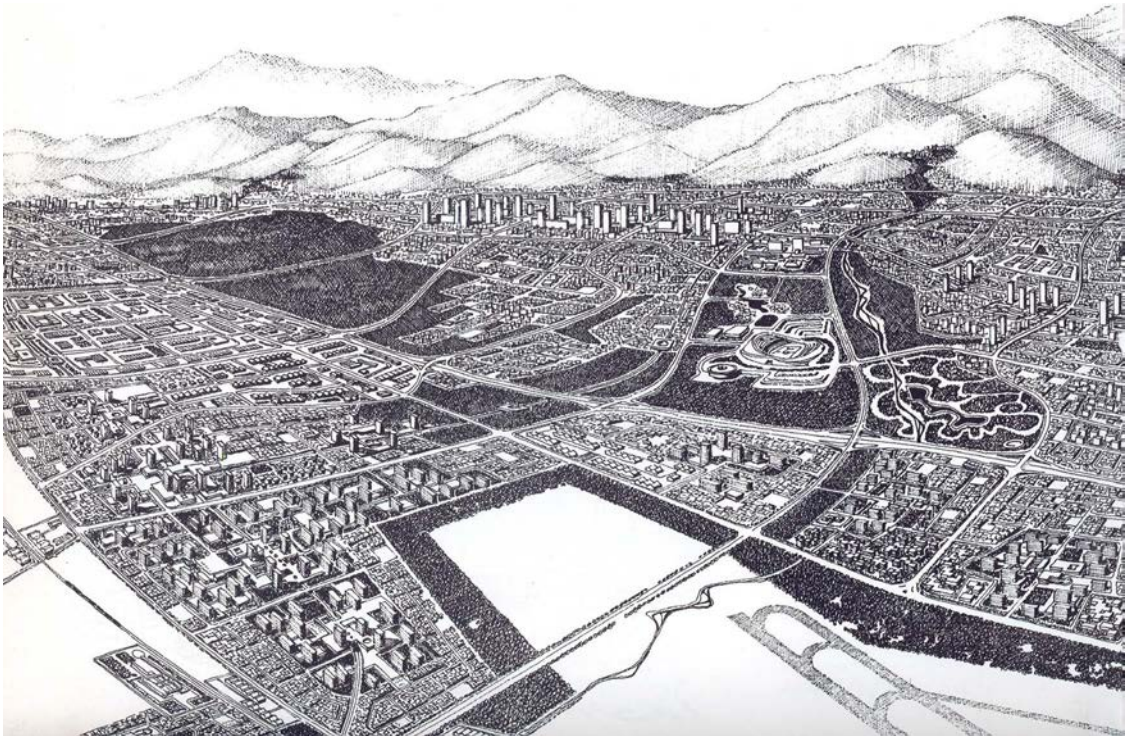




Source (A): 'Die Entwicklung der Stadt Tehran' (Tehran Urban Development), Peter George Ahrens: 82.
Source (B): Art and Architecture Magazine, No. 5. special issue of Tehran Comprehensive Plan, 1970.

The TCP approach towards the future development of the city was similar to the American post-war planning debates, which focused on resolving urban problems through decentralization, and reorganization of the living space of cities using two key elements: the 'neighbourhood unit' and the 'super-highway' (Hansen, 1968; Domhardt, 2012). The TCP envisioned that by 1991 Tehran would have ten different regional centres, each supporting half a million inhabitants in an area of 150ha, separated by large green areas and linked by a network of highways and rapid public transportation (Figure. 4.5). Over 150km of highways would enable the growth of the city west, with private automobiles as the primary mode of transport (Farmanfarmaian and Gruen, 1968). The optimism and utopian vision of Gruen and his Iranian partner to produce the ideal city for 'modern living and modern transportation' had a significant impact on the plan (Mennel, 2004). Inspired by Clarence A. Perry notion of Neighbourhood Units and Ebenezer Howard's Garden City, (Hardwick, 2004:221). Gruen and Farmanfarmaian's proposal introduces a range of neighbourhood units, with different densities for different income groups. As shown in Figure 4.6, neighbourhood units for lower, middle, and upper income groups varied in population from 3,000-5,000 residents (Art&Architecture magazine, 1970: 51). These neighbourhoods were designed based on Perry's units, organized around certain key planning principles, like the necessity for a school and playground within 500m of each house, and neighbourhoods defined by major streets, with 10% of the land area dedicated to open spaces and community activities (Lawhon, 2009).

Figure. 4.5. The scheme of Tehran Comprehensive Plan, projecting the ideal model of Tehran expansion towards the west.



Source: TCP report 1966, Tehran Municipality.

The 'neighbourhood unit' and the 'super-highway' schemes were designed to distribute facilities and services and create high quality living space. The TCP envisioned the city as a city for the middle class with no poor population. The assumption was that Tehran would be socially mobile, and the visible lifestyle of the upper classes would motivate the city's poorer residents to get better jobs to earn more. Ultimately, the new Tehran was imagined to be a utopia for the lower classes, as imagined their mobility to higher class levels regardless of the limitations of the parts of the city they inhabited (Emami, 2014).

Figure. 4.6. Different neighbourhood unit schemes proposed by Tehran Comprehensive Plan for different income groups.

Source: Drawn by author, compiled from Art and Architecture Magazine, No. 5. Special issue of Tehran Comprehensive Plan, 1970.

The TCP perceived the future of Tehran to be constructed in manageable units that were arranged within a hierarchical system both socially and spatially. The smallest unit would be the neighbourhood of three to five thousand people classified based on their level of income. In the high-income neighbourhoods to the north, single families would live in luxurious one or two storey houses with gardens, swimming pools and tennis courts. The middle-income areas consisted of high quality apartments with parks, cafés, and restaurants at the centre of their neighbourhoods, accessible by both public and private transportation. For lower income residents, the south and southwest of the city were densely filled with apartment buildings and good access to public transport, mosques, public baths, primary schools, and parks in the centre of each neighbourhood. Hence the design of these segregated neighbourhood units based on income levels accentuated the existing socio-spatial polarisation of the city. In short, the TCP approach had to do more with a technocratic and architectonic approach to urban planning with a rational reordering of the urban fabric and society, while containing no vision of social equality. It understood society in more aesthetic and visual terms, which was typical of a comprehensive planning approach that prioritized grand visions for the rational engineering of space and society.

36. Decade of Growth," in Art and Architecture magazine, vol. 18–9, 92–3.

4.7. The 'neighbourhood unit' and the 'super-highway'

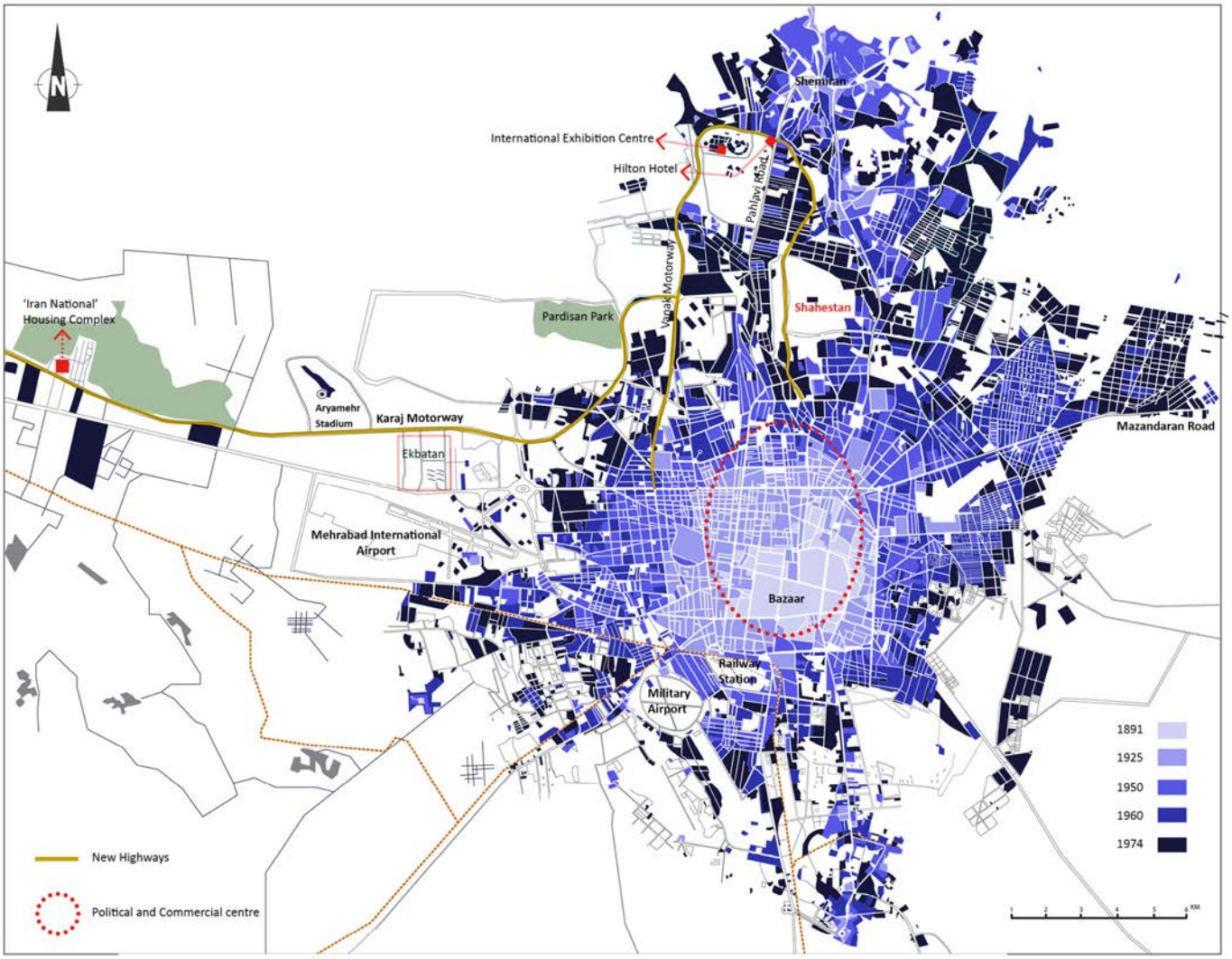
The rise in global oil prices in the early 1970s and the resultant increase in oil revenues positioned Iran among the top twenty economies in the world, and brought confidence for the state to initiate large-scale urban projects. With wealth concentrated in Tehran, the city's industry and services experienced phenomenal growth. Tehran's population jumped from 2.7 million in 1966 to 4.5 million in 1976 (Madanipour, 2006). Land speculation and rapid rural-urban migration became the main impediments to both the Comprehensive Plan and the application of a logical growth pattern. Rather than invest in factories or industrial development, wealthy Tehranis sought a way to reproduce their wealth in a faster and more reliable way: land and housing speculation. The Tehran Comprehensive Plan proposed rigid service boundaries for the city, and as a result the price of real estate in inner city Tehran increased by an average of 250% from 1966 to 1971 (Art &Architecture, 1973)[36]. With the majority of inner city land in the hands of the state and small group of landowners, a new spatial contrast began to appear, in addition to the contrast between the north (rich) and the south (poor). The rising price of land in the inner city began to distinguish it more strongly from the more peripheral future growth areas of the Comprehensive Plan, which further began to complicate the plan's implementation.

This real estate speculation influenced both public and private investments in urban projects. Alongside providing infrastructural facilities and building the new inter- and intra-city highway system, the state began to invest extensively in different projects for the inner and outer city. The construction of luxury high-rise condominiums, hotels, a modern city centre, cultural venues in the inner-city areas, and large factories, military sites, sports facilities, parks, and low- and middle-income housing complexes in the periphery combined to become an unprecedented project of urban development and modernization.

Figure 4.7 shows the map of Tehran's urban growth in 1974, and the direction of Tehran's urban expansion and division of functions in inner and outer city areas. Two lines of highways facilitated the expansion of the city towards the north and west. The north-south Vanak Highway connected the rich suburbs in the north to the centre and the international airport, while the four-lane Karaj Highway connected the industrial town of Karaj 40 kilometres west of Tehran to working class suburbs and different factories in the west to the airport and city centre. The two motorways directed urban growth towards the north and the west and transformed Tehran into a car-centric city. Two different types of urban activities were located along these two highways which produced a new form of duality in the city. For example, the Hilton Hotel, the international exhibition centre and luxury residential condominiums were located along the Vanak Highway; whereas car factories, working class neighbourhoods, sport facilities and football stadiums were built along the Karaj Highway.

For middle class Tehranis and experts at Plan Organisation, all of these projects, whether a Hilton hotel or a car factory, were spaces of pomp and prominence, highlighting the rapid progress of the Iranian capital. The neighbourhood units that Gruen and Farmanfamaian planned for Tehran were never fully implemented. However, their scheme influenced a large number of mass housing projects across the city. The working-class neighbourhood next to the Iran National Car Factory (Peykan Shahr), and the Ekbatan mass high-rise residential complex, for the middle and upper-middle classes, are two examples of new residential developments influenced by the neighbourhood unit concept.

Figure. 4.7. Tehran urban expansion in 1974.



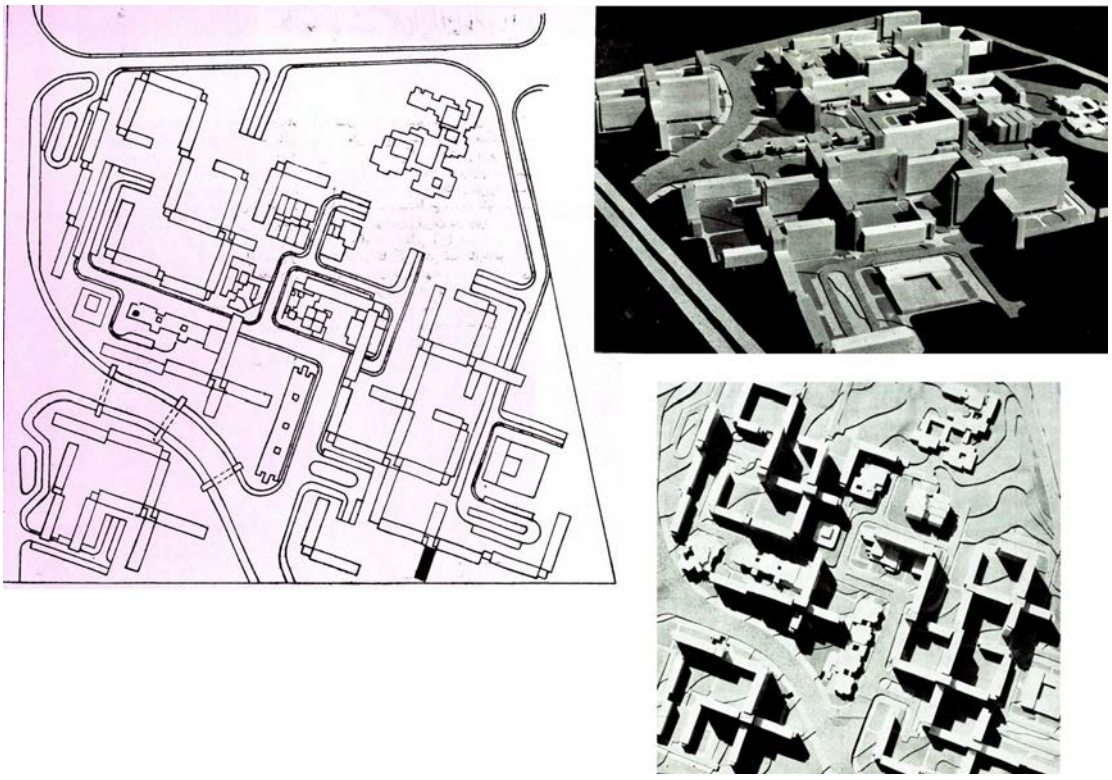
Source: Drawn by author, compiled from Map of Tehran in 1974, published in Cultural Atlas of Tehran, 1976.

Peykan Shahr was designed in 1971 by young Iranian architect Fereydoun Davarpanah, who graduated from the École des Beaux Arts in Paris and established his consulting engineering firm in Tehran. In the design of the working-class neighbourhood of Peykan Shahr, the plan consisted of 57 apartment blocks in different sizes and densities, including 34 blocks of 3 to 5 floors each, 14 blocks of 9 storey buildings, and 9 blocks of 13 storeys (Art&Architecture Magazine, 1972:117), offering a range of layouts for different family structures. But in contrast to the Gruen scheme, which locates the public spaces in the centre of the neighbourhood, Peykan Shahr lays the blocks out around different shared spaces for the families residing in them (Figure. 4.8). These smaller-scale open areas offered room for family groups to intermingle and facilitated the socialization of smaller communities within the neighbourhood. The design of the Peykan Shahr neighbourhood was characterized by concrete blocks, flat roofs, and an irregular, asymmetrical plan, which appears to have adapted some of the

Zielenbau characteristics that were developed by German and Dutch architects and planners in 1920s and 1930s. Ultimately the plan of the Peykan Shahr neighbourhood combined some of the principles of the neighbourhood unit scheme proposed by the master plan, and also a number of different modernist design elements of European social housing.

The Ekbatan high-rise complex was designed in 1976 by South Korean architect Kim Swoo Geun, the local architecture firm Rahman Golzar, and the Gruzen Partnership, an American firm with a legacy of federal housing projects going back to the thirties (Habibi, 2015). The American, Iranian, and South Korean designers had to plan modern apartments for 15,500 middle-class families on a plot of 240 ha, located to the east of the Mehrabad International Airport. The site was located outside of the first phases of the development boundaries of the Tehran Comprehensive Plan and was owned by a private landowner. The project designed a series of U and Y shaped towers with ultra-modern apartments, and various types of floor plans and flat sizes, from one bedroom flats to four bedroom penthouses (Figure.4.9).

Figure. 4.8. Scheme and model of 'Iran National' housing complex (Peykan Shahr).



Source: Art and Architecture magazine, 1972, vol. 12–13, page 117–119.

The Ekbatan project was designed in two phases, and the first phase is very much in line with the Gruen and Farmanfarmaeian 'neighbourhood unit' scheme. In this phase, the towers were designed in different densities from 12-storey apartments to 9 and 5-story apartments around a linear center that would provide all the needs of residents. The center consisted of a massive linear shopping center, schools, four sport fields, a hospital, and a post office. Beneath the shopping center were parking spaces; and residential parking was also mainly underground. The spaces in-between tower blocks were taken up by well-designed parks and gardens and swimming pools.

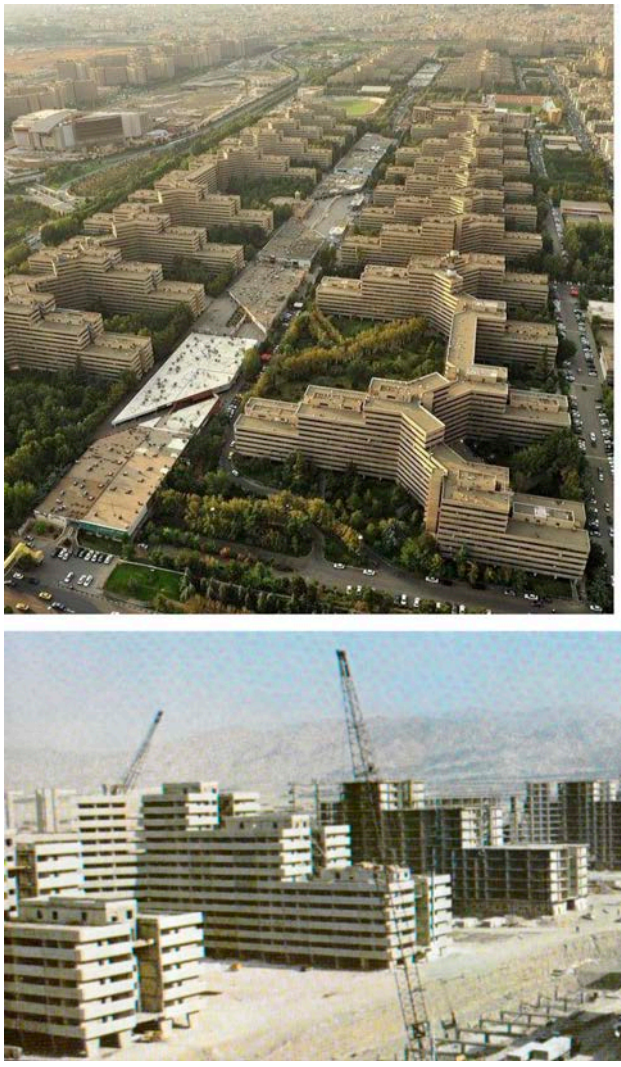


Figure. 4.9. The aerial photo of Ekbatan mass housing project

Source: DSH Design Group, http:// wp.dshdesigngroup.com/ekbatan/ (accessed 14 October 2015).

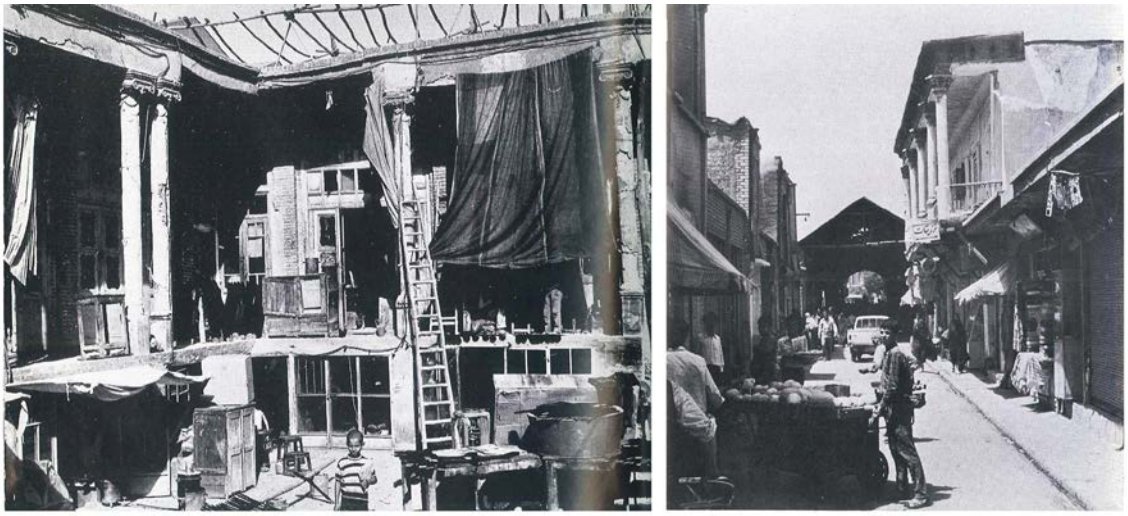
The case of Ekbatan shows that the advent of modern construction technology and intense collaboration between Iranian professionals with international architects and planners provoked immense changes in the spatial pattern of Tehran. The development of middle and upper-middle class tower block housing in different parts of Tehran flourished in the 1970s and has persisted to this day. The Atisaz Complex, the Saman Towers, the Eskan Towers and

the Behjat Abad Apartment Complex, for example, were all built in the form of a cluster of residential towers directly linked to main avenues and motorways. Living in homes with 'modern amenities', Western-style furniture, secure gates and janitors defined the identity of many upper-class citizens living in the city's north (Karimi, 2009)[37]. Consequently the closed system of neighbourhood units that are connected with motorways became a dominant pattern of Tehran urban development, creating class-segregated suburbs.

In contrast to modern residential neighbourhoods in northern parts of Tehran, traditional courtyard housing and shanties were still characteristic in the south of the city. Even a decade after land reform, continued migration from rural areas was increasing pressure on the housing market. Large traditional houses in the centre and south of the city, once the homes of well-to-do families, were subdivided to accommodate the influx of new arrivals. In 1976, some 22,000 households in these areas had seven or more people living in one room (Costello, 1998) (Figure.4.10). These numbers created a significant challenge for the state, which promised modern infrastructure and economic development that would produce a high quality of life for everyone in Tehran. Though a small number of low-income housing projects in the south were sponsored and constructed by the Mortgage Bank, the Plan Organization and the municipality, they still could not solve the scarcity of housing for the urban poor. As a result, the number of shantytowns around Tehran, mostly near the airport and the city of Rey, continued to grow in the 1970s (Hourcade, 1974, 1987).

37. For more on construction of 1970s Tehran's luxury residential high-rise see example of Eskan tower by Feniger and Kallus, "Israeli Planning in the Shah's Iran".

Figure. 4.10. On the left, the condition of housing in historic centre of Tehran. On the right, the back allies of Tehran bazaar.



Source: Seger, 'Tehran, Eine Stadgeographische Studie' (Geographic studies of Tehran), 1978

The new centre for Tehran

To shift the high density of activities away from the historic centre, the 1968 master plan proposed a new one, called 'Shahestan' after the Royal Family, in the vast 544-hectare undeveloped areas of Abbas-Abad in the north of the historic centre. Figure 4.7 shows the location of Shahestan on a 1974 map of Tehran. The project was designed by American planner Jaquelin Taylor Robertson and UK architecture and planning firm Llewelyn Davies. The core of the plan was the creation of a massive urban square to be known as 'Shah and Nation Square', which would match in size with Tiananmen Square in Beijing. Around it would be arranged the key institution of a modern Iran. The planners called it a national centre for the 20th century, and compared its proportions and the arcades that lined it to Isfahan in the sixteenth century (Figure.4.11).[38] This project would expose the bazaar, Tehran's oldest and busiest marketplace, to even stronger market competition and remove the economic heart of the city away from the older, central districts.

38. For more on the project of new centre for Tehran see Emami, "Urbanism of Grandiosity"; Mohajer, "The Shahestan blueprint", Khosravi, "Politics of DeMonst(e)ration".

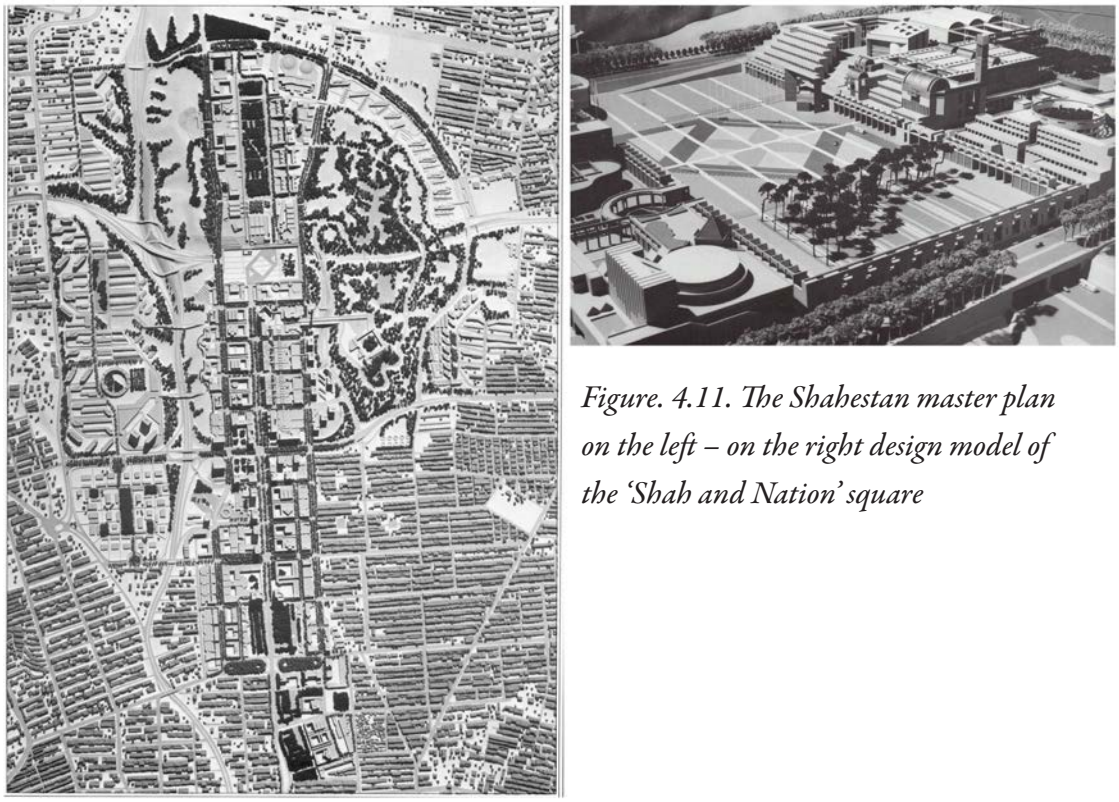


Figure. 4.11. The Shahestan master plan on the left – on the right design model of the 'Shah and Nation' square

Source: Shahestan Pahlavi, a New City Centre for Tehran, Report by Liewelyn-Davies International, planning consultants, vol. 2. 1976.

The Shahestan Plan, had it been implemented, would have further accentuated the divide between a westernised, affluent, northern city and the historic city with its narrow lanes, courtyard houses, mosques and bazaars. In fact the bazaar was viewed by the state and local professionals "as a remnant of the past, but also as an institution incapable of change, and, therefore a major impediment to Iran's continued economic development" (Keshavarzian, 2007: 134-5). In contrast to this view point, the Grand Bazaar continued to be a dense collection of covered "narrow arteries that make up an area exceeding one square kilometre and consisting of several kilometres of passageways" (Ibid:43). Since WWII, the size of the Grand Bazaar had steadily increased, in 1978 becoming the largest covered shopping area in the world (Ibid).

4.8 Conclusion

By the late 70s, one could hardly find similarity between the reality of Tehran and the 'ideal city' image which was presented by the 1968 master plan. Tehran had become an extremely contested city which illustrates a situation of intense segregation under political, social, and economic stress. While the cosmopolitan elite passed de Gaulle Expressway, and Eisenhower Boulevard to get to their luxury villas and flats in the north, many others still lacked clean drinking water. The planners' top-down and rational treatment of Tehran's urban problems dismissed the dominant presence of different groups such as the urban poor (in shantytowns), merchants (at the Bazaar), and landowners (speculating on housing) and their crucial role in shaping the city. Both Iranian and foreign 'experts' at the Plan Organization and 'consultant engineering' firms blithely ignored the following factors: the rapid rural-urban migration, the speculation of land and housing; segregated luxury high-rise residential complexes that sharply contrasted with the poor shantytowns; the rapid decline of the historic centre due to over intensification; and the massive irregular expansion of the Bazaar as the major economic centre of the city. The urban experts and decision makers, with their scientific, rationale, and technocratic approach, overlooked these urban consequences, under the assumption that all aspects of the city can be measured, monitored and addressed as a technical and physical problem.

The inefficiencies of planning practices or failure of comprehensive plans in Tehran have often been blamed on the state bureaucracy and improper execution, rather than on the planners and experts or non-state actors. While this study showed how state institutions, the

ruling class, and experts have used and oriented economic development planning and comprehensive master planning according to their own agendas and their relations with other local or foreign actors. Hence, we see that the making of Iranian planning projects was not merely the product of state institutions of planning and national ideas of planning - but also architects, engineers, planners and experts' involvements with their education, their ideology, their professional identity and economic objectives were crucial for framing the administration and professionalization of planning. In fact, in the case of the 1968 master plan, both local and international architects with their faith in science and technology, saw their role as 'technical experts', and advocated for the strong role of the state in planning matters. They set up an ambitious modernist and functional master plan with a very limited conception of public interest, and expected from the state and public bodies to eliminate land speculation, powerful landowners, urban poor and other real challenges on the ground to implement their utopian visions. As it is shown, Gruen and Farmanfarmaian's report hardly suggests a solution for housing the poor in Tehran and instead promoted income-segregated 'neighbourhood units' in a city that was already socially divided. Hence, this limited perspective of both local and foreign experts was not only ineffective in challenging centralised and rigid state policies towards planning, but instead contributed to the centralisation of the planning system, and thus excluding architects and planners from decision making processes. Therefore, the state and the municipality became the main job providers for 'consulting engineering' firms, and until today there is a strong alliance between the state and these firms, which has had significant impact on planning Tehran's urban development and other cities across the country. Ultimately this research calls for the urgent need for further studies on the relations between state and planners in shaping Tehran's urbanism, as well as further critical assessment of the role of planners and architect-engineers, by mainly questioning the practice of 'consulting engineering' firms which has persisted until today.

CHAPTER 5.

The Politics of Building in Post-Revolution Tehran

5.1. Introduction

The shortened version of this chapter is accepted for publication in Yacobi, H. and Nasasra, M. (eds.) (2019) Routledge Handbook on Middle East Cities. The title of the book chapter is the same as the title of Chapter 5.

It has been more than three decades since the Islamic Republic of Iran was established by Shia clerics—an event that not only dramatically reshaped the country, but also altered the geopolitics of the region and Iran's relation with the rest of the world. During this time, the 1979 Revolution and the Islamic Republic of Iran have continuously challenged Middle East experts' and scholars' opinions and assumptions on modernity, political Islam, and social and economic development. The 1979 Islamic Revolution was the first revolution in the 20th century to advocate for revivalist religious ideologies that rejected Western ideologies – whether democratic or Marxist – and to insist that an indigenous religion (in this case, Islam) had all the elements needed to build an egalitarian and progressive nation (Keddie, 1985). In contrast to Western views that depicted the Iranian revolt in 1979 as a break from modernity or a simple clash between backward and advanced, the Iranian revolution was a progressive act that encompassed liberal and leftist intellectuals, feminists, elite Islamists, and nationalists from almost all social classes (Keshavarzian, 2007). Radical Shia Islam emerged as a result of disillusionment with the two ideologies that had dominated Iran for almost fifty years – Western reformism and Soviet Marxism (Dorman and Farhang, 1988: 171). Revolutionaries attempted to accommodate modernity within a sense of authentic Islamic identity, culture, and historical experience (Mirsepassi, 2000), a turning inward to indigenous values was reflected in the utopian and popular revolution's motto: 'Neither East (socialist) nor West (capitalist), but Islamic Republic!' – intended to reject the two rival models of modernity and development and find a 'third way' (Khatam, 2015: 6).

Yet the 1979 Iranian revolution had coincided with the major shifts in Western political and economic ideologies, and visible decline of soviet power and communist influence in global power relations. Moreover, As discussed in section 2.2.3. the late 1970s marked the collapse of post-Second World War economic order and the emergence of a new consensus among Western powers on the role of the state in economic activities, which aimed to 'free'

the economy and market by limiting the state power in organising the national economy. It is in this condition that Islamic Republic, as the only hybrid republican-theocratic regime in the world has sought to 'catch up' with developed nations and establish an independent and economically self-sufficient development model based on the principles of Islam (Mirsepasi, 2000). The main question examined in this chapter is how the radical shift in post-revolution Iranian politics and the attempts of the Islamic Iranian state to conceive of an Islamic model of development have impacted Iranian spatial development policies and, consequently, urban planning and development of Tehran. The focus here is on the first two decades after the 1979 revolution, when the foundation of Islamic revolutionary idea of development and governance were formed and reformed under the influence of various domestic and global forces.

During the past decades, Iranian urban planners, experts, and scholars have analysed how Tehran was developed, planned, and managed after the Islamic Revolution, and the success and failures of different urban policies and plans that have shaped the urban development processes (Habibi, 1997, 2005; Hourcade, 2005; Ghomami, 2004, 2008, 2013; Zebardast, 2006; Sadri, 2014; Madanipour, 1998, 2003, 2006, 2010). The dominant view among these studies is that Tehran's urbanisation has been an outcome of top-down state policies, and draws on the idea that a unique set of political and economic conditions in Iran have given rise to a powerful and highly centralised state that directs and plans urban development. Under these terms, the state acts as the ultimate decision maker, regulator, and participant in urban development, despite pressures from globalisation and the decentralisation of administrative and fiscal power. Moreover, the majority of these studies mainly focused on official and formal state building policies and practices in examining Tehran urban governance, and consequently overlooked the informal political and economic operations, namely the institutionalisation of non-state ideological charities which played a significant role in consolidating stability and sovereignty of the Islamic Republic. While the current study benefited extensively from existing scholarship, it aims to critically rethink the role of the post-revolution 'state' and nation building strategies in shaping urban planning and development practices. Therefore, this chapter seeks to show how the idea of non-state charitable institution has formed after the revolution, and to what extend these non-state institutions have been contributing to production of neoliberal urbanisation and a hybrid form of governance for Tehran.

This chapter draws on the work of scholars Khatam (2015) and Ehsani (2009, 2013), who revisit the role of Islamic ideology and nation-building strategies in shaping urban development, and argue that there is a need to rethink how the complex political and economic power relations between the various actors and agencies involved in making urban policies and plans have shaped Tehran's urban development trajectories. Moreover, this research builds upon previous critical studies of planning in Middle Eastern cities, namely the work

of Yacobi and Shechter (2005) and Fawaz (2009), who have challenged the common views on planning processes of these cities and called for further work on integrating political economy with the study of urban development and lived spaces. This study responds to this call by providing a critical analysis on the omnipotent nature of the Islamic 'state' and examining the transformative role of the non-state actors namely charitable revolutionary organisations – Jihad Construction (Jihad Sazandegi), the Foundation of Dispossessed (Bonyad Mostazafan), the Housing Foundation (Bonyad-e-Maskan), and the Urban Land Organisation (Sazman-e-Zamin Shahri) – in shaping Tehran's urban development parallel to state institutions such as the Tehran Municipality and the Ministry of Housing and Urban Development. As discussed in section 2.2.3. in 1980s and 1990s many developing countries were under pressure of the World Bank and IMF to apply homogenising programs such as 'Structural Adjustment' and de-centralisation of state in order to come out of economic recession and 'catch up' with developed nations. This chapter argues that revolutionary organisation in Iran played an important role in adapting and domesticating these homogenising policies, while simultaneously they have protected and nurtured the revolutionary Islamic ideology. Ultimately there is this interplay between these revolutionary organisations and state agencies that has had important implications for Iranian planning system, Tehran's urban governance and development since the 1979 revolution, though it has received somewhat less attention from Tehran scholars.

The analysis is divided into two sub-periods. The first sub-period (1979–1989) shows the ways in which redistributive and egalitarian state policy influenced revisions to the 1968 Tehran master plan, and examines the role of semi-public charitable revolutionary foundations in enabling new land and housing policies, independent from the Tehran Municipality and in parallel to other state agencies, such as the Ministry of Housing and Urban Development. The second sub-period (1989–1999) looks at the shift in the state apparatus after the Iran-Iraq War and the formation of a new state administration – called the 'reconstruction administration' – under president Ali Akbar Rafsanjani, who brought institutional reform and aimed to build an Islamic developmental state inspired by Asian development models –as explained in chapter two. In this part, the study depicts the influence of the liberal state policies in the reorganisation of the revolutionary organisations and Tehran Municipality. Ultimately the chapter concludes by discussing the role of the state and political rule in shaping Tehran's urban governance and development after the Islamic Revolution, and reflects on the role of planning in urbanisation of Tehran.

5.2. The Political Economy of Post-Revolution Iran

Ayatollah Khomeini became the charismatic Leader of the Revolution, largely due to his popular messages of anti-imperialism and egalitarianism, which were distributed efficiently across the country and resonated with a broad spectrum of the population (Figure.5.1). In March 1979, when Iranians overwhelmingly participated in the referendum[39] and voted for the Islamic Republic, they did not know precisely what 'Islamic Republic' meant; instead, they were driven by a conviction that the new 'Islamic' state would be against monarchy, imperialism, and injustice, and would bring freedom, independence, and equality. In fact, the ambiguous and sweeping characterizations of the Islamic Republic in the immediate aftermath of the revolution had wide appeal to the masses, as it captured the reasoning and aspirations of various groups.

39.
In March 1979 a two-day national referendum held in Iran on establishing a new political system and asking Iranians whether they wish for an as-yet undefined 'Islamic Republic' or not. The referendum was approved by 98 percent of voters, according to official results.

After the fall of the Pahlavi government, the task of constructing a new Islamic state proved to be much more complicated than Khomeini had suggested. In initial discussions of what the nature of an Islamic state was to be, Khomeini stated that Islam had already provided all of the answers for an entire system of government (Maloney, 2000: 145). The theocratic, leftist, and liberal groups who participated in the revolution faced the challenging 'task of reinventing the state and adapting its relationship to a transformed social order while consolidating authority over the nation and extensive residual infrastructure of the monarchy in an environment of fierce contention among the revolutionary coalition itself' (Maloney, 2000: 146). The revolutionary elites who shaped the technocratic body of the state were determined to stabilize the new government's international position as fast as they could, and 'save the economy from collapse' (Nili, 2002: 80, cited in Khatam, 2015: 133).

For many of the members of the Nationalist-Religious party[40] , the Islamic Republic was a liberal-democratic government that only happened to have a cleric as a leader (Figure.5.2). Thus, the new constitution of the Islamic government simultaneously assembled much of its structure from Western social-democratic and liberal political systems and prepared the ground for the leadership of the Shia cleric Ayatollah Khomeini.[41] Based on the new constitution, Ayatollah Khomeini could dismiss the President at will 'for the good of the nation', choose chiefs of staff, decide whether to declare war, pick senior judicial authorities, and grant amnesty. Consequently, when the constitution was approved by a national referendum, Iran became the only theocratic state in the world to have an Islamic leader with absolute authority at the same time as a constitution based on Western social democratic laws.

Figure. 5.1.

(A) Mass uprising in Tehran around Shayad (Shah Memorial) monument in Tehran in 1978

(B) Ayatollah Khomeini salutes the crowds from his small school room office.

Source (A): Associate Press Archive, photo by: Aristotle Saris
Source (B) photo by: David Burnett from the collection 44 days: the Iranian Revolution. Available here: https://www.davidburnett.com/photos/44%20Days%3A%20the%20Iranian%20Revolution/32/

40. The nationalist- religious movement initially formed in 1940s and played an important role in nationalisation of oil in 1951. Despite the political oppression of Pahlavi state during 1960s and 70s the movement continued its political activity and became a crucial player in political development of Iran. According to Ahmad Ashraf, the popularity of the movement and its prominent leaders Banisadr and Bazargan, was mainly because they were seen as examples of a pious Muslim, modern scientist, and pro-democracy nationalist all rolled into one – for more on this topic see Ahmad Ashraf, "Islam in Iran xiii. Islamic political movement in 20th Century Iran," Encyclopædia Iranica, XIV/2, pp. 157-172, available online at http://www.iranicaonline.org/articles/islam-in-iran-xiii-islamic-political-movements-in-20th-century-iran (accessed on 30 December 2014).

41. The inclusion of Western social democratic law was a relic of the Constitutional Revolution of 1906.

Figure 5.2. Left to right: Abolhassan Banisadr and Mehdi Bazargan leaders of Nationalist-Religious party next to Ayatollah Khomeini

Source: Iranian photo Gallary. Open access. Available here http://fouman.com/Y/Get_Cats.php?cat1=Nature&lax1=English

In this setting, many aspects of the bureaucratic structure of the state stayed the same without any major changes from the pre-revolution government. However, the former executive directors, ministers, governors, and mayors either left the country, were jailed, or were executed by Islamic revolutionary forces. Many were convicted of treason against the Iranian people, corruption, embezzling millions of dollars from the public treasury, and serving Western interests, especially American interests. Western-educated technocrats were also marginalised and remained outsiders to the body of the state due to their weak ties to radical religious forces (Hezbollahis[42]). Nevertheless, the Shia clerics and radical Islamists, despite their supreme position within the constitution, did not fully trust the state bureaucracy or the institutions that they inherited from the previous regime. Only a few months after the revolution, Ayatollah Khomeini and those loyal to him aimed to find new ways to institutionalise ideology, consolidate their authority, and expand the power of Islam nationwide. They were fully aware that the Islamic state had to do more than simply establish sovereignty, and the state urgently needed to promote social and economic development.

42. Hezbollahi (Party of God) refers to an Iranian movement formed during the Iranian Revolution to support Ayatollah Khomeini and his forces in consolidating power. In the early years of the revolution, the supporters of the movement played an important role in oppressing and attacking newspapers or demonstrations that were critical of Ayatollah Khomeini.

In fact, Khomeini, as Supreme Leader of the Islamic Republic, was mindful of the mistrust between the state and civil society in the previous regime, and knew that one of the major forces behind the revolution was the unequal distribution of resources and uneven development. The revolution was indebted to the poor and working class in villages and the peripheries of big cities who were excluded from the benefits of the elitist development policies of the Pahlavi government. Upon his arrival in Tehran, Khomeini promised to 'build homes for the poor all over the country… this Islamic Revolution is indebted to the effort of this class, the class of shanty dwellers' (Athari, 2004:52). Thus, with the help of his followers, Khomeini initiated new mechanisms to generate and distribute resources, as well as to dismantle the former power structure that persisted in the new government. New revolutionary institutions (labelled 'charitable foundations') were formed to parallel the state machinery and quickly fill the power vacuum. Neither private nor state-owned, these developmental institutions were perhaps best characterised as semi-public organisations, and many of the new foundations took control over the confiscated wealth and property of the royal family or the assets of well-known aristocrats and industrialists who had fled the country after the revolution.

These charitable foundations became responsible for redistributing these assets and property among the poor, the working class, and state employees, promoting social and economic development and spreading revolutionary Islamic ideals across the country. They became very active mainly in the countryside where, at that time, nearly half the population resided. In the decades after the revolution, the foundations continuously evolved and developed, and played an important role in the socio-economic development of Iran. Among others, the Foundation of the Dispossessed (Bonyad Mostazafan), the Housing Foundation (Bonyad-e-Maskan), the Urban Land Organisation (Sazman-e-Zamin Shahri), and Construction Jihad (Jihad Sazandegi) each played a critical role in shaping rural and urban developments and in influencing urban planning practices, as well as urban land and housing policies.

5.3. Revolutionary Foundations and the Islamic Development Agenda (1979-1989)

The role and influence of these para-statal foundations in the rural and urban planning of the post-revolution era were a reaction to the previous political system inherited by the new Islamic government. One of the inherited organisations was Plan Organisation, which as discussed in the previous chapter played an important role in shaping the nation's development trajectory and institutionalising technocracy. In the early years after the revolution the Plan Organisation was criticized due to its dismissive attitude towards the urban poor and the rural populations. The Plan Organisation's third national development plan (1962-1968) was the first to include rural development, however, the budget allocated per villager was one fourth of the budget for each urban dweller. The investment in low-income housing in cities was also strikingly low (Athari, 2004). The outcome of these policies was not only led to a harsh divide between the city and the village, but also marginalised the poor and the working class in favour of the urban middle classes. Therefore, this situation inspired serious scepticism towards technocratic experts, planners, and urban development plans.

By 1980, half of Iran's population was living in cities, yet 70 percent were still illiterate (Saunders, 2010: 202), and another 17 million people were living in nearly 60,000 large and small villages in poor condition (Shakoori, 2001). The revolutionary foundation Construction Jihad (Jahad Sazandegi) was established by Ayatollah Khomeini to consolidate his power and address rural poverty and 'backwardness', especially relative to cities. In fact, even the name 'Construction Jihad' summarizes the complex relationship between developmentalism[43] , nationalism, and Islamism embedded in the Islamic government. In his speech announcing the formation of Construction Jihad, Khomeini invited all groups and professions to join the foundation and rebuild the nation, in a simultaneous appeal to nationalist and religious sentiments:

> We must be attentive to rebuilding the nation to repair this destruction which occurred in our country during the time of the unjust [and oppressive] Pahlavi rule... May everyone who participates in this jihad and rebuilds this destruction be successful... I want people to want to go on pilgrimages to holy shrines, supreme Mecca, and radiant Medina. However, today, there are higher spiritual rewards than these. Begin this construction all together [hameh bā ham] so that Iran can be properly built... In this jihad, God will give you the spiritual rewards that you also seek from pilgrimages (Ministry of Construction Jihad, 1991: 6, cited in Sander Lob, 2013).

42.
As discussed in section 2.2. Developmentalism in the international development context can be understood as set of ideas which place national economic development at the heart of political system and institutions and also as a main tool through which to establish political sphere and maintain political legitimacy.

In this speech, the spiritual leader boldly declared that joining Construction Jihad offered the equivalent spiritual rewards of visiting Muslim holy shrines in Mecca (a hajj) —that is, as long as people contributed to developing Iran, they did not need to go on pilgrimages. Very soon the foundation had adopted Khomeini's unifying catch-phrase of "all together [towards construction]" as its official slogan (Iravani, 1999: 189) and was successfully attracting many young men and women originally from villages and educated at universities as engineers, doctors, nurses, etc. before the revolution. These young, educated revolutionaries were among those suspicious of the bureaucratic structure of the state and critical of the Plan Organisation and other ministries for continuing to implementing Pahlavi's development policies, which, allegedly, worsened socio-economic inequality across the country.

This pervasive anti-urban and anti-plan outlook among revolutionaries had a number of consequences for urban development and planning policies in Tehran and other major cities. First, the government began to dedicate significant quantities of the national budget to rural development instead of urban development. Secondly, all inner city urban projects were put on hold and labelled as corrupt and Western, including the 1968 Tehran master plan. Lastly, Construction Jihad and other foundations such Foundation for the Dispossessed took on responsibilities belonging to the Ministries of Agriculture, Roads and Transport, Health, Education, Energy, and Housing and Urban Development. The inconsistencies and overlapping responsibilities between revolutionary foundations and other state institutions created complex situations for development planners and decision-makers within the state body who struggled to come up with any effective policy or plan for urban and regional development.

5.4. Anti-Urban and Anti-Plan Policies of the Post-Revolution State

On the eve of revolution, Tehran—with a population of five million—was one of the fastest growing cities in the world (Saunders, 2010). In 1979 alone there were nearly two million migrants to the city, a majority of which moved to older neighbourhoods in central Tehran, in run down houses, or to slums and squats on the periphery. These former peasants had moved to Tehran for the better quality of life that the Pahlavi regime had promised them after the 1963 Land Reform. Rapidly they realized that nothing much was waiting for them in the city. As a result, a series of shantytowns sprang up in and around Tehran—makeshift homes for the poor and struggling peasants that soon became permanent features, enclaves of ugliness abutting wealth and ostentation[44] (Saunders, 2010) (Figure 5.3).

44. In 1979, the New York Times published an article called 'For Tehran's Zero Class Constitution Is Secondary', and showed the hopes and worries of the 600 poor families living in a slum outside of Tehran called Halabi Abad or 'City of Tin'. The town was called 'City of Tin' because the outer walls of homes in this slum where all built of flattened cooking oilcans and the interior of mud. The tin and mud shack that every family lived in "cost the equivalent of $3,000 seven years ago and now it could bring every family more than $10,000, so acute is the housing shortage" the article claimed. Moreover, the article exhibited the fact that thousands of these poor dwellers voted for the Islamic constitution with only one demand: decent housing. The article quotes several residents: "all we want is decent housing" said Abdollah the street cleaner living in one of the shacks. "We are Tehran's zero class," said Masoumeh a young woman who ran a grocery store, "we have done as he asked us – we have voted for his constitution. Now will he give us what we want – a more decent life?" In fact, their vote was an affirmation of their trust in Ayatollah Khomeini, Iran spiritual leader, who strongly appealed to the majority of 35 million Iranians especially urban poor.

Figure. 5.3. Tin City in 1980 (South of Tehran)

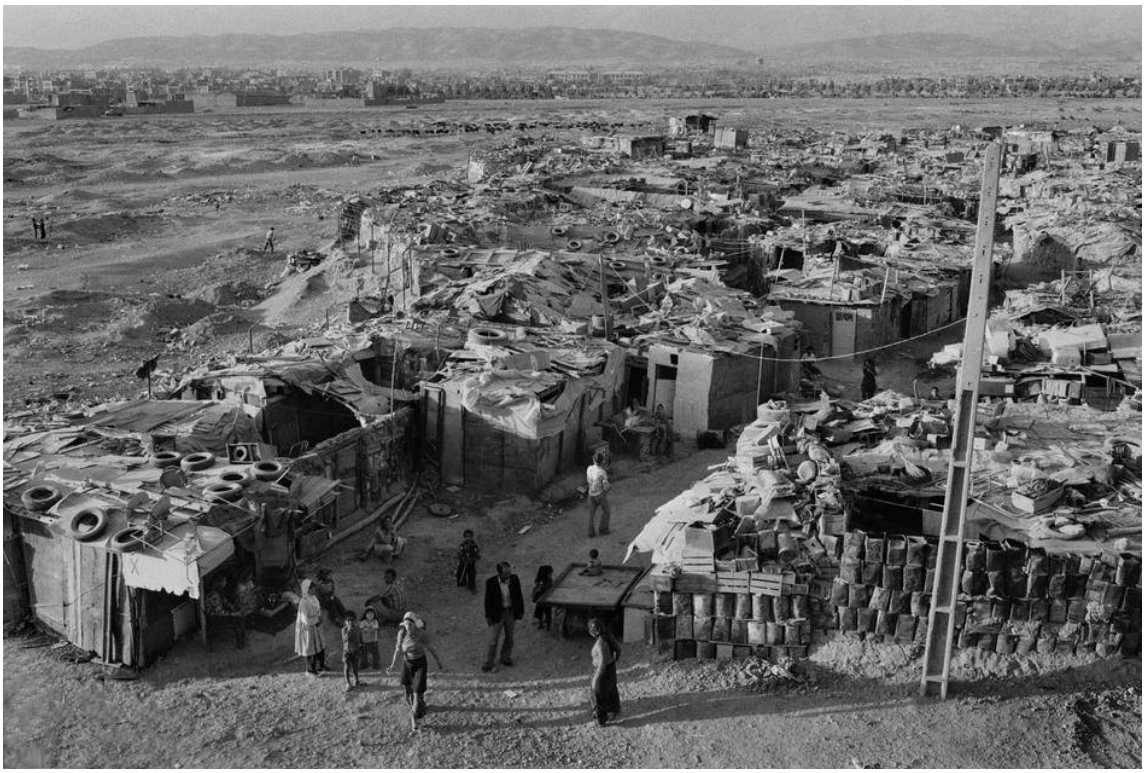


Photo by: Nasrollah Kasraian

As stated in the last chapter, from the 1950s onwards, due to increasing migration to cities and the extended power of big private landowners, Tehran began to face rising prices for land and housing, and by the late 1970s Tehran had become the most expensive city in the world when comparing land prices to the average monthly income. For the first time, housing scarcity and the worsening land situation were addressed in the Fifth National Development Plan (1973–1978), which aimed to introduce taxes on land value appreciation by:

> limiting the private transaction of undeveloped urban land, increasing state land acquisition powers for public purposes, and expanding direct public supply of low-income housing which grew to its highest level (to date) of 20 per cent of total housing investment in the country by the end of the period [in 1978] (Keivani, 2008: 1832).

However as discussed previously, none of these policies was properly implemented due to the presence of major landowners in key governmental positions who were able to negate the impact of these policies by controlling the urban land market and prices (Takamoli, 1981; Keivani, 2008).

By the time of the revolution, about 85 percent of land within the boundary of Tehran belonged to the royal family and few big landowners (Keivani, 2008). Moreover, 90 percent of the 80 million square metres of land on the outskirts of the city belonged to only 10 percent of landowners (Keivani, 2008: 1832). After the revolution, the political elite within the Islamic Republic—regardless of where they stood on the ideological spectrum—agreed to abolish large-scale land ownership and to redistribute land in a way that would serve the interest of society as a whole (Majedi, 1996). The revolutionary political forces sought to transform urban land ownership patterns based on Islamic principles regarding the possession of wealth and ownership. According to Islamic values, the ultimate ownership of land is with God, people are simply guardians of public trust, and ownership should be limited for the welfare of the public—hence land is not recognised as the particular property of anyone and "only people's work on the land implies private ownership rights" (Majedi, 1996). This basic ethos of Islamic law provided a firm legal framework for the Islamic Republic to acquire large amounts of vacant, undeveloped, and abandoned land without compensation. Consequently, when the Urban Land Act of 1979 was passed, a significant amount of land came under the ownership of the state and became nationalised.

The 1979 Urban Land Act was repeatedly revised over the next ten years, but the main objectives—to abolish the ownership of large tracts of land and provide housing for poor and low-income groups— stayed intact.[45] The act was a political move to prove the egalitarian nature of the Islamic Republic and to contrast it with the previous regime. The Urban Land Organisation and other revolutionary foundations, namely the Housing Foundation and the Foundation of the Dispossessed became key actors in implementing the Urban Land Act. The latter foundation was established in 1979 under the command of Ayatollah Khomeini to promote social welfare and win the hearts and minds of the urban poor. Both of these developmental foundations confiscated the land and properties of the royal family and well-known land owners within and outside Tehran and other cities. They played a significant role in the massive transfer of public land into private hands, including private developers and contractors. Within the redistribution process these foundations acquired considerable resources and political power, which allowed them to operate parallel to state institutions in housing and urban infrastructure projects, but without being bound to any particular state policy or plan.

45. In 2008, Katiraei (Minster of Housing, 1979-1980) explained in an interview with Rah, a radical Islamist journal: 'in 1982 the Act was revised and the new law gave the undeveloped land new status: the private ownership of this type of land is recognized and owners are entitled to develop up to 1000 square metres of their lands'. For more on the various revisions of the Urban Land Act, see Khatam (2015) and Keivani et al. (2008).

The economist Kamal Athari has noted the particular autonomy of the Housing Foundation in relation to the state's development plans and other developmental institutions. The Iranian Statistical Centre stated in their 1983 Yearbook that only four years after the Housing Foundation's formation it was employing 3,563 people, while the Ministry of Heavy Industries, which was established around the same time, had only 958 employees and the Ministry of

Housing and Urban Development, which had been in existence for over twenty years, had 6,948 employees. These numbers show the extent of the Housing Foundation's activity in the construction sector across the country, alongside the Ministry of Housing and Urban Development. In total, from 1979 to 1988, 45 percent of housing units in the metropolitan area of Tehran were constructed by the Housing Foundation and 15 percent by the Foundation for the Dispossessed, while only 6 percent were constructed by the Ministry of Housing and other state institutions (Majedi, 1996).

While the revolutionary foundations began to radically change the urban geography and political economy of Tehran, their activities had positive effects: they stabilized the land market during the 1980s, offered low-income families access to urban land and housing, and created a supply of land for public facilities. However, the ad hoc governance and implementation of the Act regarding the public allocation of urban land among the urban poor and lower classes created a series of new urban problems for Tehran. Within the first three years after the act, from 1979 to 1982, 75 percent of all new construction occurred outside the city boundaries that had been formally introduced in the 1968 Tehran Master Plan — the agenda of which was to expand Tehran's urban area towards its western suburb, Karaj, by 1991 (Ehsani, 1999).

Table 5.1. Tehran urban peripheral growth from 1966 to 1996

Year	Tehran Province Population (1000)	Distribution (%)			Growth Rate (%)	
		Tehran Province	City of Tehran	Periphery	City of Tehran	Periphery
1966	2472	100	78.3	23.7	---	---
1976	5321	100	85.1	14.9	4.2	4.4
1986	8095	100	74.6	25.4	2.7	4.3
1996	10343	100	65.3	34.4	1.1	2.9

Source: Khatam 2015 and 1999 (see bibliography)

Many villages located to the south and southwest of the city boundaries began to transform into sprawling suburbs, shifting urban growth towards areas where there was no provision for urban facilities and infrastructure (Figure.5.4 and 5.6). Furthermore, the Municipality and the Housing Foundation could not efficiently supervise the technical design drawings and construction of these houses, many of which were built by the ad hoc know-how of small-scale contractors and builders, adversely affecting the safety of the new houses. Ultimately,

the low density of houses, the lack of sufficient infrastructure, and the absence of planning and regulation led to massive urban sprawl (Figure 5.5).

Figure. 5.4. Residential development south-west of Tehran's boundaries

Source: Donya-e-eghtesad Newspaper, accessed May 2014

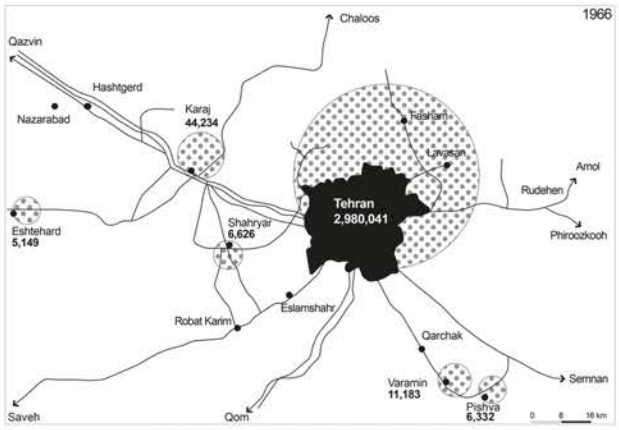
Figure. 5.5. Aerial photo of Tehran urban sprawl

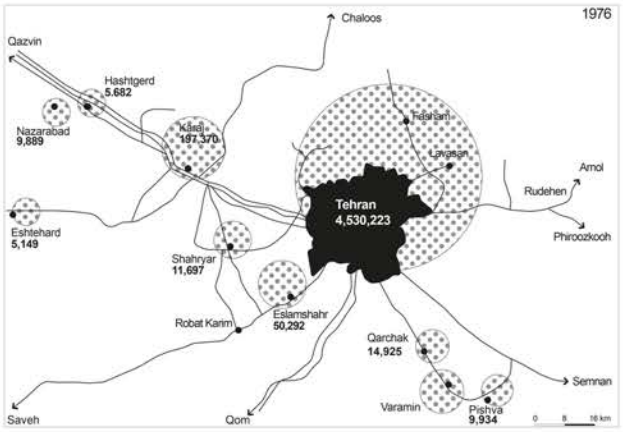
Source: Tehran Times, available here:
https://www.tehrantimes.com/news/415324/Mass-public-transit-a-solution-to-Tehran-air-pollution-traffic

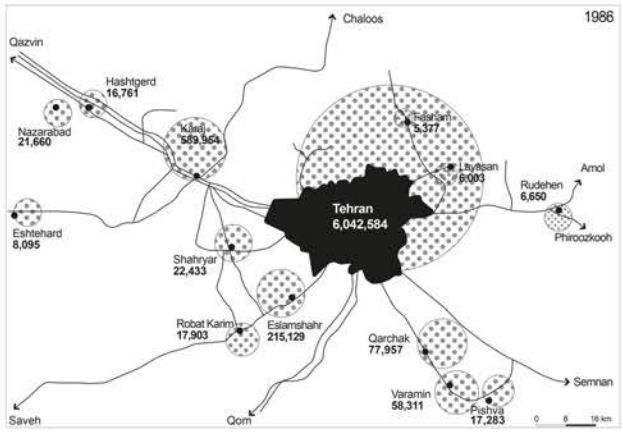
Throughout the 1980s, the only official plan for Tehran was the 1968 Tehran Master Plan. After the revolution, the master plan was criticized by revolutionaries for its connection to the political agenda of previous government and its objective of physically expanding the city and its preference for Western culture over local culture. Hence, under the Islamic egalitarian development policy, the Tehran Municipality stopped the implementation of the 1968 master plan and other unfinished urban projects across the city and instituted a number of symbolic and material revisions. As the urbanist and academic Sohrab Mashhoodi (2015) pointed out in an interview for this research, the 1968 master plan had allocated various building typologies and density ratios, from low-rise two-story buildings to high-rises of ten to fourteen stories, in different neighborhood depending on the various income levels of residents, accessibility, and requirements for open space. However, following the Revolution, the municipality passed a horizontal development policy which declared that density across city should be limited to three stories (Mashhoodi, 2015). Additionally, a considerable number of unfinished, large-scale high-rise complexes by private developers in the northern parts of Tehran for the middle classes were transferred to the Housing Foundation and the Foundation of the Dispossessed as eligible organisations to take actions towards these projects. After the Revolution, the Tehran Municipality, suffering under serious budget cuts due to anti-urban policies—as well as a general mistrust and suspicion that planners and urban plans were instruments that work in favor of the privileged and middle classes—had a very limited role in planning the urban development of Tehran.

While the enthusiasm of the Islamic elite and revolutionaries for agricultural and rural development partially managed to transform the living conditions of the poor in rural areas, it could not stop rural-urban migration. Construction Jihad carried out many development projects, particularly road construction, and improved basic public services and electricity supply, but it was not enough to solve the problem of the low agricultural incomes. In 1982, a rural household earned only 44 percent of what an urban family earned. As a result, within less than a decade (1979–1986), over 2,225,000 people moved from rural areas to cities, while nearly 1.5 million people migrated to villages outside of Tehran (Statistical Center of Tehran, 1981) (Table.5.1).

Contributing to this influx were the 2.5 million Iran-Iraq war refugees from south and southwest Iran, many of whom lived in temporary shelters in major urban areas. In addition, almost two million Afghan refugees had poured into Iran by 1985, nearly 300,000 of whom were estimated to have moved to Tehran (Kazemi and Wolf, 1997). Lastly, many of these migrants were inspired by the dream of cheap land and housing in Tehran, as well as the better quality of life that Khomeini had promised. These new migrants occupied land, both legally and illegally, outside Tehran's city limits and began to obtain urban services, legally or







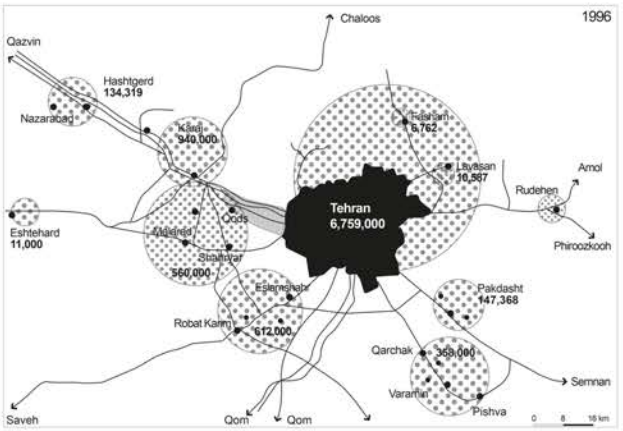


Figure. 5.6. The growth of villages and towns outside of Tehran from 1966 to 1996

Source: Author. Compiled from the Tehran metropolitan region: Strategic development Plan 1995 report (published by Centre for Urban Planning and Architecture research, Tehran, Iran)

otherwise; in 1986, nearly 100,000 households in areas around Tehran were without piped water (Kazemi and Wolf, 1997). By the end of the 1980s, there were 100 new townships within and around Tehran's city boundaries (Me'marri va Shahrsazi, 1990:4). The land area of Tehran had expanded rapidly from 200 square kilometres in the first year after the Revolution to 600 square kilometres in 1992 (Ehsani, 2006). The fantasy of egalitarian urbanism that Iran's Islamic leader had presented in 1979 was beginning to turn into a socio-spatial crisis, characterised by rapid population growth, lack of basic infrastructure and services, and unemployment.

The urban problems of Tehran were not confined to shantytowns and rapid urban expansion. By the late 1980s, Tehran's inner-city area was deteriorating, not only in terms of quality of life, but also in terms of its status as the capital city and as the country's largest political, social, economic, and industrial centre. The reasons behind this degradation were, first, the eight years of the Iran-Iraq War (1980–1988), which caused a recession in the country's development and construction, and, secondly, the anti-urban attitude of the Islamic government, which neglected spending on wealthy and middle class urban areas in favour of smaller towns and deprived rural areas. By 1990, Tehran, with a population of nearly seven million people, was polluted, overcrowded, spatially fragmented, and suffering from a lack of transport networks and municipal services. Limited funding and profound problems even led the government and assorted experts to debate the possibility of moving the capital elsewhere and building a new one (Ehsani, 2006).

5.5. Islamic and Asian Development Models (1989-1999)

The ten-year anniversary of the 1979 Revolution coincided with the death of Ayatollah Khomeini, the end of the Iran-Iraq War, and the fall of the Berlin Wall. At the same time, Iran was faced with the massive devastation and destruction left by eight years of war with Iraq, an impoverished population, an almost bankrupt economy, and political chaos. The large array of factions that Khomeini had held together with his personal charisma was disintegrating fast (Ehsani, 2006) and "[w]ith the collapse of the Soviet Union and the belief that the US model of liberal capitalism was triumphant, Iran's rulers faced an ominous new international order" (Keshavarzian, 2015). The collapse of a bipolar world system brought an ideological crisis for the Islamic Republic, which had to rethink its utopian motto of "neither west, nor east, but the Islamic Republic". A major realignment was formed in 1989 by the newly elected president Ali Akbar Hashemi-Rafsanjani (a businessman by profession and a clergyman by avocation), who, aiming to redefine the status of the Islamic Republic, "spearheaded a movement to revamp the economy in the direction of liberalization, privatization, and global participation" based on an Asian model of development (Amuzegar, 2004). The members of his administration self-identified as "constructionists" and labelled their faction "the reconstruction administration". The new government believed that maintaining the Islamic Republic's political and economic independence in a post-Cold War world required the cultivation of technical expertise, economic efficiency, and a culture of entrepreneurship (Harris, 2015).

The establishment of the new government coincided with a period during which the World Bank, IMF, and other international financial institutions were putting many developing countries under considerable pressure to privatise. The new president began his term in 1989 with a cabinet filled by technocrats and professionals with executive experience and higher education, mainly from England and the United States. Soon, the political and economic agenda of the new state shifted towards "cautious celebration of technocratic expertise and its assumed social carrier, the middle class" (Harris, 2015). The technocrats and engineers involved in the new government publicly discussed the inefficiencies of revolutionary policies and ridiculed the visible lack of scientific knowledge and expertise during the first decade after the revolution (Ibid).

Figure. 5.7. Ayatollah Rafsanjani and his cabinet, site visit in north of Tehran

Source: Tehran Times, accessed November 2012.

They sought to shift economic policy away from privileging revolutionary commitments to the poor in favour of championing expertise and the professional class. The first sign of the rising power of the technocracy was the rehabilitation of the Plan Organisation after a decade of revolutionary disregard. Iran's first post-revolutionary development plan (1989–1994)[46] was prepared primarily to reconstruct war-torn areas, expand and develop basic infrastructure, promote industrial growth, reopen the economy to foreign investment and capital, and revive the private sector under a structural adjustment programme (called Ta'deel eghtesadi) (Amouzegar, 1992).

The plan's design was based on Chinese and Malaysian development models, which were popular models in the privatization and deregulation trend among East Asian countries in the 1990s. The main characteristics of these models were to develop world-class infrastructure and sound macroeconomic management with close link to regional production network. Hence the first development plan aimed to change the global image of Iran as an undeveloped and 'inward-looking' nation under the rule of a theocratic state. The Asian economic model, as Khatam (2015) points out, "was perceived to be free from the negative aspects of both colonial… capitalism and anticolonial populist statism. It seemed ideal to reinvent a model of developmentalism with no reference to secular or democratic modernities of the west." President Rafsanjani, who visited China and Malaysia to explore their national progress, admired the promotion of the developmental state in these countries, especially the growth in Malaysia led by Islamic leader Mahatir Mohammad.

46.
for more detail on this development plan, see Amirahmadi (1995).

The Islamic leftist and traditional conservatives in parliament attacked the plan bitterly, and accused the new government of having a capitalist agenda, favouring industry over agriculture, and relying on foreign debt.[47] In fact, the approval of the first development plan in 1989, with the aim of structural reform for economic growth,[48] marked a turning point after a decade of Islamic revolutionaries' criticism for development planning and territorial management (Khatam, 2015: 141). Against the dominant mistrust of 'experts' and 'planning', the new Asian-inspired model aimed to change the revolutionary language and ad hoc governance systems. The new government obliged members of parliament, governors, mayors, managers, and even directors of revolutionary foundations without university degrees to enrol at universities (Khatam, 2015). The new administration aimed to build a state consisting of a development-oriented Islamic elite to solve the problem of the nation's 'underdevelopment' and to modernise Iran without westernizing it (Rajaee, 2007). Thus, the type of the education and expertise that the government was advocating for was different from the one supported by the pre-revolutionary state.

47. The Islamic leftists were eager to sustain the economic system through direct control of the state (a dirigiste economy), whereas the conservatives believed in traditional commerce and trade through mercantile networks with a night-watchman state.

The education of the ruling elites within the post-revolution state shifted greatly towards engineering and major sciences such as math, physics and chemistry. These fields of studies regarded by Islamists as neutral knowledge when compared to humanities and social sciences, which were considered as secular western knowledge that was used to colonise other societies (Khatam, 2015:141). This shift became visible in education of leading members of the governing body where a large number of politicians, executive directors, and Islamic militants graduated either from Iranian or European and American engineering schools with MSc or PhD in electronic, civil, and chemical engineering. For example, the experts and directors of different departments at the Plan Organisation after the revolution were replaced mainly by engineers and scientists. This change was evident in the educational background of Plan Organisation directors in 1990s after its rehabilitation under the new administration. The two main appointed directors were Hamid Mirzadeh (PhD in petroleum engineering from Australia) who was head of the Plan Organisation from 1993-1997 followed by Mohamad Ali Najafi (PhD in Mathematics from MIT) who became a director from 1997-2001.

48. Here 'structural reform' implies changes to the way government works in order to support economic growth and help the market to work efficiently.

Yet it is important to note that the 'engineering' approach towards development planning was not merely the product of a new administration and Islamic elites. As discussed in chapter 4, the Plan Organisation founded by economists and engineers and promoted a technical approach towards planning and development between 1962 and 1979. Moreover, the technocratic experts at Plan Organisation strongly advocated modernist approach towards planning and master planning as the only model for urban development. The post-revolu-

tion engineering view only amplified the legacy of the technical/technocratic approach, and continued to marginalise social-minded planners from the decision-making process and in general limited the power of these planners in guiding national and urban development.

5.6. Neoliberal Urban Governance and the Rise of the Tehran Municipality

Despite the scepticism and criticism of other political groups, Rafsanjani's government began its privatization and structural adjustment programme by reducing subsidies to state institutions and forcing them to become economically self-sustaining. The consequences of these reforms were significant for municipal activities, urban governance, and the urban development of Tehran (Figure 5.8 and 5.9). The state's liberal policies and the application of an Asian development model marked a break with the egalitarian, anti-urban revolutionary policies. Instead, these reforms aimed to turn Tehran into an iconic example of the Islamic state's developmental success. Further, in line with the privatisation agenda, municipal activities had undergone significant transformation due to the enactment of the "Municipal Fiscal Self-Sufficiency Act" in 1989 to economically decentralize municipalities and encourage local economic development. Lastly, the economic reforms of the state accelerated the transformation of the revolutionary foundations—especially the Housing Foundation and Foundation of the Dispossessed—from charitable Islamic institutes (providing housing and services for the poor, people disabled by war, and families of martyrs) to powerful entrepreneurial organizations competing with the private sector for profitable projects and contracts. As is discussed later in this section, the failure of Rafsanjani's liberal administration to integrate these foundations into the state bureaucracy produced a dual power structure that had serious implications for Tehran's urban governance.

As already noted, the Tehran Municipality had very limited resources and autonomy during the first decade after the revolution. As such, governing Tehran was an almost impossible task, with no fewer than eight mayors serving Tehran during the nine years after the Revolution (1979–1988). After the Iran-Iraq war, the municipality was virtually bankrupt and had to adopt the "Municipal Fiscal Self-Sufficiency Act" while urgently finding new financial resources to plan and develop the demanding projects for the city that were meant to compete with other Asian capitals. As a solution, it was thought that citizens should provide the required funds, following the pattern in developed countries where citizens paid for municipal expenditures via taxes or direct payments for services (Karbaschi, 2013: 153). This idea was

never executed properly for many reasons, but mainly because of the persistence of an egalitarian rhetoric that promised to redistribute state revenue among lower income groups. The municipality therefore had to come up with other ways to fund its urban renewal projects. As Gholam Hossein Karbaschi, a mayor of Tehran in the 1990s, explains:

> Tehran citizens were not accustomed to paying city taxes. This problem could not be resolved easily; it needed to be addressed via long-term educational plans for boosting the overall awareness of the society… On the other hand, municipal officials were not trained or skilled enough to employ creative ways for collecting these taxes. Moreover, considering the tight control over creating new sources of revenues and/or increasing the rates, collecting municipal taxes could be harsh for the majority of society and could even instigate riots.

Since large-scale ownership of urban land and properties of Tehran was in the hand of revolutionary foundations, taxing citizens would have political consequences. Karbaschi, Tehran's mayor, decided instead to claim the right to Tehran's skyline, replacing the horizontal development policy with one that favoured vertical development. The municipality collected fees and taxes from developers and investors in exchange for exemption from high-rise construction and zoning laws. This alliance between the municipality and large developers brought unprecedented financial and political autonomy for both the municipality and the mayor, which has influenced the trajectories of Tehran's urban development ever since. The construction tax law targeted tax payers who intended to build more than two storeys, including investors (from the upper classes) who could afford to invest in high-rise building construction. This led to an explosion of high-rise construction in different parts of the city, especially in the north, where profit rates were higher and where most of Tehran's middle class desired to live (Figure.5.8). Moreover, the municipality bent zoning laws (based on the 1968 master plan) to allow commercial land use in previously forbidden areas – such as large gardens and open green areas in north of Tehran - and issued construction permits for the subdivision of large plots and the construction of high-rise buildings. Soon, the role and function of the municipality began to change significantly as its revenues dramatically increased—in 1998, the city's budget was $670 million, forty times more than in the early 1990s (TMPCMD, 1999b, cited in Karbaschi, 2013). [49]

49. The mayor of Tehran, Gholmhosein Karbaschi, explains, 'we realise that none of [the ministries have] performed their fund-raising task well. Even those ministries responsible for industry, which are expected to make money for the country, have not become successful in cutting their dependence on the governmental budget and oil revenues.' (2013: 154)

With its distinct political and economic power, the Tehran Municipality invested heavily in urban infrastructure and mega-urban development projects across the city, including the construction of street networks, highways, large parks, and massive residential, commercial, and cultural complexes—around 250 kilometres of inter- and intra-city expressways and

Figure. 5.8. Rapid development high-rises in north part of Tehran

Source: Goran Erfani/Guardian journalist available here: https://www.theguardian.com/cities/2017/feb/24/stories-high-rise-living-tall-buildings-skyscrapers-island-sky

highways were built by the municipality to connect different parts of the city. One of the symbolic examples of municipality's mega-development project is Navab highway which cut through an old residential neighbourhood on the centre-west side of Tehran and connects the core of the city to the airport (Figure. 5.9).[50] Nearly 7000 houses were demolished, 50 meters back on either side of the 5.5 kilometre planned highway. Rows of high-rises designed by various Architecture offices to be built along the highway formed an unusual housing complex.[51] By providing extensive infrastructural support, the Tehran municipality sought to showcase urban modernisation and direct and encourage private and speculative development of the urban terrain. These changes occurred in the absence of any formal urban policy or plan, with the excuse that the preparation of urban plans are lengthy processes and Tehran urgently needed to change. In an interview, the mayor noted

> due to the severity of Tehran's problems, some immediate actions were needed, and developing the urban comprehensive plan was a time-consuming process and normally took a long-time to be approved. Therefore, to execute the civil engineering plans and the necessary construction, the 1968 Tehran master plan became the only available source.

Hence, the municipality selectively modified and implemented some of the urban and infrastructural projects proposed by the 1968 master plan. After more than a decade of being labelled western and corrupt, the 1968 master plan had become the only blueprint for Tehran's urban development and facilitator of market forces in the 1990s.

50.
In an interview with Guiti Etamad on decisions behind Navab project, the mayor of Tehran notes: 'Any large-scale urban project may cause disagreements; Thames River in London, the part where the fish market and old fishing boats and abandoned factories were located; they built the Canary Wharf there, a 60-storey building surrounded by a designed area of streets, highways and parking up to 1 or 1.5 million square meters. You can find the same thing in New York. The architecture of these sites is eye-catching, while they have always some critics. Navab is the same.... The neighborhood was not an old one. It was not part of the old Tehran. Tehran itself has not a rich history. It is a city of 150 years old' (Karbaschi 2009: 283, cited in Khatam, 2015).

51.
For more on Navab project please see Khatam (2015) and Bahreiny A. and Aminzadeh, B. (2007).

Contrary to the mayor's view that the planning apparatus of the central government was inefficient and thus an obstacle for his market-driven city development strategies, the Ministry of Housing and Urban Development enacted a new master plan for Tehran in 1992. As part of the constitution that had persisted from the pre-revolution bureaucratic system, the Ministry of Housing was assigned to prepare comprehensive master plans and district plans for cities across the country, and to then charge municipalities with the responsibility for supervising the execution of these plans.[52]

52. This whole procedure had been halted in the first decade after the revolution, due to the anti-urban and anti-planning attitude of the state and the Islamic political elite.

The Ministry of Housing in collaboration with Plan Organisation commissioned private planning and engineering consultant companies to design comprehensive urban plans, which were then approved by the High Council of Urban Planning and Architecture (Table. 5.2 and 5.3). In this process, the municipality acted only as a consultant and had hardly any decision-making role. Moreover, planning consultant companies who are selected to prepare the plan are completely excluded from participating in any decision making processes.

Figure. 5.9. Navab Residential Complex and Highway under construction

Source: Archive of KAYSON Engineering and Construction Company, permission granted.

As it shown in the Table. 5.3. the municipality, the private sector, and civil society have no representative in the High Council of Urban Planning and Architecture (HCUPA), yet Housing Foundation is the only non-state organisation that has a representative.

Table 5.2. Key government organisations involve in urban planning and management of Tehran

Government Ministries and Organisations	**Bureaus, Departments, and Affiliated companies**	**Responsible for,**
Ministry of Housing and Urban Development	Bureau of Urban Development and Architecture	Preparation and supervision of implementation of urban comprehensive plans
	Bureau of Housing and Construction Plans	Monitoring housing quality and construction codes
	Department of Urban Development and Revitalisation Organisation	Revitalising the dilapidated and deprived neighbourhoods
	New Towns development Company	Planning and supervising the establishment of new towns outside of the city's boundaries
	Enforcement Agency for Government and Public Buildings and Facilities	The construction of governmental and public buildings
	National Land and Housing Organisation	Providing, managing and utilising land and housing
Ministry of Interior	Technical Bureau (Development coordination - National level)	Overseeing the preparation and implementation of development plans
	Cooperation Organisation of Tehran's Municipalities	Supervising municipalities in providing and distributing required services
Ministry of Energy	Tehran Regional Electric Company	Distributing electricity
	Tehran Regional Water Authority	Providing drinking water, water for agriculture, industry and services use
	Tehran Wastewater Company	sewage and water treatment
Plan Organisation of Iran	Management and Planning Organisation of Tehran	Preparation and supervision of Regional plans for Tehran - and approval of the eligibility of consulting planning companies for designing comprehensive and detail plans
Department of Environment	Tehran Office	Combating environmental pollution and conserving ecosystem

Source: Author. Data collected from the website of Ministry of Housing. (accessed 12 December 2017)

Table 5.3. The list of members of High Council of Urban Planning and Architecture in 1990s

Organisation or Ministry	**Numebr of representatives at the Council**	**Affiliation**
Ministry of Housing and Urban Development	Three	The Minister and two Deputy Ministers of housing and transport
Ministry of Culture and Islamic Guidance	One	Deputy Minister of resources and development management
Ministry of Agriculture Jihad	One	Deputy Minister
Ministry of Defense and Armed Forces Support	One	Deputy Minister
Ministry of Industry, Mine&Trade	One	Deputy Minister of small industries and indusrtial towns
Department of Environment	One	Head of Human Enviroment
Ministry of Interior	One	Deputy Minister of urban and rural development and management
Iran Cultural Heritage Organisation	One	Head of Cultural Heritage department
Ministry of Energy	One	Deputy Minister of water management
Plan Organisation of Iran	One	Managing director of strategic planning department
Islamic Parliament	One	Member of the parliament
Iran Construction Engineering Organisation (IRCEO)	One	Director
Housing Foundation	One	Head of rural development section

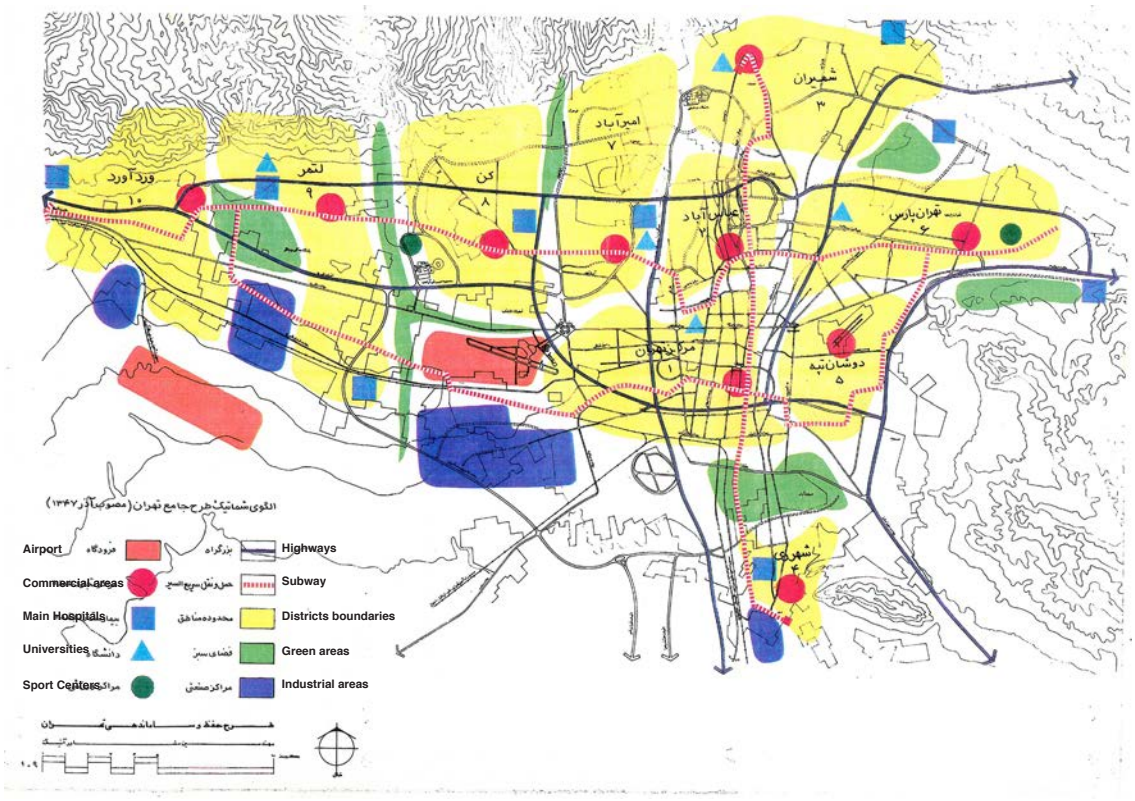
Source: Author. Compiled from the website of Ministry of Housing. (accessed 12 December 2017)

With the changes in state planning policies, the engineer-technocrats within the government body began to revive urban planning efforts in 1992, and the new master plan for Tehran was consequently prepared by ATEC Consulting Engineering company (Figure 5.10). The company established in 1980 by young architects and urban planners mostly graduated from Iranian university namely Tehran University school of Architecture, and trained by pre-revolution planners and architects. Thus, their education and trainings were mainly under the influenced of modernist urban planning and similar to pre-revolution urban experts and practitioners. As a result, the 1992 Tehran master plan was not very different from the 1968 master plan (Figure. 5.10). Similar to 1968 master plan, the 1992 plan proposed polycentric development of Tehran, and considered five major urban centres, one in the centre which already existed and the other four around the central area (Figure 5.10(b)). The proposed centres were connected by a network of highways. In contrast to the 1968 master plan which designed ten centres and considered west parts of the city for residential and commercial purposes, the 1992 master plan allocated most industrial activities in the west parts. Additionally, in the long term it was planned to construct five new towns outside of Tehran to move people and services to these towns (ATEC Engineering Consultants, 1992). Nevertheless, as noted above, the mayor of Tehran—whose decision-making power was extended due to the impressive financial resources the municipality had accrued—vetoed this plan, arguing that the 1992 plan was too rigid and outdated to solve the pressing urban problems of Tehran. Instead he made the case that Tehran was in urgent need of strategic planning, rather than comprehensive master planning (Khatam, 2015: 173), and the municipality duly initiated the 'Tehran 80'[53] (also known as 'Tehran 2000') plan to prepare Tehran for the 21st century, yet the plan was never officially approved or realized.

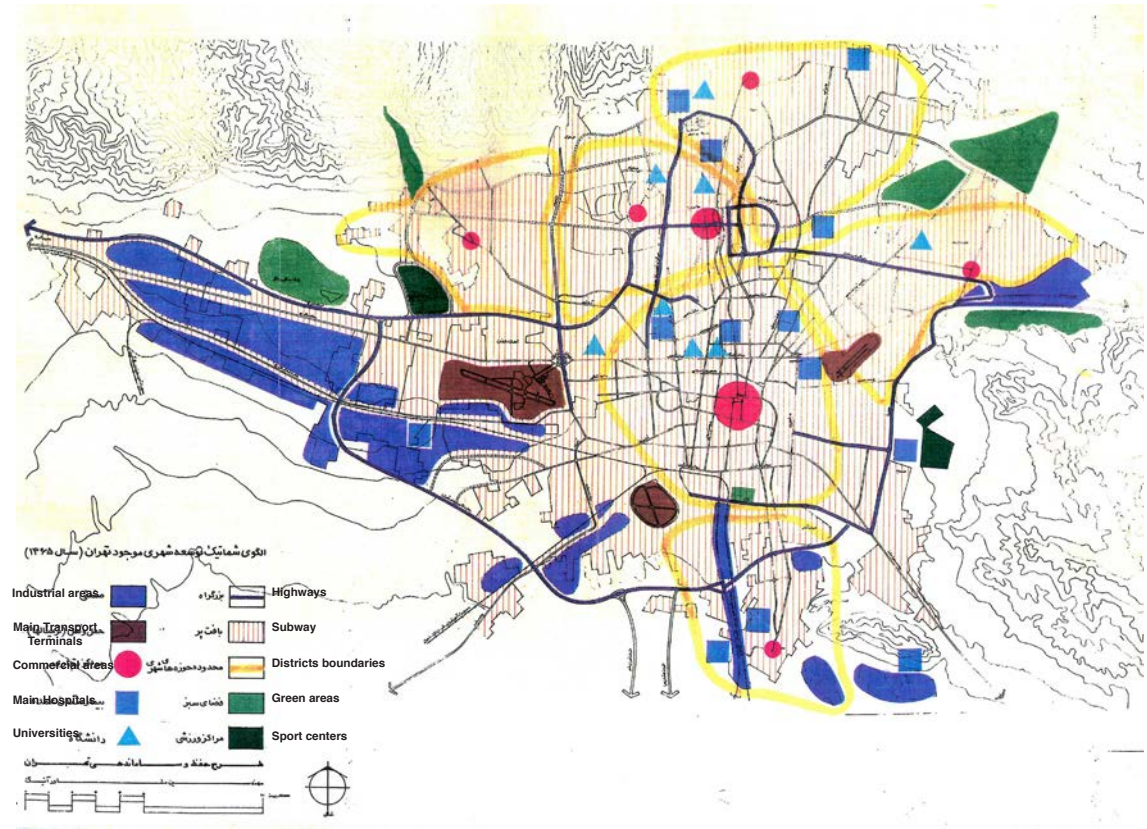
In fact, the mayor discredited the state-approved 1992 master plan not only for the sake of his market-driven policies, but also to claim political autonomy and a greater decision-making role for the municipality. The scale of municipal resources and fiscal autonomy in Tehran reinforced his political power and largely expanded the activity and capacity of the municipality. From 1992 to 1995, the municipality expanded its institutional capacity by establishing various large organizations and small- and medium-sized offices expert in technical and civil engineering, transportation, urban services, and social and cultural affairs (TMRPC 1993b; TMRPC 1995).

53. This plan introduced a set of strategies for the city and proposed policies in order to achieve those strategies. Instead of being concerned about land-use planning, Tehran 80 plan outlined six following goals for the city: 'a clean city, ease of movement in the city, the creation of parks and green spaces, the development of new cultural and sports facilities, reform of the municipal organization, and planning for the improvement of urban space, including preparation of comprehensive and detailed plans for land use and conservation' (Madanipour, 2006:436).

Figure. 5.10. (a). The scheme of 1968 Tehran Master Plan



(b) The scheme of 1992 Tehran Master Plan



Source: Archive of ATEC Consulting Planning and Engineering. Accessed October 2014.

Within just three years, eleven new technical, civil engineering, and transport organizations had been established by the Tehran Municipality in order to design, supervise, and implement large-scale infrastructural and civil engineering projects, including the construction of 250 kilometres of inner-city highways and select mega-projects (such as Navab project) from the 1968 master plan. Among others, the Tehran Technical Consultancy and the Tehran Civil Engineering Organization became primary municipal agencies for urban development projects and plans, and were under the direct supervision of the mayor (Karbaschi, 2013:176). Beside these technical and engineering organizations, the municipality established additional agencies to offer social and cultural services that would improve the quality of life in Tehran. Hence for the first time in the history of the Tehran Municipality, six new bureaus and institutes were created, offering social and cultural services (Karbaschi:176). The Cultural Spaces Development Company (Sherkat-e Toseh Fazahaye Farhangi), the Council for Examining Tehran Social Issues, and the Hamshahri Daily Company were among these new organizations and played an important role in transforming Tehran's urban culture and citizens' way of life, especially for the urban middle classes marginalized during the first decade after the revolution.

Within a short span of time, these municipal cultural agencies built 26 cultural centers, 29 libraries, 23 art galleries, and several movie theatres in different parts of the city (Karbaschi, 2013: 177).[54] In an interview with the author, the mayor notes that these cultural centres and leisure spaces were meant to improve quality of life and increase cultural consumption. Azam Khatam argues that the municipality adopted a liberal cultural policy and neoliberal economic policy not only to modernize Tehran, but also to marginalize the conservative Islamists' presence in the city and break from the revolutionary past (Figure. 5.11). The publication of the Hamshahri (Fellow Citizen) newspaper by Hamshahri Daily Company, with its focus on urban issues, was part of this pioneering cultural policy to raise citizen awareness and the municipality's socio-political power. The publication had a daily circulation of 460,000 copies and was unique in the history of the Iranian press and the socio-political activity of the local government in Tehran (Mer'at 1999: 35). This popular newspaper played an important role in the presidential election of 1997 through its support of the reformist candidate Mohammad Khatami and its role in bringing out more voters than any campaigning had done before (Rajaei, 2007).

54. These organizations involved diverse groups of artists and cultural elites in their projects and cultural activities (Khatam, 2015: 179).

The structural changes that emerged from this state-municipality relationship and mayor-centred development of Tehran significantly altered the socio-spatial form of the city in 1990s, and thus have had socio-political implications for the pro-market developmental state. In 1992 and 1993, a series of protests and riots by informal settlers occurred on the peripheries of Tehran and other large cities to demand housing, basic infrastructure, and public transport, which took extensive effort from the police forces to suppress. The riots on the south-east of Tehran were the first urban political crisis in the capital since the revolution, which was alarming for both the municipality and the Ministry of Housing, who worried about the potential spread of riots across the country. In fact, the dismissive attitude of the state and municipality towards informal settlements, as well as piecemeal speculative development and the heavy municipal investment in urban infrastructures and inner city renewal projects, produced uneven geographies that valued some places while devaluing others. The large-scale network of highways that was built to direct the speculative urban growth and connect different groups and places instead produced social and spatial fragmentation.

Figure. 5.11. Khavaran Cultural Centre in South-east of Tehran
Commisioned by Tehran municipality and opened in 1994

Source: Disa magazine archive, open access. Available here https://disamag.com/

5.7. Governing Tehran With or Without the State

After 1993, the conservatives, who had the majority of seats at the parliament, attacked the 'foreign-educated cabinet' for ignoring the ordinary people and questioned state privatization projects which aimed to sell state enterprises to private sector. In 1994 a parliamentary law was passed that forced the state to sell its enterprises only to those who devoted themselves to the Iran-Iraq War, such as the families of martyrs, veterans, and devotees of revolution (Harris, 2013: 51).[55] However, it was clear that war veterans and the families of martyrs lacked the financial means to buy these enterprises. In practice, the charitable revolutionary foundations acted as their representatives (Saeidi, 2004; Khatam, 2015). These foundations were the main 'non-state' bodies that benefited from the outsourcing of the state and at the same time acted as the major obstacle to any systematic economic reform.

The government had been working to weaken the political and economic role of these revolutionary foundations since 1989 by integrating them into the state bureaucratic system. However, the state only made marginal gains, managing to turn the Construction Jihad foundation into the Ministry of Agriculture Jihad, and the Urban Land Organisation into one of the departments within the Ministry of Housing and Urban Development. Consequently, when the 1994 law was passed by the conservatives, it succeeded in reversing the integration of revolutionary foundations into the government body while at the same time converting the state's market-oriented policies back into a populist economic policy reminiscent of the early years after the revolution, all of which helped the conservatives to regain political power. Ultimately, the liberal technocratic elites failed to integrate the revolutionary foundations into the state apparatus and, instead, economic liberalization empowered these foundations and created a dual power structure and a dual system of decision making (Maljoo, 2004).

55. From 1992-1996 conservatives had the majority of seats in parliament.

After the 1994 parliamentary law, the revolutionary foundations acquired considerable shares of state-owned companies and expanded their activities into different fields. In Tehran, the activities of the Housing Foundation and the Foundation of the Dispossessed went beyond allocating urban land in peripheral areas to provide mass housing projects for the poor and new urban infrastructures. These developmental foundations were turning into large developers and contractors with significant economic and political power. As Saeidi notes, "With no governmental discretion over their expenses, no shareholders, no public accounts, and no well-defined legal status, [these foundations] have been operating autonomously from the government and have acted like giant private monopolies rather than charity organizations caring only about the welfare of the poor" (2004: 485).

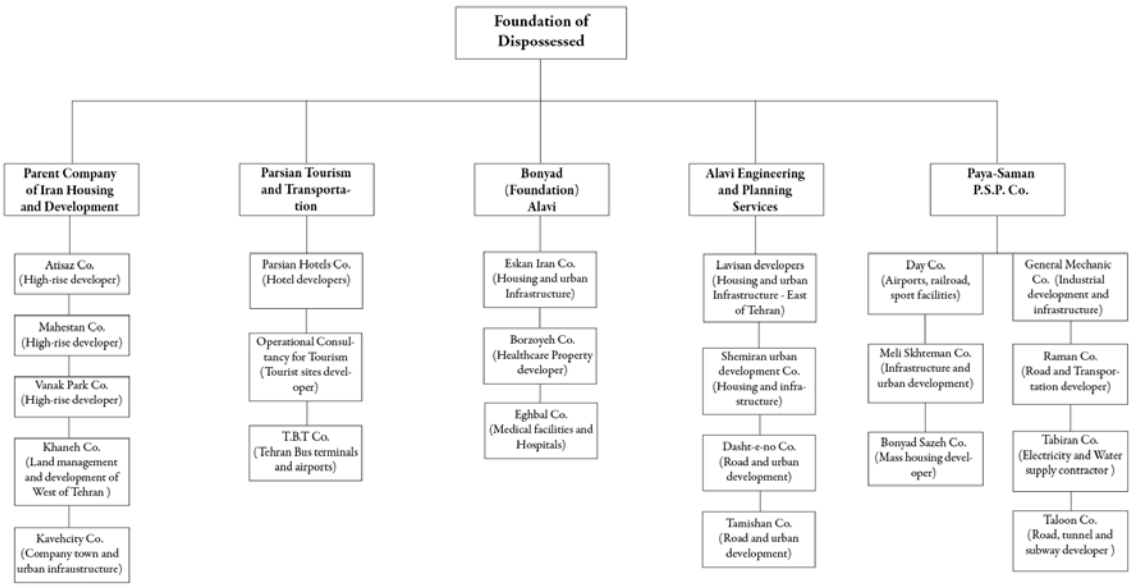
After 1996, the Foundation of the Dispossessed expanded its activities into construction and infrastructural development, culture and tourism, and even heavy industry. According to their website[56], the Foundation of the Dispossessed established thirteen major holding companies to drive development, justifying it as a public good.[57] Among them, five companies are heavily active exclusively in construction and urban development at the national scale. Each of these mega-development and real estate construction companies owns a number of other important real estate and construction companies, with expertises such as high-rise construction, highways, railways, and bridges. According to their websites, these five major holding contractors own 48 developer/contractor companies active in various urban development projects across the country (Figure. 5.13). Among these companies, 22 have been exclusively involved in urban development projects in Tehran—building everything from single apartment blocks to mass high-rise residential developments, shopping centres and retail services, hospitals, hotels, cultural and sport centres, highways, a subway system, bridges, tunnels, and the Tehran International Airport.

The monopoly on large-scale high-rise residential complexes in Tehran, for example, fell into the hands of one of these holding companies—the Parent Company of Housing and Development of Iran (Sherkat-e Madar Takhasosi Omran Maskan Iran)—who has managed, completed, and sold many unfinished luxury high-rise projects that were initially designed and developed before the Revolution. This monopoly amounted to more than 5,000 units, almost all of these high-rises built in undeveloped lands in the north-west and north-east of the city, far from the poor, who live in the south or city centre. In the early years of the revolution, the Foundation of the Dispossessed and the Housing Foundation confiscated construction sites from pre-revolution developers, and thus became the major owners of mass high-rise developments across Tehran. There are seven giant developer companies under the Foundation of the Dispossessed and four companies under the Housing Foundation, each controlling and managing the construction of residential high-rises in north Tehran. Among others, Atisaz Co., Mahestan Co., Vanak Park Co., Ekbatan Co. and Eskan Co. have developed hundreds of middle-class high-rises and sold them to high ranking civil servants or middle- and high-income state employees (Figure 5.14).

56.
Please check here http://www.irmf.ir and also here http://amval-amlak.org and http://mfnews.ir/fa/links, accessed November 2017.

57.
A holding company is a type of business that deals specifically with assets, investments, and management, rather than goods and services, with a view to making a profit from production and sales. It will be limited by shares and its main activities involve owning assets in another company or companies. Assets could be in the form of shares, intellectual property, or real property. Holding companies may also be responsible for the supervision and management of other companies, in addition to or instead of holding shares and receiving dividends from their shareholdings. Aside from these functions, a holding company will usually conduct no other type of business activity. A list of holding companies belonging to the Foundation of the Dispossessed can be found at http://www.irmf.ir/RelatedCompanies.aspx?CFC=vnvivjikvneHvnan, accessed November 2017.

Figure 5.12. The companies under Foundation of Dispossessed that are involve in urban development projects in Tehran



Source: Author. The information for making this figure is gathered via extensive search in website of Foundation of Dispossessed and five major holding companies operating under the foundation. (the websites accessed April/May 2018)

In an interview with a planner who has been involved with the preparation of detail Plan for District 1 in the north of Tehran, says:

> 'Investors in District 1 are mainly revolutionary foundations who just want to generate money for their institutions. These investors have the large areas which used to be lands of the royalty and monarchy during the Shah's time. After the revolution, these lands were confiscated … and were given to these institutions …. Sometimes the municipality is happy to pay them A amount and buy the garden from them and turn it to a public park but the investors want to build a tower block and raise 10A.' (Interview, 2014)

The extensive activities and involvement of these revolutionary foundations and their related developmental companies in numerous residential, commercial, recreational, and infrastructural development in Tehran weakened the role of the private sector and expanded the socio-economic and political power of conservative Islamic groups. This situation has led to a complex power relation between the local government and these foundations. In fact, neither the local nor central government had enough power to question the developmental activities of these revolutionary companies. As stated before, the foundations and their companies

were directly controlled by the Supreme Leader and Islamic conservatives, while the municipality and state institutions were in the hands of liberal Islamists. Karbaschi, as the mayor of Tehran from 1990 to 1998 had close connections with President Rafsanjani and was fully in line with the liberal policies of Rafsanjani's administration. As a result, a dual apparatus of development was formed, in conflict and competition for political power and legitimacy. This power struggle in the developmental process has been critical in shaping Tehran's neoliberal urbanisation and governance.

Figure. 5.13 (A). Atisaz Residential Complex (located in north of Tehran), developed by Foundation of Dispossessed (Bonyad-e-Mostazafan) in late 1980s and early 90s.

Source: Courtesy of Foundation of Dispossessed.

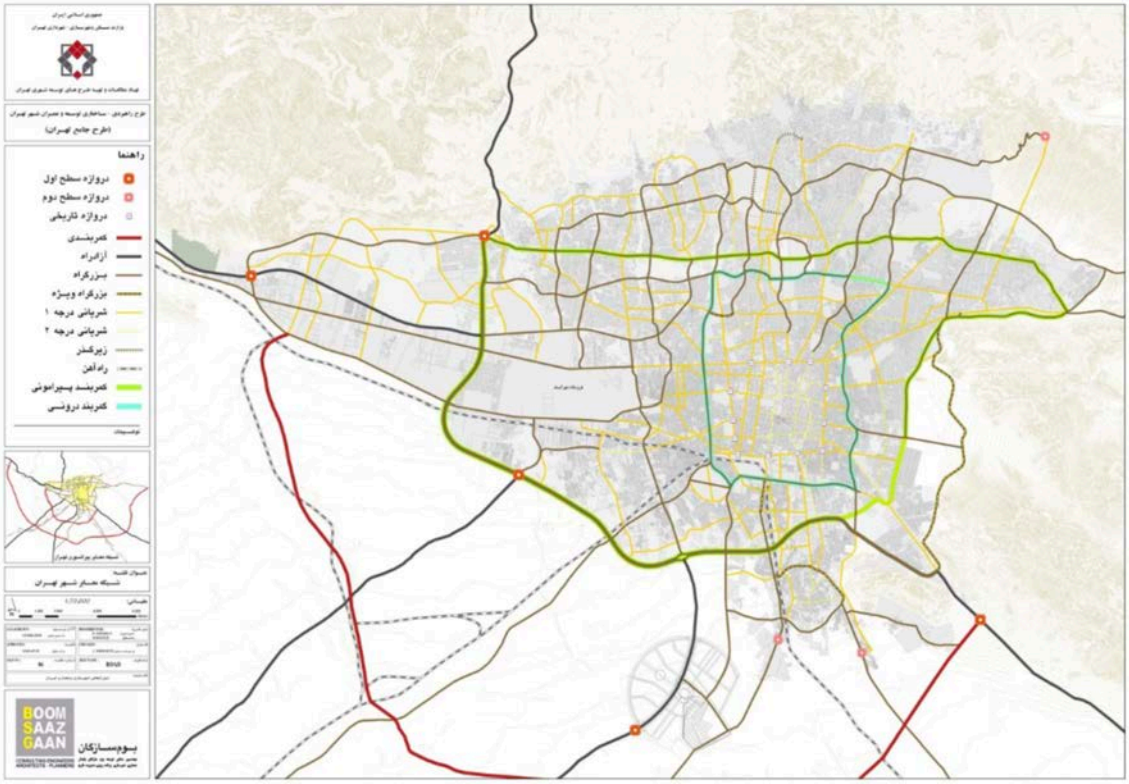
(B). Mass housing developments in North-west of Tehran (Shahrak-e-Gharb) by Housing Foundation (Bonyad-e-Maskan)

Source: Courtesy of fotocommunity.com, open access

Socio-spatial manifestation

The pressure for redevelopment of the city after eight years of war and global competition especially with Asian countries have stimulated both Tehran municipality and revolutionary foundations to invest heavily in developing Tehran. As discussed in the above section, the revolutionary foundations and their extended housing and construction companies have become the main provider of income for the Tehran municipality. Despite the difference in their political orientation in the 1990s, the municipality and these revolutionary agents established a bilateral relationship; on the one hand, the agents became contractors of large-scale development schemes of the Municipality and on the other hand they were active in extremely profitable commercial (massive shopping malls) and residential (high-rises) projects in the north and north-west parts of Tehran.

Figure. 5.14. The network of highways that constructed in Tehran during 1990s



Source: Report of Tehran Comprehensive plan 2006

The municipality and the mayor who aimed to improve the infrastructure of Tehran and make it a world-class city, have invested considerable part of municipal budget on developing an expanding Tehran network of highways (Figure 5.15). The new highway system in many instances such as Navab Project had cut through older fabric of the city and created socio-spatial divide and harsh relocation of residents to remote suburban neighbourhoods. Hence the

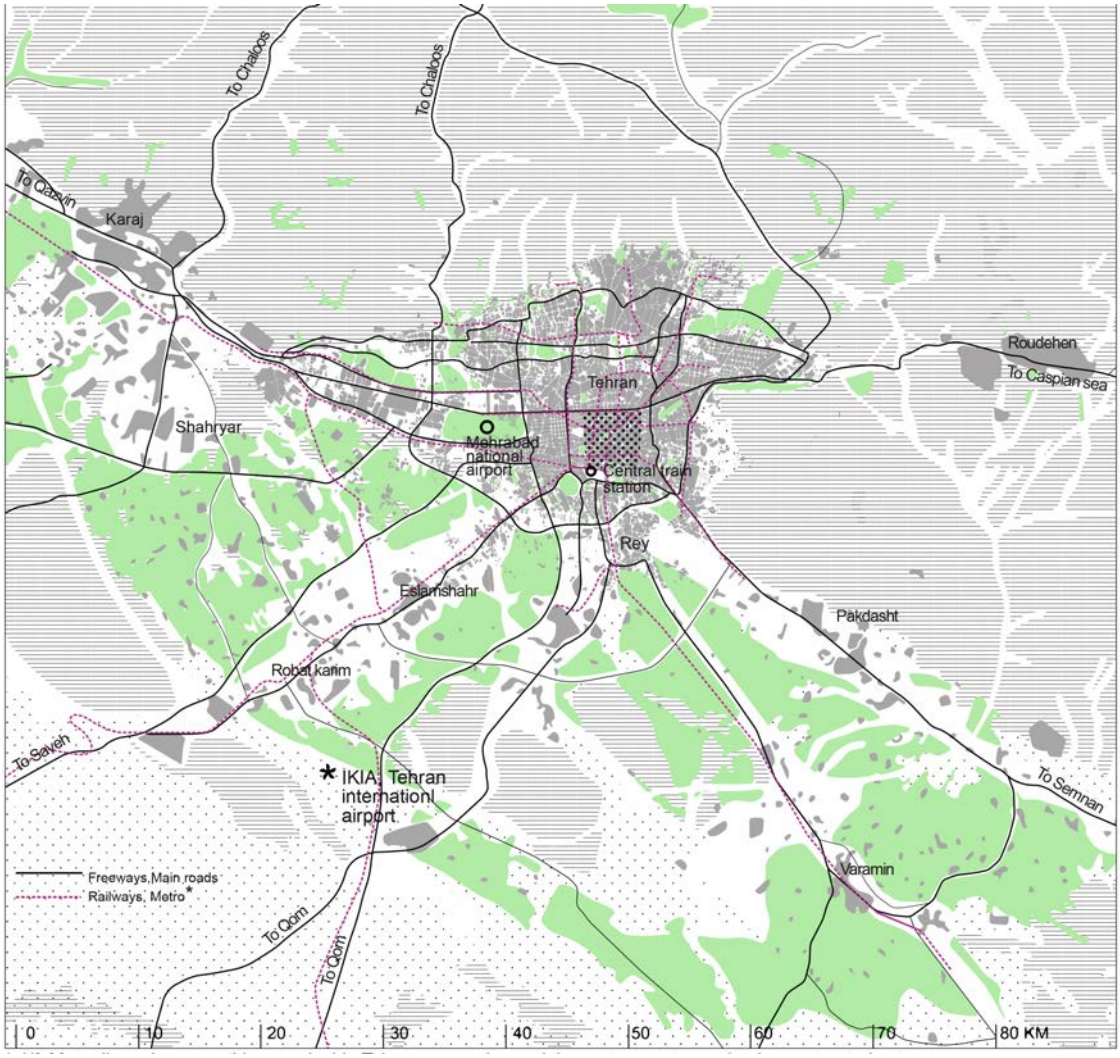
new urban grid of highways produced series of fragmented urban spaces and communities that simultaneously are interconnected but segregated and divided. In fact, at the turn of the 21st century the rows of tower blocks, cluster of housing complexes, and network of highways became the spatial characteristic of Tehran. In fact, the persistence of main elements of Gruen 1968 master plan ('Neighbourhood unit' and 'super-highway') in Tehran decades after the revolution, signals the continuity of pre-revolution pattern of development and similar approach to planning urban development.

The market-led and ad hoc development of Tehran in 1990s had significant spatial, socio-economic and environmental consequences for the city. Beside rapid urban sprawl along the inter-city highways (Figure 5.16), most inner-city gardens in areas with high land value became under threat to be the sites for high-rise luxury residential development. In many areas in north of the city powerful developers (mostly revolutionary foundations) demolished large gardens to develop up to 25 story residential buildings. According to the planner of District 1 in north of Tehran 'the northern districts of Tehran experienced the most alterations in their zoning plans throughout the planning process. These are the regions in which developers with strong political ties and financial resources prefer to invest and, as a result, the municipality can generate income from them.' Beside the rapid large-scale development in northern parts of the city, the other consequence of the construction tax law was the re-construction of the buildings that are still in good condition. Low-rise buildings were re-constructed by smaller developers because they have the potential for being built with a higher construction density. In an interview with Ghomami, he notes, 'most of the two-three story in inner city areas that are in good shape and only 10 to 15 years old, came under pressure to be reconstructed with three to four more floors' (interview, 2014). This turns the city into a big construction site which added to noise and air pollution and extreme misuse of resources. Therefore, housing construction became the major construction activity in the city. In other the profitability of housing market attracted many small land owners from other social groups such as civil servants, doctors, or merchants into the housing development business.

All of this resulted in turning housing construction into a secure and profitable business which many individuals and small and large scale companies with access to capital were attracted to this business. As stated in the World Bank reports (2004: 126), based on construction permits issued from 1996 to 2000, the private sector (including revolutionary foundation) built 86% of new housing, governmental housing cooperatives built 11% and the public sector built only 3%. In fact, by the year 2000 the housing industry was a strong sector that diverted private investment from manufacturing into housing and property market. As Athari and Yazdani (2008) show, 23% of private investment between 1973 and 2001 was attracted to real estate development while only 18% was attracted to manufacturing. Ulti-

mately, the financial dependence of the Tehran municipality to revolutionary foundations and various scale housing developers have created ambiguous interrelation between central planning system, municipality, developers, and citizens.

Figure. 5.15. Tehran urban configuration in 2000



Source: Author, data collected form Atlas of Tehran Metropolis and Google Earth maps

5.8. Conclusion

The analysis of the two decades of state and nation-building strategies of Islamic Republic in this chapter illustrates the complex attempts of different agents and actors to break from linear conception 'development' and 'modernity' and put forward another understanding of progress and reproduction of national subject guided by principles of Sharia Islam. Yet the international pressure especially the World Bank imposed neoliberal reform programs on developing country along with the complex power relation between Islamic technocratic elite and Islamic conservatives who ran the charitable foundations under the supervision of the Islamic leader has had serious implications for the state and nation-building process in the decades after the revolution.

Globally the post-revolution state-making process coincided with the growing mistrust towards the state and lack of confidence in the capacity of politicians and governments to control the national economies and development. As discussed in this chapter, Ayatollah Khomeini was mindful of this global condition and similar mistrust among Iranians towards Pahlavi government. Thus the idea of formation of revolutionary foundations as non-governmental organisations responsible for distribution of resources among poor and lower income groups was a mechanism to respond to this global and local condition.

While the conservatives (revolutionary foundations) has been seeking to consolidate and spread ideology of Shia Islam and act as a guardian of nation – especially poor and marginalised -, the technocratic reformists were determined to build a progressive Muslim nation and strong state that could compete with other advanced nations in the Muslim world. Hence engineering the spaces of the nation and the capital city became the main instrument for their political rivalry. On the one hand, to prove the egalitarian nature of the Islamic Republic the revolutionary foundations – with the support of Ayatollah Khomeini - confiscated the land and property of big landlords in Tehran and other big cities, and redistributed the land among the poor and low-income groups, and offered housing and infrastructure. This act completely transformed urban land ownership pattern and also created a strong alliance between lower income class and newly established Islamic Republic. On the other hand, the reformist technocrats aimed to develop Tehran similar to progressive Asian Islamic cities in Malaysia and Indonesia that were simultaneously grounded in religious values, modernity, and high-tech ambitions. Hence the reformists supported investment in extensive

highway systems for Tehran, high-rise luxury residential apartments and urban development mega-projects. Yet the scope of intervention of these groups was not limited to the city (for reformists) and periphery (for the conservatives). As shown in section 5.7, both groups were constantly using their political or economic resources to interfere in different parts of the city to grab more authority and maintain their legitimacy among different social groups. The spatial consequence of this power struggle for Tehran is unbalanced development of urban infrastructures and services along with fragmented urban spaces and communities that are segregated and divided.

Ananya Roy in her studies of India shows "the increase in urban renewal projects, peri-urban development, and special economic zones are instantiations of a 'homegrown neoliberalism,' a kind of public–private intervention that actively references other Asian cities" (Roy and Ong, 2011: 16). Similarly, in Tehran, the revolutionary foundations and the municipality deployed developmental and neoliberal agendas to serve their own political interests and economic benefit, which in turn manufactured Iran's own home-grown form of neoliberal urban governance (Khatam, 2015: 145).

Nevertheless, the political rivalry among these groups has been complicating the materialisation of any form of (centralised or decentralised) urban planning and policy. With the immense scale of development by multiple 'state' and 'non-state' agencies in Tehran, and in the absence of any authority to coordinate these activities, the governance of Tehran remains a huge challenge and the role of planning remains ambiguous. The ad hoc utilisation of urban plans (in this case, the 1968 master plan) as well as resistance to any new comprehensive or strategic urban plan (ATEC 1992 master plan) —by both the municipality and revolutionary companies—has considerably influenced the role of planning and the planner's expertise. During this period, social-minded urban planners were marginalised and a new generation of planners, contractors, and engineers mostly graduated from Iranian universities emerged to work in for both state and non-state developmental agencies. As argued at the beginning of this chapter, to uncover the hidden planning and governance mechanisms of Tehran after the revolution, we must first understand the distribution of power between the central and local government, as well as between the Supreme Leader and revolutionary foundations. Without considering the interplay between these powers, as main actors of urban development and the modernisation of Tehran, it is difficult to comprehend the politics of urban growth and the formation of neoliberal urbanisation in Iran as it enters the 21st century.

Finally, the predominant view of urban politics of Middle Eastern cities conceives of the state as authoritarian and omnipotent, fully controlling political-economic and socio-spatial changes in these cities. By reflecting on Iran's political transition after the 1979 Revolution and by reviewing two decades of nation-state building strategies and spatial development policies, this chapter shows how the polarised political structure of Iran—which combines authoritarian and democratic practices, and where sovereignty is divided between elected executives and unelected ones (Shambayati, 2004)—has directly influenced national development strategies and, therefore, Tehran's urban planning and development pattern. This chapter used the case of Tehran to reflect on this dominant view by interrogating the role of charitable revolutionary foundations in relation to state institutions in shaping Tehran's urban development.

The case of Tehran illustrates the crucial involvement of charitable foundations and giant holding companies in urban development projects, independent from the municipality and the central state. In fact, the revolutionary foundations are not unique to Tehran—other Middle Eastern cities are facing a similar phenomenon. Hezbollah[58] and Solidere in Lebanon, or Abdali in Amman, are similar examples of developmental organisations with political and ideological agendas (Fawaz, 2009; Abu-Hamdi, 2017; Khirfan, et. al. 2017). During the past decades, these organisations have had a significant impact on urban policy and planning in Middle Eastern cities. Nevertheless, studies of the role and involvement of these developmental organisations in rapidly developing Middle Eastern cities have been limited, and further research can make an important contribution to enrich this debate on the political economy of the region, planning, and the built environment.

58. Hezbollah is a political (religious, Islamic) party and an organized military resistance movement that has been operating in Lebanon since 1982, its main motivation being resistance to Israeli occupation of the country (1978–2000) and its repeated incursions since then. For more on the ideology, practices and goals of the party, see Fawaz, M. (2009). Hezbollah as Urban planner? Question to and from Planning Theory.

CHAPTER 6.

Conclusion

This thesis has attempted to contribute to an understanding of the urbanisation process of Tehran and offers a new perspective on its complexities and specificities. This perspective builds on the work of urban scholars who have critically questioned the Eurocentric understanding of cities and have moved beyond an artificial hierarchy of cities that pushes for 'backward/underdeveloped' cities to become like 'advanced/developed' cities, even if that is inappropriate to their specific material and cultural condition. In doing so, this thesis has demonstrated the problematic of the persistent equating of urbanisation with industrialisation/modernisation in studies of cities in the Global South. By critically analysing the history of interconnection between urbanisation and development throughout the 20th century, this study was able to adapt a multi-scalar approach and frame the history of Tehran's urbanisation as an intertwined local and global process. Moreover, through problematizing the common assumptions and understanding of urbanisation and development and their perceived positive relationship, three cross-cutting themes have emerged which have informed the empirical analysis of this research, as can be found in chapters 3, 4, and 5. These themes include firstly the relationship between politics and urban development, or in other words, the multiple ways in which power operates in the organisation of space on the national and urban scale; secondly, the ways in which state-making processes and national political and economic development have influenced planning practices and urbanisation processes of cities in the global south; and lastly, the role both local and Western urban planners and experts have played in the urbanisation and development trajectories of non-Western cities.

These three thematic areas of study were used as lenses with which to analyse Tehran's urban transformation and urbanisation process throughout the 20th century, and to understand the role and involvement of various actors in this process. Moreover, this research has sought to address the gaps in theoretical and empirical research on Tehran, and depict the limitation of current studies in analysing the role of the state in city-making practices. The literature review and thematic discussion are therefore offered as an analytical framework to interrogate state power, its modalities and its effect in building Tehran as a capital city. Hence, the empirical study in chapters 3, 4, and 5 have depicted Iranian state formation and transformation

during the 20th century and the ways in which this process influenced Iranian planning practices and Tehran's urban transformation. In this process, both global, national, and local forces were considered, by examining the interconnection between dominant international development discourses and Iranian nation-building strategies, and the ways this interplay shaped the trajectory of Tehran's urban development. Furthermore, the study focused on analysing a series of key national development policies and plans, and their intersection with urban planning projects and their socio-spatial outcomes. Finally, the role of urban planners and experts, and the ideas and principles that guided their work, were examined through tracing the institutionalisation of expertise and the plan-making processes.

6.1. Discussion

In this concluding chapter, the above research themes and analyses will be discussed in direct link to the main outcomes and empirical findings of this study. This discussion will help to recap the different conceptual lenses and approaches undertaken in this research, and further open a wider debate and recommendation for future research directions. Lastly, this chapter presents the main contributions of this study by opening up the discussion beyond the case of Tehran, reflecting on the findings of the research and their implication for planning theory.

6.1.1. Politics and Urban Development

One of the aims of this thesis has been to uncover the relationship between power and urban space as this relationship has been manifested historically in the making of cities and particularly capital cities. Along these lines, this study has sought to address, what is the relationship between particular forms of urban development, and the power structure of the regime that is behind the building of a capital city? Many studies, especially studies on Middle Eastern cities have approached this question by looking at urban plans and development projects as a reflection of the political project of the state and its founding ideology, which can be traced in the buildings, urban patterns, and urban planning of the capital city (Marefat, 1988; Bozdogan, 2001; Cinar, 2014 :227). Yet the findings of this thesis push this approach one step further and shows that the making of cities and especially capital cities, 'not only reflects the political project of the state' (Cinar, 2014: 227), but in fact, is a main device with which the state apparatus further consolidates its power and authority, and maintains its legitimacy.

By revealing the pathway of Tehran's urbanisation and its particular historical trajectory, this thesis arrives at an understanding that the building and development of Tehran in the 20th century has been one of the key mechanisms with which the Iranian state has constructed itself, generating its power and legitimizing its authority.

As shown in chapter three, the urban renewal of Tehran in the early 20th century was not simply something that the newly formed Pahlavi state did after consolidating its power so as to build for itself a location from which it can govern the nation. Rather, the re-building of the capital city with a new street system and new administrative district replete with monumental buildings was more importantly about the creation of the state itself. The Pahlavi state established itself by redefining the land regime as national territory and passing the 1929 land law, which revived the land registration system that mainly benefited big landlords and thus formed a strong alliance between state and landlords who were supportive of state modernisation and secularisation policies.

With these self-constitutive acts, the Pahlavi state founded itself as the agent of the nation with the power and authority to organise its territory, dictating the meaning of 'modern' urbanity, defining the public sphere, and supressing opposing ideologies – coming from Shia clerics and Bazaari merchants - who sought in different ways to define the nation and organise its spaces. As stated before, the plurality and heterogeneity of the nation was considered as a problem and impediment to the realisation of Pahlavi's and the ruling elite's modernising ambitions - which consisted of Western modernism, secularism, and Iranian nationalism that distinguished itself from traditionalism, Islamism and other contending national ideologies at the time. Therefore, by becoming the builder and engineer of the new modern spaces of Tehran and the nation, the Pahlavi state was able to consolidate itself and extend its authority and legitimacy.

Nevertheless, as shown in this study, the formation of the modern state did not mean that all other contending ideologies were silenced and eradicated. Rather on the contrary, the negotiation of the legitimacy, authority, and Iran's new national identity around issues of nationalism, Shia Islam, Westernism or liberalism persisted throughout the 20th century and still remained the main point of political contention until today. We have seen across the historical analysis of this thesis that the Pahlavi or Islamic nation- and state-building projects were never the only dominant projects. There have been always alternative and opposing projects and discourses of development and modernisation that were deployed by other movements and forces such as elite nationalists, Bazaari merchants (traditional business associations), Shia clerics and the Islamic technocratic elite which influenced the state's development plans and policies. The liberal/nationalist wave of the 1940s, the resurgence of Islamic discourse in

1970s, and the neoliberal/Islamic trend of 1990s are some salient examples. Therefore, the official development project of the state has been continuously challenged by other alternative discourses on development and modernity.

The State-Building Trajectory and Tehran's Urban Development

The empirical analysis of this research presented the spatial consequences of these competing discourses in Tehran. This thesis shows how Tehran's trajectory of urban development, across different periods, was shaped by a complex interaction between the official state project of development and the needs and interests of opposing groups who either competed for political power or saw themselves as marginalised or under-represented in the development project of the state. For example, both the 1933 Street Widening Act and the Trans-national railway project which intended to modernise, unify and politically homogenise the nation and the different spaces of Tehran, did not actual eliminate or weaken the Bazaar and its merchants - perceived as it was as a traditional form of commerce - but rather the improved urban infrastructure connected the Bazaar to the rest of the city and the country and added to its centrality. Moreover, the close proximity of the new administrative centre to the Bazaar created a strong political and economic centre which gave more significance to the Bazaar.

Moreover, in chapter four, we saw that with the rise of the nationalist movement in the 1940s and 1950s, the ruling technocratic elite saw the strong presence of well-known landlords in rural areas and within the state apparatus as an obstacle to modernising the nation. Yet the nationalisation of the oil industry provided a direct and independent revenue for the state and the educated ruling elite to push for their developmental agenda. This meant high investment in urban areas, as cities were commonly perceived as symbols of modernity and progress, which consequently left the rural population behind and under the rule of landlords. The outcome of this power struggle between landlords and state elites was formed by significant rural-urban disparities, which was then followed by rapid rural-urban migration and the growth of shanty towns and slums on the periphery of the capital. In fact, the direct access of the state to oil revenues offered great authority to Pahlavi's ruling elite in their state-building and nation-building projects. Therefore, the state did not have to rely on people as a source of national wealth, for example in the form of taxes. Instead, the state became largely unaccountable and created corrupt and ambivalent relationships between people and state.

Ultimately, the revolt of the large numbers of population who were left outside of the Pahlavi development project led to the 1979 Islamic revolution. In this phase, as discussed in chapter 5, the building of the first ever republican-theocratic state became a daunting and complicated task for the Islamic revolutionary elite and their leader Ayatollah Khomeini. The complex

power relation between Islamic technocratic elite and Islamic conservatives who ran the charitable foundations under the supervision of the Islamic leader has had serious implications for the state-making process in the decades after the revolution. Both these groups were seeking for a development model based on the principles of Islam, however, each of them had its own particular visions. The conservatives aspired to consolidate and expand the ideology of Shia Islam across the nation and region, while the reformist technocrats were determined to build a progressive Muslim nation that could compete with other nations in the Muslim world. Hence engineering the spaces of the nation and the capital city became the main instrument for their political rivalry. On the one hand, to prove the egalitarian nature of the Islamic Republic the revolutionary foundations confiscated the property of big landlords at the periphery of Tehran and other big cities, and redistributed the land among the poor and low-income groups, and offered housing and infrastructure. On the other hand, the reformist technocrats aimed to develop Tehran similar to progressive Asian Islamic cities in Malaysia and Indonesia that were simultaneously grounded in religious values, modernity, and high-tech ambitions. Hence the reformists supported investment in extensive highway systems for Tehran, high-rise luxury residential apartments and urban development mega-projects. Yet the scope of intervention of these groups was not limited to the city (for reformists) and periphery (for the conservatives). Both groups were constantly using their political or economic resources to interfere in different parts of the city to acquire more authority and maintain their legitimacy among different social groups.

6.1.2. National Development and Urban Change

Approaching the history of Tehran's urban development through the lens of urbanisation and development discourses offered an important insight into how the ruling elite responded to dominant international development discourses (state-led development or neoliberalism), and attempted to nurture a locally interpreted version of what it meant to be 'developed', and how efforts to be 'developed' were intertwined with nation-building strategies and planning urban development. As presented earlier, shifts in international development discourses throughout the 20th century have had important implication for Iranian national development policies and plans, especially the globally dominant shared view that being 'prosperous' or 'successful' is directly link to being 'urban'. Hence cities were perceived as globally powerful symbols of cultural, political and economic progress, whereas the rural areas were often associated as 'backward'. In the case of Iran, and many other non-Western countries, this powerful assumption has led to urban-centric conceptualisations of development and modernity and a strong desire among ruling elite to urbanise their nations. In other words, city-making practices reflect local interpretations of what constitutes being 'developed', 'modern' or 'global'.

By tracing the link between shifts in global ideas of development and Iran's national development agendas, this thesis revealed the important role this interaction played in shaping Tehran's urbanism and development. The main findings of this investigation offer a counter-narrative to the common approach in contemporary literature that is mainly concerned with the economic role played by cities, and the way they operate not just within their national territory, but also within interconnected global networks of consumption and production. These debates propose that the significance of the nation-state in driving economic growth is declining and instead large cities are bypassing their nation-state and becoming strategic actors in the global economy. Yet what the case of Tehran uncovers is that during the last century different states and regime-types with their specific developmental ambitions have implemented certain nation-building strategies which not only influenced Tehran urban condition in the local and national scale, but also transformed its role within the global economic system. Therefore, the authority of the nation-state in Iran has not decreased, but instead in many ways, especially after the 1979 revolution, has grown stronger as the ruling revolutionary elite have planned new strategies to reinstate the nation as an imagined political community (Anderson, 1991,1983).

By comparing different historical periods of Tehran's urban change, this thesis furthers our understanding of how different states with their particular political characteristics and preferred models of development, both economic and political, have influenced the urban dynamics and process of city-making. For example, the discussion in chapter 4, showed that by the end of WWII, with the rise of the nationalist movement in Iran, and the Soviet-American Cold War, the Pahlavi state underwent dramatic administrative and bureaucratic changes. The formation of the Plan Organisation by educated technocratic elites and backed by US and Western aids was one of the main outcomes of this political transformation. In fact, the nationalisation of the oil industry, and the Iranian American alliance from 1950s until 1970s have helped the ruling elites to materialise their ambitious urban-centric national development plans. The bureaucratic elite with their paternalistic policies were determined to protect the national economy and sovereignty by 'homogenising' the culturally diverse population and converting them into a standard model of 'modern' and secular Iranian citizen. The Tehran middle class household became representative of the homogeneous national subject and their growth and prosperity would further legitimize the developmental agenda of the state and ruling elite. Hence, a series of large-scale, prestigious, and capital- intensive development projects – including the Tehran International Airport, five-star hotels, a network of highways, sports stadiums, universities, cultural centres, and luxury high-rise condominiums were constructed to accommodate the cosmopolitan middle class of Tehran and produce a form of national urbanism. Yet as we saw in reality Tehran became a scene of greater socio-spatial ex-

clusion and fragmentation as rapidly growing number of migrant newcomers faced the scarce resources available to them and consequently were pushed to the periphery of the capital.

Nevertheless, after the 1979 Islamic Revolution, the role of Tehran radically changed both on the national and global scale. Tehran became a representative of a wider wave of Islamic revivalism in the Middle East and other Muslim countries that were dissatisfied with their government, ruling elite, and Western political ideologies – whether democratic or Marxist. In chapter 5, the analysis of the two decades of the Islamic Republic's nation-building strategies showed the role national development plans played in linking religion and national identity with the city and wider development processes such as neoliberalism and globalisation. The Islamic Revolution marked a break with the Pahlavi elite's linear conception of modernity and development and put forward a new understanding of progress along with new projects for the reproduction of the national subject guided by Sharia Islam. During the 1980s, the revolutionary elite rejected Pahlavi's urban-centric conceptualisation of development and championed for rural development and re-building the nation by retreating from urban centres. The goal was to symbolically reject the previous models of development, and by finding a strong social base among rural population, consolidate the power of Islamic republic.

Yet by the 1990s, the technocratic Islamic reformists, inspired by the Asian model of development and progressive Muslim cities in the region, aimed to shape the national and urban development strategies in a way that they could compete with other nations/cities in the Muslim World. While the Islamic reformists never officially followed the idea of building a 'global city' or 'neoliberal city', they were determined to create their own competing version of an Iranian/Muslim city that aspired to be 'global' and 'modern' yet retain a sense of national identity and religious value. The analysis of Tehran's urban development policies in the 1990s revealed that planning and development of Tehran became a tool for competing not with the universally known image of 'global cities' but with nearby cities in the region – as shown, this regional competition took various forms: expansive highway systems, large mosques, luxury residential and office towers, cultural centres and national libraries, and sites for international expositions. Ultimately what we learned from the findings of the analysis in chapter 5, is that despite the hegemonic nature of neoliberalisation and globalisation discourses, the development trajectory of cities like Tehran demonstrates a local interpretation of 'global' elements and strategies that result in unique forms of urban governance and urban patterns. More importantly, these findings on Tehran contribute to the work of scholars such as Yassar Elsheshtawy (2008) on the evolution of the Arab city and Sara Moser on new cities in the Muslim world who argue that while many developing cities in the Muslim world will never become a 'global' city according to the conventional socio-economic definition but

they are 'still influenced both materially and discursively through globalisation and the 'global-cities' discourse' (Moser, 2012: 183).

6.1.3. The Role of Urban Planners in Urbanisation Process

This thesis viewed planning as a central device through which governments and ruling elites manage national territories and populations: the issue of political and economic power is therefore intimately linked to an understanding of the planning system and the planning profession. This thesis explored the formation of the Iranian planning system as well as the role and involvement of planners and architects in state urban development projects and the urban transformation of Tehran. The main outcome of this investigation contributes to recent debates among planning scholars who argue that current planning systems in most parts of the global south are increasingly 'inadequate and often inappropriate' (Watson, 2009: 2260, Parnell and Oldfield, 2014). The argument put forward by these studies is that much of the cities in the global south still use variations of urban planning approaches that initially formed in Europe and the US in the early 20th century (Watson, 2009:2261). This early 20th century approach to city planning mainly comprised of a 'master planning', zoning, and modernist visions of a 'good city'. Evidently these older forms of planning became outdated and inappropriate for the vast challenges of cities in the global south in the 21st century. Therefore, during the last decade the pressing urban challenges of poor and developing cities raised serious concerns among planning scholars and international agencies such as UN Habitat (2009) – asking urban planners and practitioners to rethink their role in the rapidly changing and urbanising cities of the South.

The findings of this study reflect on these debates in two ways: firstly, we discuss in what ways older approaches to city planning such as zoning and master planning persisted in the Iranian planning system as Tehran entered the 21st century. Secondly, the analysis of the making of Iranian planning projects and the professionalization of planning uncovers the ways in which Iranian planners are located within a primary conflict of rationalities between the logic of science and technology through which they can control and regulate development, and the logic of the unruly (uncontrollable) or 'informal', generally referring to those places and people in the city that are excluded from or only partly included in official public development plans.

The planning profession formed in Iran in 1960s as part of a larger national development project, and with the support of the technocratic elite at the Plan Organisation. Up until the 1960s, the majority of architects and engineers were coming from well-to-do families and almost all of them were educated in European universities. Hence the world view and

intellectual formation of the first generation of architects and engineers were influenced by the enlightenment tradition of modernity which assumed that through "the application of scientific knowledge and reason to human affairs, it would be possible to build a better world, in which the sum of human happiness and welfare would be increased" (Healey, 1992: 145, Watson, 2016). Therefore, this generation of planners believed firmly in the rational discourse of planning and uncritically endorsed technical and scientific approaches towards building a modernist city.

The rational and scientific approach towards planning continues until today, not only because of the vital role this first generation of Iranian planners played in shaping planning education and the profession but also the way planners were positioned within the power structure and employed by state institutions. In fact, the idea of planning as a technical process - embraced both by the Pahlavi and Islamic governments – meant that planners, architects and engineers operated in a disengaged fashion - away from wider politics (compelled as they were to only address technical problems) which ultimately excluded them from decision-making processes and implementation of the plans that they have worked on. As a result, the role of planners became reduced to technicians or manages who have limited socio-political and economic engagement with cities that they are supposed to plan for. The role of planners in shaping the urban development trajectory of Tehran has been restricted to the selective implementation of their 'master plans' by those with economic and political power. As shown in chapter 4 and 5, the 1968 master plan has been selectively adapted by different powerful groups who either wanted to promote the image of a modern city with the help of developers and contractors (the Pahlavi elite and the landowning class) or used the land-use and zoning plans as a tool to back municipal financing – the 1989 Tehran municipal construction density tax policy. Ultimately, we have learnt that the fixation of planners with science, and assumptions of modern city building, together with the unaccountable position of state planning institution towards citizens and 'technical experts' are the main reasons behind the continuity of the older planning approaches in Tehran.

Moreover, an important observation that came from evaluating the role of planners and urban planning in confronting socio-spatial challenges and shaping the urban structure of Tehran, is that planners and urban planning practices are stuck in a conflict of logics and rationalities – a logic of governable and regulated development over what is generally referred to as 'spontaneous' or 'informal'. For example, through the course of the 20th century and up until today Iranian planners have been struggling to understand how the Tehran Bazaar operates and how it effects the socio-spatial structure of the city. The planners under different state and regime-types have persistently identified the Bazaar as either an informal economic zone that has to be regulated by the state or as a 'cultural heritage' site that needs to be pre-

served and protected. Both these approaches have been completely ignoring the important social and economic function of the Bazaar and its constant transformation as well as the survival methods that the shopkeepers and influential merchants adapted to resist against the regulatory and modernist projects of states and planners.

The outcome of this investigation depicts the ambiguous and weak position of Iranian planners. In fact, their fixation with technical and older planning approaches in planning have politically weakened their position and stopped them from critically question their role and recognizing the conflicting issues on the ground. Hence, this dissertation questions whether the technical and scientific method still counts as the best way or only way forward. Or there are other ways in which we can do planning? How can Iranian planners develop a more critical and reflexive approach that recognizes the multiple structural and conflicting urban logics, instead of simplifying or eliminating them with technical solutions? This study suggest that the technical approach has to be treated with caution and conflicting interests and diversity should be recognized first and for.

6.2. Further Research Directions and Questions

While this dissertation has led to some significant observations and a detailed understanding of the processes of urbanization in Tehran, it also raises many further questions and some future avenues of research:

. As noted earlier, the scope of this research was limited to understanding the urbanisation process of Tehran during the 20th century. Nevertheless, much further work is needed to examine recent urban processes and the ways in which current political economic conditions have influenced the urban development and planning of Tehran. In the past two decades Iran and the wider region of the Middle East have undergone considerable political, social and economic changes – ranging from imposed economic sanctions on Iran, the Iraq war, the Arab Spring, the rise of terrorist groups such as Al-Qaeda and ISIS, the Syrian crisis, the Israel/Palestine conflict, and much more. This geopolitical turmoil has had serious implications for the wider society and economy of Iran and the many other countries in the region, which confronted the states and ruling regimes with unprecedented challenges. In the last decade, the region has experienced multiple regime changes either forced by foreign occupation or through popular mobilisation and violence. The results have destabilised many parts of the Middle East and led to serious problems not only for regimes, but also for the territorial integrity of the state and its very sovereignty. Hence today more than ever, it is not possible

to think about planning Middle Eastern cities without considering the issues of government and urban governance. Therefore, it is crucial to rethink and deepen our understanding of the role of the state and state-making processes in shaping urban planning practices and urbanization processes of Tehran and other major cities in Iran and the Middle East. In fact, the 21st century challenges of urban governance and planning in Tehran and other cities of the region go beyond the neoliberal discourse, and require future research on how exactly different regime-types (democratic, semi-democratic, post-authoritarian, and authoritarian) and states with their particular nation-building strategies have shaped the planning practices and city dynamics. Also, it is critical to ask, do these sates and regime-types have a similar capacity to steer urban spaces and development.

. Moreover, further reconsideration of unquestioned assumptions about the 'modern state', its form and its function is crucial. In the case of Tehran as this study showed we urgently need to ask what are the 'formal' and 'informal' forces in determining the nature of the state and state-making strategies. Raising these questions can help us better interrogate the state's abilities and limitations to govern and shape a contemporary city, especially Middle Eastern cities with much weaker and younger governments.

. Additionally, we urgently need to revisit the common definition and understanding of terms such as 'private sector' and 'civil society', as the normative understanding of these terms are often not applicable to Middle Eastern cities. In the case of Tehran this is particularly pertinent to the careful investigation of the role of revolutionary charitable foundations in planning development as these foundations cannot be defined simply as public or private sector. In more general terms, it is important to further research the role of the religious-political groups (as non-state actors) or any other developmental organisation with ideological orientations in shaping urban spaces and spatial practices of Middle Eastern cities. In fact, it will be impossible to do any planning reform without considering the crucial role these ideological groups and organisations play in socio-economic development of these cities.

. Finally, by interrogating state power in producing Tehran's urbanism we discovered some of the ways in which informal practices (e.g. unofficial forms of alliances between municipality and developers) have been used by the state to govern and build the city. This makes it clear that there needs to be more research on how the state defines the boundaries between formal and informal, or planned and unplanned, and what is the relationship between the planned and unplanned dynamics of Tehran today.

Bibliography

Abdi, K. (2001). Nationalism, Politics, and Development of Archaeology in Iran. American Journal of Archeology 105(1), 51–76.

Abrahamian, E. (1982). Iran between two revolutions. Reprint, Princeton: Princeton University Press, 1998.

Abrahamian, E. (2008). A history of modern Iran. Cambridge, UK: Cambridge University Press.

Abu-Lughod, J. (1991). Before European hegemony: The world system A.D. 1250-1350. Oxford: Oxford University Press.

Abu-Lughod, J. and Hay. R. (1977). Third World Urbanization. Reprint, London: Routledge, 2007.

Abu-Hamdi, E. (2017). 'The Processes of Neoliberal Governance and Urban Transformtions in Amman, Jordan'. In Khirfan L. (Ed.), Order and Disorder: Urban Governance and the Making of Middle Eastern Cities (pp. 132-154). Montreal; Kingston; London; Chicago: McGill-Queen's University Press.

Ahrens, P. (1966). Die Entwicklung der Stadt Tehran, Eine Stadtebauliche, Untersuch -ungihrer zukunftigen Gestaltung (Tehran Urban Development, Town Planning, and its Future Design). Germany: C.W. Leske Verlag.

Alacevich, M. (2009). The Political Economy of the World Bank: The Early Years. Stanford: Stanford University Press.

Alemi, M. (1985). The 1891 map of Tehran: Two cities, two cores, two cultures. Journal of the Islamic Environmental Design Research Centre 1, 74–84.

Amanat, A. (1992). Constitutional Revolution. Encyclopaedia Iranica. Available online at http://www.iranicaonline.org/articles/constitutional-revolution-i

Amirahmadi, H. (1986). Regional Planning in Iran: A Survey of Problems and Policies. The Journal of Developing Areas 20(4), 501–530.

Amirahmadi, H. (1990). Revolution and economic transition: The Iranian experience. Albany: State University of New York Press.

Amirahmadi, H. (1995). An Evaluation of Iran's First Development Plan. Middle East Executive Report 18.4, 11–18.

Amirahmadi, H. (2012). The political economy of Iran under Qajar. New York: I.B Tauris.

Amirahmadi, H. and Kiafar, A. (1987). Tehran growth and contradiction. Journal of Planning, Education and Research 6(3), 167–177.

Amirahmadi, H. and Kiafar, A. (1993). The transformation of Tehran from a garrison town to a primate city: A tale of rapid growth and uneven development. In H. Amirahmadi and S. S. El-Shakhs (eds.), Urban development in the Muslim world (p. 109–136). New Brunswick, NJ: Center for Urban Policy Research.

Amuzegar, J. (1966). Technical Assistance in Theory and Practice: The Case of Iran. New York: F. A. Praeger Publishers.

Amuzegar, J. (1992). The Iranian Economy before and after the Revolution. The Middle East Journal, 46 (3), 413-425.

Amuzegar, J. (2001). Iran's Post-revolution Planning: The Second Try. The Journal of Middle East Policy vol. 8, 25-42.

Amuzegar, J. (2004). Iran's Economy: Status, Problems and Prospects, Wilson Centre Publications. Available online at https://www.wilsoncenter.org/sites/default/files/JahangirAmuzegarFinal.pdf

Anderson, B. (1991). Imagined Communities: Reflection on the Origin and Spread of Nationalism. New York and London: Verso.

Annez, P. and Buckley, R. (2009). Urbanization and growth: setting the context. In M. Spence, P. Annez, and R. Buckley, Urbanization and Growth: Commission on Growth and Development (p. 1¬–45). Washington, DC: World Bank.

Art and Architecture magazine (Honar o Memari), "Tehran the capital in search of itself", vol. 18-19: 92-105, 1973.

Art and Architecture (Honar-o-Memari) magazine, A Decade of Growth, vol. 18-19: 92-93, 1973, (Persian).

Art and Architecture (Honar-o Memari) magazine,vol. 12-13: 117, 1972 (Persian).

Art and Architecture (Honar-o Memari) magazine, special issue on Tehran master plan, vol. 5, 1970, (Persian).

Ansari, A. M. (2003). Modern Iran since 1921: the Pahlavis and After. Edinburgh: Pearson Education Limited.

Ansari, A. M. (2012). The Politics of Nationalism in Modern Iran. Cambridge, UK: Cambridge University Press.

Ashraf, A., and Banuazizi, A. (1992). Class system in Pahlavi Period. Encyclopaedia Iranica. Available online at http://www.iranicaonline.org/articles/class-system-vi.

Ashraf, A. (1981). The roots of the emerging dual class structure in nineteenth century Iran. Iranian Studies 14(1-2), 5-27.

Ashraf, A. (2006). Iranian Identity: 19th-20th Centuries. Encyclopaedia Iranica. Available online at http://www.iranicaonline.org/articles/iranian-identity-iv-19th-20th-centuries

Atabaki, T. (2003). The Making of Modern Iran: State and Society under Reza Shah, 1921-1941. London: Routledge.

Atabaki, T. (2007). The State and the Subaltern: Modernization, Society and the State in Turkey and Iran. New York: I. B. Tauris.

Atabaki, T. (ed). (2009). Iran in the 20th century: Historiography and political culture. New York: I. B. Tauris.

Atabaki, T. and Zurcher, E. J. (2004). Men of Order: Authoritarian Modernisation in Turkey and Iran, 1918-1942. New York: I. B. Tauris.

Athari, K. (2004). Evaluating the new Plan: Islamic Revolution Housing Foundation. Goftogu 39. Available online at http://www.goftogu.com/article/2013/07/post-73.html.

Athari, K., & Yazdani, F. (2008). Borjouazi-ye Mostaghelat; Kaj-karkardi-ye Jameaeh, Kajtabi-ye Shahr (landed Property Bourgeoisie; Dysfunctional Society, Dys Plasia of City). Cheshm-andaz-e Iran, (48), 43–50.

Avermaete, T. (2016). The Ford Foundation's Footprint. In Journeys and Translation. Montreal: Canadian Centre for Architecture. Available online at http://www.cca.qc.ca/en/issues/5/journeys-and-translation/32834/the-ford-foundations- footprint.

Avermaete, T., and Casciato, M. The International Development Expert. In Journeys and Translation. Montreal: Canadian Centre for Architecture (CCA). Available online at http://www.cca.qc.ca/en/issues/5/journeys-and-translation/32777/the- international-development-expert.

Bahrambeygui, H. (1977). Tehran: an urban analysis. Tehran: Shahab Books Institute.

Bahreiny A. and Aminzadeh, B. (2007). Evaluation of Navab regeneration project in central Tehran. International Journal of Environmental Research, 2: 114-127.

Banani, A. (1961). The modernization of Iran 1921-1941. Stanford, CA: Stanford University Press.

Bavar, S. (2009). The Advent of New Architecture in Iran. Tehran: Faza Publication. In Persian.

Bayat, A. (2010). Tehran: The Paradox City. New Left Review 66, 99–122.

Bayat, K. (1993). Davar's political thought and building modern state in Iran. Goftogu 2. 116-133. In Persian.

Beall, J. (2002). Globalization and social exclusion in cities: framing the debate with lessons from Africa and Asia. Environment and Urbanization 14, 41–51.

Benner, C. (2014). Digital Dynamics: New technologies and work transformation in African Cities. In S. Parnell and S. Oldfield (eds.), The Routledge Handbook on Cities of the Global South (p. 236–251). London: Routledge.

Berman, M. (1982). All That Is Solid Melts into Air. New York: Simon & Schuster.

Bhabha, H. (1994). The Location of Culture. London: Routledge.

Bharier, J. (1971). Economic Development in Iran (1900–1970). Oxford: Oxford University Press.

Birch, E. L., and Wachter, S. M., (eds.). (2011). Global Urbanization. Philadelphia: University of Pennsylvania Press.

Bostock, F., and Jones, G. (1989). Planning and Power in Iran: Ebtehaj and Economic Development Under the Shah. London: Routledge.

Boyce, A. (1923). The Life of an American Woman in the Shah's Capital. (PHS) RG 91-18-11.

Bozdoğan, S. (2001). Modernism and Nation Building: Turkish Architectural Culture in the Early Republic. Seattle: University of Washington Press.

Brenner, N. and Schmid, C. (2011). Planetary urbanization. In M. Gandy (ed.) Urban Constellations (p. 10–13). Berlin: Jovis.

Brenner, N. and Schmid, C. (2014). The 'urban age' in question. International Journal of Urban and Regional Research 38(3), 731–755.

Brenner, N. and Schmid, C. (2015b). Combat, Caricature & Critique in the Study of Planetary Urbanization. Available online at http://www.soziologie.arch.ethz.ch/_DATA/90/BrennerSchmid2.pdf.

Brenner, N. and Schmid, C. (2015a). Towards a new epistemology of the urban? City 19(2–3), 151–182.

Bryceson, D. F., Gough, K., Rigg, J., and Agergaard, J. (2009). Critical commentary: World Development Report 2009. Urban Studies 46(4), 723–738.

Chakrabarty, D. (2000). Provincializing Europe: Postcolonial thought and historical difference. Princeton: Princeton University Press.

Chakravorty, S. (2000). From Colonial City to Globalizing City? The Far-from-complete Spatial Transformation of Calcutta. In P. Marcuse and R. van Kempen (eds.), Globalizing Cities: A New Spatial Order. London: Blackwell Publishers.

Chang, H. (2003). Globalization, Economic Development and the Role of the State. London and New York: Zed Books Ltd.

Chehabi, H. E. (1990). Iranian politics and religious modernism: The liberation movement of Iran under the Shah and Khomeini. Ithaca, NY: Cornell University Press.

Chen, X. and Kanna, A. (eds) (2012) Rethinking Global Urbanism: Comparative Insights from Secondary Cities, Routledge, London.

Çinar, A. (2014). State Building as an Urban Experience: The Making of Ankara. In M. Minkenberg (ed.), Power and Architecture: The Construction of Capitals and the Politics of Space (p. 227-260). New York and Oxford: Berghahn Books.

Clawson, P. (1993). Knitting Iran Together: The Land Transport Revolution, 1920-1940. Iranian Studies 26(3), 235-250.

Cody, J. W. (2003). Exporting American Architecture 1870–2000. Routledge, London.

Costanza, R., Hart, M., Posner, S., and Talberth, J. (2009). Beyond GDP: The Need for New Measures of Progress. Boston: Boston University Press.

Costello, V. (1998). The Morphology of Tehran: A Preliminary Study. Built Environment 24(4), 201–216.

Cowen, M. and Shenton, R. (1995). The invention of development. In J. Crush (ed.), Power of Development. London: Routledge.

Cowen, M. and Shenton, R. (1996) Doctrines of Development. London: Routledge.

Craig, D. and Porter, D. (2006). Development beyond Neoliberalism? Governance, Poverty Reduction and Political Economy. London: Routledge.

Cronin, S. (2003). Modernity, Change and Dictatorship in Iran: The New Order and Its Opponents, 1927-29. Middle Eastern Studies 39(2), 1–36.

Cronin, S. (2003). The Making of Modern Iran: State and Society under Reza Shah, 1921-1941. New York: Routledge.

Cronin, S. (2007). Reform from above, resistance from below: The new order and its pponents in Iran, 1927-1929. In T. Atabaki, ed. The State and the Subaltern: Modernization, Society and the State in Turkey and Iran (p. 71–95). New York: I. B. Tauris.

Cronin, S. (2009). Re-interpreting modern Iran: Tribe and state in the twentieth century. Iranian Studies 43(3): 357-388.

Crush, J. (ed.). (1995). Power of Development. London: Routledge.

Dados, N. and Connell, R. (2012). The Global South, Journal of American Sociological Association, 11 (1): 12-13

Davila, J. (2014), Urban Fragmentation, 'Good Governance' and the Emergence of the Competitive City. In Parnell, S. and Oldfield, S. (eds.) The Routledge Handbook on Cities of the Global South. New York: Routledge.

Davis, D. E. (1994). Recasting the Dynamics of Urban and Political Change in Mexico. In Urban Leviathan. Philadelphia: Temple University Press.

Davis, D. E. (2004). Discipline and Development. Cambridge: Cambridge University Press.

Davis, D. E. (2005). Cities in Global Context: A Brief Intellectual History. International Journal of Urban and Regional Research 20(1), 92-109.

Davis, D. E. (2016). Reflections on the relations between development and urbanization: past trajectories and future challenges. International Journal of Urban Sciences, 20(1):1-14 Desai, V. and Potter, R. (2002). The Companion to Development Studies. London: Routledge.

Devos, B. (2014) Engineering a modern society? Adoptions of new technologies in early Pahlavi Iran. In Devos and Werner (eds.), Culture and Cultural Politics Under Reza Shah (p. 266-288). London: Routledge.

Domhardt, K. (2012). The Garden City Idea in the CIAM Discourse on Urbanism: a Path to Comprehensive Planning. Planning Perspective 27(2): 173–197.

Dorman, W. and Mansour F. (1988). The U.S. Press and Iran: Foreign Policy and the Journalism of Deference. Berkeley CA: University of California Press.

Eastern Urban Form and Culture. Cultural Atlas of Tehran, printed by Supreme Council for Culture and Arts, Centre for Cultural Studies and Cultural Coordination, 1976.

Ebtehaj, A. (2010). The Memoirs of Abolhassan Ebtehaj. Los Angeles: Ketab Corp. In Persian.

Ehlers, E. and Floor, W. (1993). Urban change in Iran 1920-1941. Iranian Studies 26 (3-4): 251-275.

Ehsani, K. (1999). Municipal matters: The urbanization of consciousness and political change in Tehran. Middle East Report 212: 22-27.

Ehsani, K. (2006). Agrarian Change and Rural Community in Iran after the Revolution. Goftogu 46, 77–101. In Persian.

Ehsani, K. (2009). Survival through Dispossession; Privatization of Public Goods in the Islamic Republic. Middle East Report 250, 26–33. Available at http://www.merip.org/mer/mer250/survival-through-dispossession.

Ehsani, K. (2013). Politics of property in the Islamic Republic of Iran. In S. AmirArjomand and N. Brown (eds.), The Rule of Law, Islam, and Constitutional Politics in Egypt and Iran (p. 158–178). Albany NY: State University of New York Press.

Elsheshtawy, Y. (ed.). (2008). The Evolving Arab City: Tradition, Modernity and Urban Development. London: Routledge.

Elwell-Sutton, L. P. (1949). Political Parties in Iran 1941-1948. Middle East Journal 3(1), 45-62.

Elwell-Sutton, L.P. (1941). Modern Iran. London: G. Routledge & Sons, Limited.

Emami, F. (2014). Urbanism of Grandiosity: Planning a New Urban Centre for Tehran (1973–76). International Journal of Islamic Architecture 3, no. 1: 69–102.

Ersoy, C. (2016). Urbanization and the Formation of Modern Nation-States in the Turko-Persian World. PhD dissertation. Stony Brook University, New York.

Escobar, A. (1995). Encountering Development: The Making and Unmaking of the Third World. Princeton: Princeton University Press.

Escobar, A. (1995b). Imagining a post-development era. In J. Crush (ed.), Power of Development. London: Routledge.

Escobar, A. (2008). Territories of Difference: Place, Movements, Life. Durham: Duke University Press.

Etemad, G. (Ed.) 2013. Assessment of Navab project and its consequences. Tehran: Jame-h Mohandesan Moshaver Iran, 1392.

Farhoodi, R., Gharakhlou, M., Ghadami, M., and Panahandeh Khah, M. (2009). A Critique of the Prevailing Comprehensive Urban Planning Paradigm in Iran: The Need for Strategic Planning. Planning Theory 8, no. 4: 335–361.

Farivar Sadri, B. (2014). Tahavolat-e Tarhrizi Shahri Iran dar dorane Moaser (Iran Contemporary Urban Planning Development). Tehran: Iranian Society of Consulting Engineers. In Persian.

Farman-Farmaian, A., and V. Gruen, eds. (1968). Tarh-I Jami' Tehran [Tehran Masterplan], 1968, First Stage report, 5 vols. Tehran.

Farmanfarmaian, K. (1982). Harvard Iranian Oral History Project. Available online at www.fas.harvard. edu/~iohp/farmanfarmaian.html (accessed September 2015).

Fawaz, M. (2009). Hezbollah as Urban planner? Question to and from Planning Theory. Journal of Planning Theory 8(4): 323-334.

Feniger, N., and R. Kallus. (2004). Israeli Architects in 1970s Iran: From Transnational to Supranational Planning. Planning Perspectives 29, no. 3: 1–21.

Fillion, P. (1996). Metropolitan planning objectives and implementation constraints: planning in a post-Fordist and postmodern age. Environment and Planning, vol. 28 (9), 1637–60.

Floor, W. (1984). Industrialization in Iran 1900-1941. Working Paper. University of Durham, Centre for Middle Eastern and Islamic Studies, Durham.

Ford Foundation. (1962). Ford Foundation in 1960s: Statement of the board of trustees on policies, programs, and operations. Washington, DC and London: Library of Congress and British Library Archive.

Fox, S. and Goodfellow, T. (2009). Cities and Development. London: Routledge.

Friedman, M. (1962). Capitalism and Freedom. Chicago: University of Chicago Press.

Friedmann, J. (1971). The Future of Comprehensive Planning: A Critique. Public Administration Review 31: 315–326.

Friedmann, J. (1987). Planning in the Public Domain: From Knowledge to Action. Princeton, NJ: Princeton University Press.

Friedmann, J. (2005). Globalization and the emerging culture of planning. Progress in Planning Journal, Vol 64, p.183-234.

Gabriel G. (1929). Ein Landhaus in Neuilly. In Innendekoration: mein Heim, mein Stolz; die gesamte Wohnungskunst in Bild und Wort, Darmstadt, 318 - 330.

Gandy, M. (2002). Concrete and Clay: Reworking Nature in New York City. Cambridge: MIT Press.

Ghamami, M. (2008). Darbareh Masael Barnameh Rizi Shahri Dar Iran [Challenges of Urban Planning in Iran Today]. Tehran: Agah.

Ghamami, M. (2013), Analysis of Urban and Regional Planning in Contemporary Iran. Tehran: Afrand. In Persian.

Glaeser, E., and Sims, H. (2015). Contagion, crime and congestion: Overcoming the downsides of density. IGC Growth Brief Series. London: International Growth Centre. Available online at https://www.theigc.org/wp-content/uploads/2015/05/Glaeser-

Sims-2015-Growth-brief.pdf.

Graham, S. and Marvin, S. (2001). Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition. London/New York: Routledge.

Grigor, T. (2004). Recultivating 'Good Taste': the early Pahlavi modernist and their Society for National Heritage. Journal of Iranian Studies 37 (1): 17-45.

Grigor, T. (2005). Cultivat(ing) Modernities: The Society for National Heritage, Political Propaganda and Public Architecture in Twentieth-Century Iran. PhD dissertation, Massachusetts Institute of Technology.

Grigor, T. (2009) Building Iran: Modernism, Architecture, and National Heritage under the Pahlavi Monarchs. Cornwall: Periscope Publishing Ltd.

Grigor, T. (2014). The King's White Walls: Modernism and Bourgeois Architecture. In Devos and Werner (eds.), Culture and Cultural Politics Under Reza Shah. London: Routledge. PP.266-288.

Habibi, M. and Salimi, J. (1997).Tehran Urban Structure (Ostekhan Bandie Shahr Tehran (vazeh mojod). Tehran: Engineering and consulting centre of Tehran municipality. In Persian.

Habibi, M. (1997). De La Cite a La Ville. Tehran: University of Tehran press. In Persian.

Habibi, M. Ahari, Z., and Emami, F. (2009). From Demolishing Fortifications to Thoughts of Highways: History of Urban Design in Tehran from 1930 till 1966. Soffeh Journal, 50(20),pp 51-61. In Persian.

Habibi, R. (2015). Modern Housing in Iran: Episodes of Urbanism 1945–1979. PhD diss., The Katholieke Universiteit Leuven.

Habibi, S. M. (1997). De La Cite a La Ville: analyse historique de la conception urbaine et son aspect physique. Tehran: University of Tehran Press.

Habibi, S.M. and Hourcade, B. (2005). Atlas of Tehran Metropolis. Tehran: Tehran Geographic Information Centre.

Hall, P. (1988). Cities of Tomorrow. Oxford: Blackwell.

Hall, P. and Tewdwr-Jones, M. (2011). Urban and Regional Planning. Abingdon: Routledge.

Hamshahri Newspaper, 25 Jan 1994:2-4. In Persian.

Hansen, W. (1968). Metropolitan Planning and the New Comprehensiveness. American Institute of Planners 34, no. 5: 295–302.

Hardwick, M. J. (2004). Mall Maker: Victor Gruen, Architect of an American Dream. Philadelphia: University of Pennsylvania Press.

Harris, K. (2013). The Rise of the Subcontractor State: Politics of Pseudo-Privatization in the Islamic Republic of Iran. Middle East Studies 45.1, pp. 45–70.

Harris, K. (2015). Class and Politics in Post-Revolutionary Iran: A Brief Introduction. Middle East Report 277 vol. 45. Available online at http://www.merip.org/mer/mer277/class-politics-post-revolutionary-iran-brief-introduction.

Harris, N. (1986). The End of the Third World: Newly Industrialising Countries and the Decline of an Ideology. London: Penguin.

Harris, N. (2005). Towards new theories of regional and urban development. Economic and Political Weekly, 12 Feb.

Harris, N. (2014). From master plans to city development strategies, DPU60 Working Paper, no. 162/60. Available online at https://www.ucl.ac.uk/bartlett/development/sites/bartlett/files/wp162.pdf.

Harvey, D. (2006) Spaces of Global Capitalism: A Theory of Uneven Geographical Development. London: Verso Books.

Hay, eds. Third World Urbanization. New York: Methuen, Inc.

Hayek, F. (1948). Individualism and Economic Order. Chicago: University of Chicago Press.

Healey P. (1992). The Reorganisation of State and Market in Planning. Urban Studies Vol 29, Issue 3-4, pp. 411 – 434.

Healey P. (1999). Sites, Jobs and Portfolios: Economic Development Discourses in the Planning System. Urban Studies Journal, Vol. 36 (1), 27-42.

Healey P. (2016). The Planning Project. In Fainstein, S., DeFilippis, J. and Campbell, S. (eds.), Readings in Planning Theory. Sussex: John Wiley & Sons, Ltd.

Healey P., Khakee, A., Motte, A., Needham, B. (1997). Making Strategic Spatial Plans, Innovation in Europe. London: UCL Press.

Healey, P. and Upton, R. (eds.). (2010). Crossing Borders: International exchange and planning practices. London: Routledge.

Hein, C. (ed.) (2018) The Routledge Handbook of Planning History, New York and London, Routledge.

Hessamian, F., Etemad, G. and Haeri, M. (1985). Urbanization in Iran (*Shahrneshini dar Iran*). Tehran: Agah Publishing House.

Hodge, J. (2010). British Colonial Expertise, Post-Colonial Careering and the Early History of International Development. Journal of Modern European History 8, no. 1: 24–46.

Honar-o-Memari. (1970). Tehran Master Plan [Special Issue] 5. In Persian.

Honar-o-Memari. (1972). Volume 12–13. In Persian.

Honar-o-Memari. (1973). A Decade of Growth [Special Issue] 18–19. In Persian.

Hooglund, E. (1982) Land and Revolution in Iran, 1960-1980, University of Texas Press.

Hourcade, B. (1987). L'homme vertical: un Mythe, une ville, un divorce. Tehran au Dessous du Volcan, Hors Serie, Paris: Autrement, no. 27: 60–68. In French.

Hourcade, B. (1974). Téhéran : Évolution Récente D'une Métropole." Méditerranée 16, no. 1: 25–41. In French.

Hourcade, B. (2008). The Demography of Cities and the Expansion of Urban Space. In P. Sluglett, The Urban Social History of the Middle East, 1750-1950. Syracuse: Syracuse University Press. Pp.154-158

Hourcade, B. (2009). Tehran- L'Elbourz (Tehran Alborz). Tehran: Taraneh. In Persian.

Hourcade, B., and S. Adl, (eds.). (1996). Tehran, Payetakhte devist saleh (Tehran, the 200 Years Old Capital). Tehran: Tehran Engineering and Technical Consulting Organization. In Persian.

Iravani, J. M. (1999). Institutionalism and Jehad-e Sazandegi. Tehran: Ministry of Jehad-e Sazandegi, Office of Public Relations. In Persian.

Jacobs, K. (2004). Waterfront redevelopment: A critical discourse analysis of the policy making process within the Chatham Maritime project. Urban Studies, 41(4), 817–832.

Kanna, A. (2012) The Trajectories of Two "Asian Tigers": The Imperial Roots of Capitalism in Dubai and Singapore, in Chen, X. and Kanna, A. (eds) (2012) Rethinking Global Urbanism: Comparative Insights from Secondary Cities, Routledge, London. PP. 35-53.

Karbaschi, G. H. (20 November 2015), Personal Interview.

Karbaschi, G. H. (2013). The Role of the Decision Making Processes in Urban Management Systems: Case study of Tehran, PhD dissertation. Newcastle University, UK.

Karimi, P. (2009). Transitions in Domestic Architecture and Home Culture in Twentieth-Century Iran. PhD diss., Massachusetts Institute of Technology.

Karimi, P. (2013). Domesticity and Consumer Culture in Iran: Interior Revolutions of the Modern Era. New York, Routledge.

Katouzian, H. (2003). Reza Shah's political legitimacy and social base. In: Cronin, S (ed.), The making of modern Iran: state and society under Reza Shah, 1921-1941. London: Routledge/ BIPS Persian Studies Series. PP. 15-36.

Katouzian, H. (1981). Political economy of the modern Iran 1926–1979. New York: New York University Press.

Katouzian, H. (2009). The Persians: Ancient, Mediaeval and Modern Iran. New Haven: Yale University Press.

Kazemi, F. and L. R. Wolf. (1997). Urbanization, Migration, and Politics of Protest in Iran. In M. Bonine ed., Population, Poverty, and Politics in Middle East Cities. Gainesville FL: University Press of Florida, pp. 256–285.

Keddie, N. (1985). Khomeini's Rule. London Review of Books 7.1, available online at https://www.lrb.co.uk/v07/n04/nikki-keddie/khomeinis-rule.

Keil, R. (1994). Global sprawl: urban form after Fordism?' Environment and Planning D: Society and Space, 12, 131–6.

Keivani, R., M. Mattingly, and H. Majedi (2008). Public management of urban land, enabling markets and low-income housing provision: the overlooked experience of Iran. Journal of Urban Studies 45.9, pp. 1825–1853.

Keshavarzian, A. (2007). *Bazaar and State in Iran: The Politics of the Tehran Marketplace*. Cambridge: Cambridge University Press.

Keshavarzian, A. (2015). The Iran Deal as Social Contract. Middle East Report, 277. Vol. 45, Available online at https://www.merip.org/mer/mer277/iran-deal-social-contract.

Khatam, A. (1999). Social studies of Tehran Metropolitan Plan (motaleat ejtemaei tarh majmoeh shahri Tehran). Markaz-e Motaleat va Tahqiqat Memari va Shahrsazi Iran.

Khatam, A. (2004). Bazaar and City Center. Goftego, issue 41. In Persian.

Khatam, A. (2015). Tehran Urban Reforms Between Two Revolutions: Developmentalism, Worlding Urbanism and Neoliberalism, PhD dissertation, York University, Toronto, Canada.

Khatam, A. and Keshavarzian, A. (2016). Decentralization and Ambiguities of Local Politics in Tehran. In Middle East Institute, special issue 'Governing Megacities in MENA and Asia'. Available online at http://www.mei.edu/content/map/governing-Megacities-Mena-and-Asia.

Khirfan L. (2016) (ed.), Order and Disorder: Urban Governance and the Making of Middle Eastern Cities (pp. 132-154). Montreal; Kingston; London; Chicago: McGill-Queen's University Press.

King, A. (1998). Writing the transnational city: the distant spaces of the Indian city. In Dandekar, H. (ed.), City, Space and Globalization: An International Perspective. Ann Arbor MI: College of Architecture and Urban Planning, University of Michigan pp. 25–31.

Kingston, P. W. T. (2002). Britain and the Politics of Modernization in the Middle East, 1945-1958. Cambridge: Cambridge University Press.

Klein, N. and Smith, N. (2008). The Shock Doctrine: A Discussion. Environment and Planning D: Society and Space, 26 (4), pp. 582 – 595.

Knox, P. (1993). Capital, material culture and socio-spatial differentiation. In P. Knox (ed.), The Restless Urban Landscape. Englewood Cliffs NJ: Prentice Hall, 1–34.

Kostof, S. (1994). His majesty the pick: the aesthetics of demolition. In Z. Celik, D. Favro and R. Ingersoll (eds.), Streets: Critical Perspectives on Public Space. Berkeley CA: University of California Press, 9–22.

Koyagi, M. (2015),.The Vernacular Journey: Railway Travelers in Early Pahlavi Iran, 1925-50. International Journal of Middle East Studies. 47 (4), 745–763.

Lambton, A. (1969). The Persian Land Reform, 1962-1966. Oxford: Clarendon Press.

Lawhon, L. (2009). The Neighborhood Unit: Physical Design or Physical Determinism. Planning History 8, no. 2: 111–132.

Madanipour, A. (1998). *Tehran: the making of the metropolis*. Chichester, UK: Wiley.

Madanipour, A. (1999). City Profile: Tehran. Cities journal, vol. 16 (1): 57-65.

Madanipour, A. (2003). Modernization and Everyday Life: Urban and rural change in Iran. In A. Mohammadi ed., Iran Encountering Globalization. London: Routledge-Curzon. Pp.137–148.

Madanipour, A. (2006). Urban Planning and Development in Tehran." Cities 23, no. 6: 433–438.

Madanipour, A. (2010). Sustainable Development, Urban Form, and Megacity Governance and Planning in Tehran. In A. Sorensen, and J. Okata eds., Megacities: Urban Form, Governance, and Sustainability. New York: Springer, pp. 67–91.

Madanipour, A. (2010). The Limits of Scientific Planning: Doxiadis and the Tehran Action Plan." Planning Perspectives 25, no. 4: 485–504.

Mahbubi Ardakani, H. (1992). The history of modern institutions in Iran. Tehran: Anjuman-i Danishjuyan-i Danishgah-i Tehran. In Persian.

Majd, M. G. (2003). The Great Famine and Genocide in Iran: 1917-1919. University Press of America.

Majedi, H. (1996). Public acquisition of urban land and allocation for housing and urban development in Iran (1979–1988), PhD thesis, University College London, UK.

Majidi, A. (1982). Interview in *Barnāmarizi-e omrāni wa tasmimgiri-e siāsi* (Ideology, Process and Politics in Iran's Development Planning). Interviewer Gholam Reza Afkhami. Washington, DC and Paris: Archive of Foundation of Iranian Studies (Oral History Program. In Persian.

Maljoo, M. (2004). Introduction. Special issue on the 'foundations', Goftogu 39, pp. 4–7.

Maloney, S. (2000). Agents or Obstacles? Parastatal Foundations and Challenges for Iranian Development. In P. Alizadeh, ed., The Economy of Iran: The Dilemma of an Islamic State. London: I. B. Tauris Publishers.

Maloney, S. (2015). Iran's Political Economy since the Revolution. Cambridge: Cambridge University Press.

Marefat, M. (2002). Gabriel Guevrekian. Encyclopaedia Iranica. Available online at http://www.iranicaonline.org/articles/guevrekian.

Marefat, M. (1988). Building to Power: Architecture of Tehran 1921-1941. PhD thesis, Massachusetts Institute of Technology.

Martin, R. (1999). Selling off the state: privatization, the equity market and the geographies of shareholder capitalism. In R. Martin, ed., Money and the Space Economy (p. 261–283). London: Wiley.

Mashadizadeh, N. (1995). An Analysis Urban Planning Characteristics in Iran. Tehran: University of Science and Technology Press. In Persian.

Mashoodi, S. (12 June 2015), Personal Interview.

Mason, E., and Asher, R. (1973). The World Bank since Bretton Woods. Washington, DC: Brookings Institution Press.

Matin, K. (2013). Recasting Iranian modernity: International relations and social change. London and New York: Routledge.

Mbembe, A. (2001). On the Postcolony. Berkeley: University of California Press.

Mbembe, A. and Nuttall, S. (eds.). (2008). Johannesburg: The Elusive Metropolis. Durham, NC: Duke University Press.

Mbembe, A., and Nuttall, S. (2004). Writing the World from an African Metropolis. Public Culture 16(3): 347–372.

McFarlane, C. (2011). Learning the city: knowledge and translocal assemblage. Oxford: Wiley Blackwell.

McKinsey Global Institute. (2012). Urban world: Cities and the rise of the consuming class. Available online at https://www.mckinsey.com/featured-insights/urbanization/urban-world-cities-and-the-rise-of-the-consuming-class [accessed 10 September 2017].

Memari va Farhang. (2013). Foreign Architects and Designer of the Pahlavi Era (1925-1979) [Special Issue] 15(52). In Persian.

Mennel, T. (2004). Victor Gruen and the Construction of Cold War Utopias. Journal of Planning History 3(2): 116–150.

Mer'at, Z. (1999). Pushing the limits of the possible: the press in Iran. Middle East Report 212, pp. 32–35.

Merrifield, A. 2013. The urban question under planetary capitalism. International Journal of Urban and Regional Research 37: 909-922.

Milani, A. (2004). Lost Wisdom: Rethinking Modernity in Iran. Washington, DC: Mage.

Milani, A. (2008). Eminent Persians. Syracuse: Syracuse University Press.

Ministry of Construction Jihad. (1991). The Ten-Year Performance Record of the Construction Jihad from 1979 until 1989. Tehran: Publications and Press Office. In Persian.

Ministry of Construction Jihad. (2001). Twenty Years of Effort for Construction: A Glance at Twenty Years of Construction Jihad's Operations and Achievements. Tehran: Office of Public Relations. In Persian.

Mirsepasi, A. (2010). Political Islam, Iran, and the enlightenment: Philosophies of hope and despair. Cambridge: Cambridge University Press.

Mirsepassi, A. (2000), Intellectual Discourse and the Politics of Modernization: Negotiating Modernity in Iran. Cambridge: Cambridge University Press.

Mishra, A. (2012). From the Ruins of Empire: The Intellectuals Who Remade Asia. London: Farrar, Straus and Giroux.

Mitchell, T. (1991). Colonising Egypt. Oxford: University of California Press, Ltd.

Mitchell, T. (1991). The limits of the state: Beyond statist approaches and their critics. The American Political Science Review, 85(1): 77–96.

Mitchell, T. (1995). The Object of Development: America's Egypt. In Crush J. (ed.), Power of Development. London: Routledge. pp.129-158.

Mitchell, T. (1999). No factories, no problems: The logic of neo-liberalism in Egypt. Review of African Political Economy, 26 (82): 455-468.

Mitchell, T. (2002). Rule of Experts: Egypt, Techno-politics, Modernity. Berkeley and Los Angeles: University of California Press.

Mitchell, T. (2005). The work of economics: How a discipline makes its world. European Journal of Sociology 46: 297–320.

Mitchell, T. (2014). Economentality: How the Future Entered Government. Critical Inquiry Vol. 40 (4), 479-507.

Mitchell, T. (ed.). (2000). Questions of Modernity. Minneapolis: University of Minnesota Press.

Mitchell, T. (2009). Carbon democracy. Economy and Society, Vol. 38 (3): 399-432

Mitchell, T. (2011). Carbon democracy: Political power in the age of oil. New York: Verso.

Mofid, K. (1987). Development Planning in Iran: From Monarchy to Islamic Republic (Menas Socio-Economic Studies). Wisbech: Middle East & North African Studies Press.

Moghtader, R. (1993). 100 years of Modernity of Iran architecture and urbanism. Iran Nameh Magazine, issue 11, 259-270.

Mohajeri, S. (2016). "The Shahestan blueprint: the vestigial site of modernity in Iran." In The Historiography of Persian Architecture, ed. M. Gharipour. New York: Routledge.

Mokhtari, E. (2011). The Heritage of Modern Architecture of Iran. Tehran: Daftar-ePajouhesh-ha-ye-Farhangi Press. In Persian.

Momayyez, M. (1999). Faculties of the University of Tehran: Faculty of Fine Arts. Encyclopaedia Iranica. Available online http://www.iranicaonline.org/articles/faculties-ii.

Motamedi, M, (1990). Historical Geography of Tehran, University Publication Centre (Markaz-e-Nashre Daneshgahi), Tehran (Persian).

Mozayeni, M. (1974). City Planning in Iran: Evolution and Problems. Ekistics Vol. 38 (227), pp. 264-7.

Murray, M. (2013). Afterword: re-engaging with transnational urbanism. In T. Samara, S. He and G. Chen (eds.), Locating Right to the City in the Global South. London: Routledge, pp. 285–305.

National Geographic, vol. 39, no. 4, April 1921. Special issue on Modern Persia and Its Capital. Accessed online October 2014. Available online at http://www.chaonix.com/DL/National_Geography_April_1921.pdf.

Nicolson, H. G. (1934). Curzon, the last Phase, 1919-1925: A Study in Post-War Diplomacy. Faber and Faber Ltd. London.

Nili, M. (2002). Interview by Ahmadi Amouei. Political economy of the Islamic Republic. Tehran: Gam-e Nu. 1381. In Persian.

Offner, J-M. (2000). "Territorial deregulation": local authorities at risk from technical networks. International Journal of Urban and Regional Research, 24 (1), 165–82.

Parnell, S. and Oldfield, S. (eds) (2014). The Routledge Handbook on Cities of the Global South. London and New York: Routledge.

Parnell, S. and Pieterse, E. (2010). The 'Right to the City': Institutional Imperatives of a Developmental State. International journal of urban and regional research 34 (1), pp. 146-162. Parnell, S. and Robinson, J. (2018). The Global Urban: Difference and Complexity in Urban Studies and the Science of Cities. In Hall, S. and Burdett, R. (eds.) The SAGE Handbook of the 21st Century City. London, SAGE Publications Ltd.

Parnell, S., and Robinson, J. (2006). Development and urban policy: Johannesburg's city development strategy. Urban Studies 43 (2), 337-355.

Parnell, S., and Robinson, J. (2012). (Re) theorizing cities from the Global South: Looking beyond neoliberalism. Urban Geography 33 (4), 593-617.

Parnell, S., Pieterse, E. and Watson, V. (2009). Planning for cities in the global South: An African research agenda for sustainable human settlements. Progress in Planning, 72: 233–40.

Patel, S. (2014). Is there a 'south' perspective to urban studies? In Routledge Handbook on the Cities of the Global South, eds. S Parnell and S Oldfield. London: Routledge. pp. 37-53.

Peck, F. (1996). Regional development and the production of space: the role of infrastructure in the attraction of new inward investment. Regional Studies 28, pp. 327–39.

Peet, R. and Hartwick, E. (2009). Theories of Development: Contentions, Arguments, Alternatives. The Guilford Press, London and New York.

Pieterse, E. (2008). City Futures: Confronting the Crisis of Urban Development. London: Zed Books.

Pieterse, E. (2010). Cityness and African Urban Development. Urban Forum (Working paper No. 2010/42) DOI: 10.1007/s12132-010-9092-7.

Pieterse, E. (2014). Epistemic Practices of Southern Urbanism. In Cape Town: African Centre for cities.

Pieterse, E. and Hyman, K. (2014). Disjunctures between urban infrastructure, finance and affordability. In Parnell, S. and Oldfield, S. (eds.), The Routledge Handbook on Cities of the Global South. Oxon, New York: Routledge. P. 191-206.

Pieterse, E. and Simone, A. (eds.). (2013). Rogue Urbanism: Emergent African Cities. Johannesburg, South Africa: Jacana Media and African Centre for Cities.

Plan Organization of Iran. Historical review, (1955–1958). Tehran: Plan Organization, Public Relations Bureau. Archive of British Library. Shelfmark: S.S.300/5.

Potter, R. and Lloyd-Evans, S. (1998). The City in the Developing World. London: Longman.

Prior, A. (2005). UK planning reform: A regulationist interpretation. Planning Theory and Practice, 6(4), 465–484.

Pugh, C. (1996). 'Urban Bias', the Political Economy of Development and Urban Policies for Developing Countries. Urban Studies, 33(7), 1045–1060.

Rah (Road) Journal (2008), Special issue on Land Justice, issue 11, interview with Katiraei former Minster of Housing of Tehran (1979-1980). In Persian. Accessed November 2015. Available online at http://www.rahmag.ir/content.php?id=225.

Rajaee, F. (2007). Islamism and Modernism: The Changing Discourse in Iran. Austin TX: University of Texas Press.

Ramsamy, E. (2006). World Bank and Urban Development: From Projects to Policy. Abingdon: Routledge Studies in Development and Society.

Rangan, H. (2008). Development" in Question. In SAGE Handbook of Political Geography, edited by Cox K., Low M., and Robinson J. 563–579. London: Sage. pp. 563-578

Roberts, B. (1977). Center and Periphery in the Development Process. In Abu-Lughod, J. and Hay, R. (eds.), Third World Urbanization. Reprint, London: Routledge, 2007.

Roberts, B. (1978). Cities of Peasants: The Political Economy of Urbanization in the Third World. London: Arnold Press.

Robertson, J. T. (1978). Shahestan Pahlavi: Steps Toward a New Iranian Centre. In Towards an Architecture in the Spirit of Islam, ed. R. Holod (p. 44–51). Philadelphia: The Aga Khan Award for Architecture.

Robinson, J. (2002). Global and World Cities: A View from off the Map. International Journal of Urban and Regional Research 26 (3): 531-54.

Robinson, J. (2006). Ordinary Cities: Between Modernity and Development. Routledge London.

Robinson, J. (2011). Cities in a World of Cities: The Comparative Gesture. International Journal of Urban and Regional Research 35 (1): 1–23.

Robinson, J. (2015). City and development. In Miraftab, F. and N. Kudva (eds.) Cities of the Global South Reader. New York, London: Routledge (p. 66-73).

Robinson, J. (2015). Towards an Africa Urban Agenda. UN-HABITAT.

Robinson, J. (2016). Comparative Urbanism: New Geographies and Cultures of Theorizing the Urban: Debates & Developments. International Journal of Urban and Regional Research 40 (1): 187–99.

Robinson, J. (2016). Thinking Cities through Elsewhere: Comparative Tactics for a More Global Urban Studies. Progress in Human Geography 40 (1): 3–29.

Robinson, J. and Roy, A. (2016). Debate on Global Urbanism and the Nature of Urban Theory. International Journal of Urban and Regional Research 40 (1): 181-186.

Roudbari, S. (2016). Instituting Architecture: A History of Transnationalism in Iran's Architecture Profession, 1945– 1995." In The Historiography of Persian Architecture, ed. M. Gharipour, 173–205. New York: Routledge.

Roy, A. (2009). Why India Cannot Plan Its Cities: Informality, Insurgence and the Idiom of Urbanization. Planning Theory 8 (1): 76–87.

Roy, A. (2016). Who's Afraid of Postcolonial Theory? International Journal of Urban and Regional Research, 40 (1): 200–209.

Roy, A. and Ong, A. (eds). (2012). Worlding Cities: Asian Experiments and the Art of Being Global. Oxford: Wiley-Blackwell.

Sadri, B. (2014), Tahavolat-e Tarhrizi Shahri Iran dar dorane Moaser [Iran Contemporary Urban Planning and Development]. Tehran: Iranian Society of Consulting Engineers.

Saeidi, A. (2004). The Accountability of Para-Governmental Organizations (bonyads): The Case of Iranian Foundations. Iranian Studies 37.3, pp. 479–498.

Sager, T. (2011). Neo-liberal urban planning policies: A literature survey 1990–2010. Progress in Planning 76: 147–99.

Sander Lob, E. (2013). An Institutional History of the Iranian Construction Jihad: From Inception to Institutionalization (1979-2011), PhD dissertation, Princeton University, New Jersey, USA.

Sandercock, L. (1998). Towards Cosmopolis: Planning for Multicultural Cities. Wiley, Chichester.

Saremi, A. (2005). Iran an Unaccomplished Modernization in Architecture. Mimar Journal 41 (2). Pp. 31-36. In Persian.

Satterthwaite, D. (2007). The transition to a predominantly urban world and its underpinnings. Human Settlements Discussion Paper Series. London: International Institute for Environment and Development.

Saunders, D. (2010). Arrival City: How the Largest Migration in History is Reshaping Our World. London: Heinemann/Random House.

Schayegh, C. (2012). Iran's Karaj Dam Affair: Emerging Mass Consumerism, the Politics of Promise, and the Cold War in the Third World. Comparative Studies in Society and History 54, no. 03: 612–43.

Schayegh, C. (2008). Recent trends in the historioghraphy of Iran under the Pahlavi dynasty, 1921-1979. History compass 6(6): 1400-1406

Schayegh, C. (2010). "Seeing Like A State": An essay on the historiography of modern Iran. International Journal of Middle East Studies vol. 42, 37-61.

Schmid, C. (2012). Patterns and pathways of global urbanisation: towards comparative analysis. In Josep Acebillo, Jacques Levy, and Christian Schmid, eds. Globalisation of Urbanity. Barcelona: ACTAR, p. 51–79.

Schmid, C. (2015). Specificity and urbanization: A theoretical outlook. In: Basel, ES, Diener R, Herzog J, et al. (eds) The Inevitable Specificity of Cities. Zurich: Lars Muller Publishers, pp. 287–307.

Schmid, C., Karaman, O., Hanakata, N. C., Kallenberger, P., Kockelkorn, A., Sawyer, L., Streule, M., Ping Wong, K. (2017). Towards a new vocabulary of urbanisation processes: A comparative approach. Urban Studies 55(1), 19–52.

Seger, M. (1978). Tehran, Eine Stadgeographische Studie (Geographic studies of Tehran). Wien, New York; Springer-Verlag. In German.

Shafiei, Z. (2011). Contested Understanding of Urban Governance: A case study of Tehran, Iran. PhD dissertation, Newcastle University. P. 83.

Shahestan Pahlavi. (1976). A New City Centre for Tehran. Report prepared for 'Sherkat Sahami Nosazi Shahesatan Pahlavi', vol.2. by Liewelyn-Davies International, London. In Persian.

Shakoori, A. (2001). The state and rural development in post-revolutionary Iran. London and New York: Palgrave Macmillan.

Shambayati, H. (2004). A Tale of Two Mayors: Courts and Politics in Iran and Turkey. Middle East Studies 36, pp. 253–275.

Shaw, K. (2015). Planetary urbanisation: what does it matter for politics or practice? Planning Theory & Practice Vol. 16 (4), 588–593.

Sheppard, E. (2014). Globalizing Capitalism and Southern Urbanisation. In Parnell, S. and Oldfield, S. (eds), The Routledge Handbook on Cities of the Global South. Oxon, New York: Routledge. P. 143-154.

Sheppard, E., Gidwani,V., Goldman,M, Leitner,H., Roy,A. and Maringanti,A. (2015). Introduction: Urban revolutions in the age of global urbanism. Urban Studies Vol 52 (11), pp. 1947 – 196.

Sheppard, E., Leitner, H., and Maringanti, A. (2013). Provincializing global urbanism: A manifesto. Urban Geography 34(7): 893–900.

Shirazian, R. (2013). Two approaches to the expansion of Tehran. Memari va Farhang vol. 15 (52): 6-10. In Persian.

Simmel, G. (1903). The Metropolis and Mental Life.

Simone, A. (2001). On the Worlding of African Cities. African Studies Review, 15–41.

Simone, A. (2004). For the city yet to come: Changing African life in four cities. Durham & London: Duke University Press.

Simone, A. (2011). The Ineligible Majority: Urbanizing the Postcolony in Africa and Southeast Asia. Geoforum 42 (3): 266–70.

Slater, D. (1975). Underdevelopment and spatial inequality: approaches to the problems of regional planning in the Third World. Progress in Planning 4, 97–167.

Smith, C. J. (2008). Monumentality in urban design: The case of China. Eurasian Geography and Economics 49(3), 263–279.

Söderström, O. (2014). Cities in Relations: Trajectories of Urban Development in Hanoi and Ougadougou. Oxford: Wiley-Blackwell.

Speich, D. (2008) Travelling with the GDP through early development economics' history. Working papers on the nature of evidence: how well do 'facts' travel?, 33/08. London: Department of Economic History, London School of Economics and Political Science.

Spring, D. W. (1976). The Trans-Persian Railway Project and Anglo-Russian Relations, 1909-14. London: Modern Humanities Research Association and University College London, School of Slavonic and East European Studies, Vol. 54 (1), pp. 60-82.

Stokes, E. (1959). The English Utilitarians and India. Delhi: Oxford University Press.

Sutton, E. (1978). Reza Shah, the Great Founder of Pahlavi Dynasty. In Lenczowski, G. Iran under the Pahlavis. Stanford: Hoover Institution Press.

Sykes, P. (1951). A History of Persia. London: Macmillan and Co.

Tai, H. (1974). Land Reform and Politics: A comprehensive Analysis. Berkeley: University of California Press.

Tajbakhsh, K. (2005). Planning Culture in Iran: Centralization and Decentralization and Local Governance in the Twenieth Century (The case for urban managent and planning). In Comparative Planning Cultures, ed. Sanyal, Bishwapriya. New York: Routledge.

Takamoli, A. (1981). An analysis of the new owner-occupied housing market in Tehran, PhD thesis, Victoria University of Manchester, Manchester UK.

Takmil Homahyoun, N. (2000). Social and Cultural History of Tehran: From the Destruction of Darulkhilafeh-ye Naseri to the end of Pahlavi Era, Vol. III. Tehran: Cultural Research Bureau Tehran. In Persian.

Tasan-Kok, T. (2008). Changing Interpretations of 'Flexibility' in the Planning Literature: From Opportunism to Creativity? Journal of International Planning Studies, Vol. 13 (3). 183-195.

Tavakoli-Targhi, M. (2001). Refashioning Iran: Orientalism, occidentalism, and historiography. London and New York: Palgrave Macmillan.

Taylor, N. (1999). Anglo-American Town Planning Theory Since 1945: Three Significant Developments but no Paradigm Shifts. Planning Perspective 14, no. 4: 327–345.

Tehran Municipality Bulletin. (1993). No. 19: 26-31. In Persian.

Tehran Municipality Research and Planning Centre (TMRPC). (1993), The Functions and Responsibilities of Different Divisions and Organisations in Tehran Municipality. Tehran: Tehran Municipality Research & Planning Centre.

Tehran Municipality Research and Planning Centre (TMRPC). (1995). Tehran Municipality's Transformations. Tehran: Tehran Municipality Research & Planning Centre.

Tehran Municipality Project Control and Management Division (TMPCMD). (1999). Tehran Municipality Incomes and Expenditures Database: 1990-1999. Tehran: Office of Tehran Mayor.

Timberlake, M. (ed.). (1985). Urbanization in the World Economy. Newbury Park, CA: Sage.

Timberlake, M. (1987). World-system theory and the study of comparative urbanization. In M. P. Smith and J. Feagin (eds.), The Capitalist City (p. 37-65). Oxford: Basil Blackwell.

Truman, H. S. Truman's Inaugural Address, 20 Jan. 1949. Available online at www.trumanlibrary.org/ whistlestop/50yr_archive/inagural20jan1949.htm.

Turok, I. (2014). The urbanisation-development nexus in the BRICS. In Parnell, S. and Oldfield, S. (eds) The Routledge Handbook on Cities of the Global South. New York: Routledge.

Turok, I. (2017). Urbanisation and Development. In Bhan, G., Srinivas, S., and Watson, V. (eds.), The Routledge Companion to Planning in the Global South. London: Routledge.

Turok, I. and McGranahan, G. (2013). Urbanization and economic growth: the arguments and evidence for Africa and Asia. Journal of Environment and Urbanization, Vol 25(2): 465–482.

Turok, I. and Parnell, S. (2009). Reshaping cities, rebuilding nations: The role of national urban policies. Urban Forum 20 (2), 157-174.

Unger, C. R. (2010). Histories of Development and Modernisation: Findings, Reflections, Future Research. H-Soz-u-Kult, Access online Dec. 2016. Available online at http://www.hsozkult.de/literaturereview/id/forschungsberichte-1130.

United Nations, Department of Economic and Social Affairs, Population Division. (2015). World Urbanization Prospects: The 2014 Revision. New York: United Nations.

United Nations, Populations Fund (UNFPA). (2007). The State of World Population 2007, Unleashing the Potential of Urban Growth, New York: UNFPA.

Vahdat Zad, V. 2013. Spatial Discrimination in Tehran's Modern Urban Planning 1906–1979. Journal of Planning History 12 (1), pp. 49–62.

Vale, L. (1999). Mediated monuments and national identity. Journal of Architecture, 4, 391–408.

Walker, R. (2015). Building a better theory of the urban: A response to 'Towards a new epistemology of the urban?' CITY 19: 183–191.

Ward, K. (2011). Urban Politics as a politics of comparison. International Journal of Urban and Regional Research 35 (4), p. 864-865.

Ward, K. and McCann, E. (2011). Mobile Urbanism Cities and Policymaking in the Global Age/ University of Minnesota Press, Minneapolis, London.

Ward, S. (2002). Planning in the Twentieth Century: The Advanced Capitalist World. Wiley, London.

Watson, V. (2009). Seeing from the South: refocusing urban planning on the globe's central urban issues. Urban Studies 46(11), 2259-2275.

World Bank and UNCHS (Habitat). (1999). Cities Alliance for Cities Without Slums: Action Plan for Moving Slum Upgrading to to Scale. Washington, DC: World Bank; Nairobi: United Nations Centre for Human Settlements.

World Bank. (1972). A Program of Reinvestment Studies in Iran, Report No. SA-28a. Accessed July 2016. Available online: documents.worldbank.org.

World Bank. (1983). World Economic Recession and Prospects for Recovery, the Management in Development: World Development Indicators. Washington, DC: World Bank. https://doi.org/10.1596/0-1952-0432-8

World Bank. (1991). Urban Policy and Economic Development: An Agenda for the 1990s. Washington DC: World Bank.

World Bank. (2000). Cities in Transition: World Bank Urban and Local Government Strategy. Washington, DC: World Bank.

World Bank. (2002). Sustainable Development in a Dynamic World: Transforming Institutions, Growth and Quality of Life, World Development Report 2003. New York: World Bank and Oxford University Press.

World Bank. (2004). Islamic Republic of Iran, Ministry of Housing and Urban Development, Strategies for the housing sector (No. 28983). Washington DC: World Bank.

World Bank. (2009). World Development Report: Reshaping Economic Geography. Washington DC: The World Bank.

World Bank. (2010). Systems of Cities: Harnessing Urbanization for Growth and Poverty Alleviation. Washington, DC: World Bank.

World Urbanization Prospects. (2014). Planning and preparing for the growth of cities of various sizes is essential to maximize the benefits of urbanization and promote sustainable development.

Wright, R. (2002). Transnational Corporations and the Global Division of Labour. In R. J. Johnston, P. J. Taylor and M. J. Watts (eds.), Geographies of Global Changes: Remapping the World. Oxford: Blackwell.

Yacobi, H. and Shechter, A. (2005). Rethinking cities in the Middle East: political economy, planning, and the lived space. Journal of Architecture. 10 (5): 499-515.

Zebardast, E. (2006). Marginalization of the urban poor and the expansion of the spontaneous settlements on the Tehran metropolitan fringe. Journal of Cities 23.6, p. 439–454.

Zetter, R. (2004). Market Enablement and the Urban Sector. In R. Zetter and M. Hamza, Market Economy and Urban Change: Impact on the Developing World. London: Earthscan.

Appendix

Archives

Public Archives

. Iran National Archives Organisation, (Sazman-e asnad-e meli-e Iran)
. Tehran's Organisation for Cultural Heritage, (Sazman-e miras-e farhangi-ye Tehran)
. National Library of Iran's Islamic Republic, (Ketabkhaneh-e meli-e Iran)
. Tehran University, Central Library and School of Fine Arts Library
. Institute for Iranian Contemporary Historical Studies (IICHS)
. Archives of the Ministry of Housing and Urban Development
. The Parliament's Library of the Islamic Republic of Iran

Private Archives

ATEC Consulting Engineering, Company Archive
Dr. Eskandar Mokhtari (former deputy director of Tehran's Cultural Heritage Organisation)
Dr. Shahab Katouzian
Bahram Farivar Sadri (former official at the technical bureau of the Ministry of the Interior)
Nasrollah Kasraian (photo archive)

Archives in UK

British National Library
Durham University Library Archives and Special Collections

Archives in Netherlands

Oriental heritage collections of Leiden University Libraries

Archives in the United States

Washington D.C.: The Library of Congress (The Press and Photograph section) and the Victor Gruen Collection (LoCVGC).

Online Archives

Iranian Oral History Collection at Harvard University (Centre for Middle Eastern Studies)
Foundation of Iranian Studies – Oral History collection https://fis-iran.org/en/oralhistory
Missouri.

Interviews

Name	Institution	Provided information	Date of Interview
Dariush Borbor (Architect and Urban Planner)	Founder of Borbor Consulting Engineering and City planning	Knowledge on Plan Organisation role in Iran Planning System	August 2014 - Vienna
Bahram Farivar Sadri (Architect and Urban Planner)	Founder of Sharestan Consulting Engineering and City planning	Decision making process and knowledge on Urban development policies	December 2013 and April 2015 -Tehran
Eskandar Mokhtari (Architect)	Former deputy director of Tehran's Cultural Heritage Organisation	Plan implementation in Tehran and regeneration projects	January 2013 - Tehran
Iraj kalantari (Architect and Urban Planner)	Founder and director of Bavand Consulting Engineering and City planning	Master plan preparation and the role of consultant engineering	December 2014 - Tehran
Majid Ghomami	Official Planner of Tehran Metropolitan region in 1985	Dynamic between central government and municipality in preparing urban plans	April 2015- Tehran
Seyed Reza Hashemi	Deputy Minister of Road and Urban Development	Funding Municipality and regulating high-rises	December 2014-Tehran
Kamal Athari (Economist)	Urban economist for Tehran master plan 2006	The role of political economy in urban change – and Dynamic between municipality and developers	April 2015-Tehran
Giti Etemad (urban Planner and practitioner)	Advisor of the municipality on Tehran master plan 2006	Relation between planners and state since 1960s	December 2014-Tehran
Azam Khatam (urban scholar and practitioner)	University professor and Advisor of the municipality on Tehran master plan 2006	The role of state and non-state actors in preparation and implementation of urban plans	April 2014- Vienna
Gholam Hossein Karbaschi	Mayor of Tehran 1989-1998	Tehran urban development after the revolution	December 2015
Ali Madanipour	Professor of Urban Design at the School of Architecture, Newcastle University	Dynamic between various actors in shaping urban development of Tehran	July 2013- Dublin
Kaveh Ehsani	Assistant professor at DePaul University	neoliberal urban governance in Tehran	April 2014 - Chicago

Ali Modarres	Director of Urban Studies programme – University of Washington	History of urban change in Tehran	July 2013 – Dublin
Arang Keshavarzian	Associate Professor of Middle Eastern and Islamic Studies at New York University	The interplay between Iran political economy and Iran urban change	April 2014- Chicago
Talin Grigor (Architect, Historian)	Professor of Art History Contemporary Global Architecture - Brandeis University in Boston	Emergence of Urban vision and development models during Pahlavi era	March 2014 – skype interview
Ahmad Goshayeshi	Member of Society of Consulting Architects and Planners	The role of planners in decision making processes	December 2015
Seyed Mohammad Beheshti, (Architect, Historian)	The head of the Iranian Research Centre for Cultural Heritage and Tourism	The politics of Tehran urban development (Historical view)	December 2014 – Tehran
P1	Official Planner at Tehran municipality District 1	Funding municipality and plan implementation	December 2015 – Tehran
P2	Official Planner at Tehran municipality District 3	Funding municipality and plan implementation	December 2015 – Tehran
P3	Official Planner at the Ministry of Road and Urban Development	Knowledge of Tehran planning system before and after the revolution	December 2015 – Tehran
P4	Official Planner at the Ministry of Road and Urban Development	Plan and implementation of Mega urban development projects in Tehran	December 2015 – Tehran

Note: The last four planning officials who were working at Tehran municipality and Ministry of Road and urban Development were wished to remain anonymous. Each planner is given a code started with P. for Planner.

Published Primary Sources (Newspapers and Iranian Academic Journals)

Arshitect [Architect] – periodic magazine on Architecture published from 1940-1946
Memari-e Novin [Modern Architecture] periodic on housing and urbanism published from 1944-1950
Hunar va Me ʻmarn [Art and Architecture]
Marzhay-e No (New Frontiers) published from 1962-1975 by the Iranian-American Society in Tehran
Iran Nameh [Quarterly magazine on Iranian studies] published from 1982-2016
Abadi (Quarterly Journal on Architecture and Urbanism)
Sharq (East) daily newspaper
Donya-e- eqtesa (the world of Finance) daily newspaper
Goftogu (Dialogue) [Quarterly magazine on Humanities and Social Sciences]
Tejarat-e Farda [weekly magazine on political economy of Iran]