

The Making of the Modern Iranian Capital

On the Role of Iranian Planners in Tehran Master Planning at a Time of Urban Growth and Transnational Exchange (1930-2010)

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and Transnational Exchange (1930-2010)

Elmira Jafari



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The Making of the Modern Iranian Capital

On the Role of Iranian Planners
in Tehran Master Planning
at a Time of Urban Growth and
Transnational Exchange
(1930-2010)

Dissertation

for the purpose of obtaining the degree of doctor
at Delft University of Technology
by the authority of the Rector Magnificus, prof.dr.ir. T.H.J.J. van der Hagen
chair of the Board for Doctorates
to be defended publicly on
Thursday 7 July 10:00 o'clock

by

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UMass Dartmouth

History is a magical mirror. Who peers into it sees his own image in the shape of events and developments. It is never stilled. It is ever in movement, like the generation observing it.

Sigfried Giedion

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List of Acronyms

AFFA: Abdolaziz Farmanfarmaian Associates

APUR: Atelier parisien d'urbanisme (Paris Urban Agency)

CBD: Central Business District

HCAUP: High Council of Architecture and Urban Planning

MHUD: Ministry of Housing and Urban Development

OAPEC: Organization of Arab Petroleum Exporting Countries

TAP: Tehran Action Plan

TDC: Tehran Development Council

TMP: Tehran Master Plan

TSRI: Tehran Social Research Institute

TSSP: Tehran Strategic Spatial Plan

UPARC : Urban Planning and Architecture Research Centre

Summary

The second Pahlavi period (1941-1979) marked the highest of Iran's international interconnections. The booming oil economy in Iran and its changing international position attracted the influx of foreign companies and experts to work on Tehran urban projects. The international influences affected every aspect of development and societal changes to the extent that Tehran's urban development cannot be thoroughly understood from either a national or a global perspective, but a transnational one. Iran's intellectual encounter with modern urban planning in the mid-twentieth century has provoked criticism and scholarly debates on the domination of the foreign planners and planning system. Iran's strong political and economic ties with the United States during the Cold War geopolitics greatly influenced the way that transnational planning of Tehran has been interpreted and criticized. Scholars of Tehran modern planning depict Tehran urban projects as the product of Cold War geopolitics and a scheme directly exported to Tehran to facilitate top-down modernization of the capital promoted by the pro-American Shah. They all share a common perspective towards modern urban planning practices in Tehran, labelling it 'Westernization', a blind imitation of American and European planning ideals. This popular narrative flattens the complexity of transnational planning and strengthens the common belief that global powers directed urban planning in the so-called developing countries during the Cold War. This, in turn, obscures the transformative role performed by multiple local actors and the impact of changing local circumstances in the formation and realization of Tehran urban projects.

The persistence of this historiographic absence prevents us from acknowledging the role of Iranian planners who mediated power relations in national and international networks, and strived to delineate their own planning agenda. This dissertation, therefore, aims to answer the following question: "What role did Iranian planners play in Tehran master planning at a time of transnational exchange of planning ideas and how did they incorporate foreign urban models to achieve their own goal of urban growth?"

This dissertation argues that Iranian planners, who had mostly graduated from American and European universities, played a dual role in incorporating the foreign planning system as well as the state's political agenda. Their active collaboration with big-name foreign planners on the one hand, and local policy-makers and

politicians on the other, led to the formation of a new system of planning in Tehran which eventually distinguished Tehran's trajectory of development from that of American and European cities, where the underlying ideas of Tehran master plans originated from. This dissertation particularly interrogates how local planners were engaged in a dialogue with pioneering international planners to negotiate Tehran's urban future, and how master planning became a powerful tool affecting not only the (re)formation of the city but also locals' imagination about how Tehran would economically and socially function. Unravelling the changing role of Iranian planners as mediator between foreign experts and local actors, and the way they imagined the future socio-economic performance of Tehran, help us have a deeper understanding of how Tehran urban projects were developed based on (inter)national re-positioning of Tehran, rather than a one-way imposition of foreign urban planning innovations.

The research question is answered through two particular methodological approaches. The first approach, 'new periodization', challenges the conventional periodization of Tehran urban changes and offers a more engaging and argumentative periodization that accentuates the changing role of planning and planners since the institutionalization of a modern planning regime in Iran. It divides urban planning practices in Tehran into four distinct periods and brings transnational discussions to the fore, while reflecting on diverse political and socio-economic forces. Each phase interrogates the role of multiple actors in provisioning Tehran master plans in a particular period of time including: the First Tehran Master Plan (1966-1969); the First Tehran Action Plan (1970-1973); Tehran's Central Business District (1975-1980); and the First Tehran Strategic Spatial Plan (2000-2005). While engaging with the transnational planning of Tehran, the new periodization is also concerned with the issue of Tehran urban growth as a result of its constant (inter)national re-positioning. Each phase, therefore, reveals how Tehran's entanglement between national goals and aspirations for its globality challenged Iranian and foreign planners, became a subject of discussion for a group of planners, and overshadowed urban planning decisions and planning policies.

The second methodological approach, 'interplay between planning ideas/policies/impacts', provides a particular lens to scrutinize a series of Tehran master plans and understand how Iranian planners employed foreign planning models and techniques to achieve their own planning agenda for Tehran urban growth. Through the careful examination of the planning documents and archives, this dissertation offers a detailed analysis of the overarching 'idea' behind each plan, their translation to urban 'policy' and later on their broader (un)wanted 'impact' on the city and its regions. This is a continuing theme that runs through all the chapters of this dissertation. The systematic juxtaposition and the successive analysis of Tehran master plans mirror the evolving tradition of urban planning in Tehran and the

constant shifts in its transnational approach. Moreover, this helps us recognize how the cumulative effect of imported planning ideas and their translation to planning policies eventually gave rise to the unfettered growth of Tehran, and subsequently socio-spatial segregation and city-region disparities.

This dissertation concludes that transnationalism in Tehran was not a static but rather a very dynamic and variable. By recognizing constant shifts in the transnational approach to Tehran urban planning practices, it identifies three different but interrelated types of transnational planning practices in Tehran: 'intervention', 'negotiation', and 'interaction'. This dissertation concludes with how transnationalism gave rise to the formation of and contestations against the modern urban planning in Iran which ended up to the ejection of foreign planners, marginalization of Iranian planners, and a shift in the political agenda for Tehran urban growth after the 1979 Islamic Revolution. To deal with Tehran's urban growth, the conclusion calls for re-thinking the role of planning and planners in Iran after almost four decades of marginalization and isolation from the cohort of international planners.

Samenvatting

De tweede Pahlavi-periode (1941-1979) markeerde het hoogtepunt van de internationale verbindingen van Iran. De bloeiende olie-economie in Iran en de veranderende internationale positie van het land trokken buitenlandse bedrijven en deskundigen aan om aan stedelijke projecten in Teheran te werken. De internationale invloeden hebben elk aspect van de ontwikkeling en de maatschappelijke veranderingen zodanig beïnvloed dat de stedelijke ontwikkeling van Teheran niet grondig kan worden begrepen vanuit een nationaal noch vanuit een mondiaal perspectief, maar vanuit een transnationaal perspectief. De intellectuele ontmoeting van Iran met de moderne stedenbouw in het midden van de twintigste eeuw heeft geleid tot kritiek en wetenschappelijke debatten over de overheersing van de buitenlandse planners en het planningsysteem.

De sterke politieke en economische banden van Iran met de Verenigde Staten tijdens de geopolitiek van de Koude Oorlog hebben een grote invloed gehad op de manier waarop de transnationale planning van Teheran is geïnterpreteerd en bekritiseerd. Geleerden over de moderne planning van Teheran beschrijven de stadsprojecten van Teheran als het product van de geopolitiek van de Koude Oorlog en als een plan dat rechtstreeks naar Teheran werd geëxporteerd om de top-down modernisering van de hoofdstad te vergemakkelijken, bevorderd door de pro-Amerikaanse Sjah. Zij hebben allemaal dezelfde kijk op de moderne stadsplanning in Teheran, en bestempelen die als "verwestersing", een blinde imitatie van Amerikaanse en Europese planningsidealen.

Dit populaire verhaal vlakkt de complexiteit van transnationale planning af en versterkt de algemene overtuiging dat wereldmachten tijdens de Koude Oorlog de stedelijke planning in de zogenaamde ontwikkelingslanden aanstuurden. Dit verdoezelt op zijn beurt de transformerende rol die meerdere lokale actoren hebben gespeeld en de invloed van veranderende lokale omstandigheden op de vorming en verwezenlijking van stedelijke projecten in Teheran. Het voortbestaan van deze historiografische afwezigheid belet ons de rol te erkennen van Iraanse planners die bemiddelden in machtsverhoudingen in nationale en internationale netwerken, en ernaar streefden hun eigen planningsagenda af te bakenen. Deze dissertatie wil daarom de volgende vraag beantwoorden: "Welke rol speelden Iraanse planners in de masterplanning van Teheran in een tijd van transnationale uitwisseling van planningsideeën en hoe incorporeerden zij buitenlandse stedelijke modellen om hun eigen doel van stedelijke groei te bereiken?".

In dit proefschrift wordt betoogd dat de Iraanse planners, die meestal aan Amerikaanse en Europese universiteiten waren afgestudeerd, een dubbele rol speelden bij de integratie van zowel het buitenlandse planningssysteem als de politieke agenda van de staat. Hun actieve samenwerking met grote buitenlandse planners enerzijds en plaatselijke beleidsmakers en politici anderzijds leidde tot de vorming van een nieuw planningssysteem in Teheran, waardoor het ontwikkelingstraject van Teheran zich uiteindelijk onderscheidde van dat van Amerikaanse en Europese steden, waar de onderliggende ideeën van de Teheraanse masterplannen vandaan kwamen.

Deze dissertatie onderzoekt in het bijzonder hoe lokale planners een dialoog aangingen met baanbrekende internationale planners om te onderhandelen over de stedelijke toekomst van Teheran, en hoe masterplanning een krachtig instrument werd dat niet alleen van invloed was op de (her)vorming van de stad, maar ook op de verbeelding van de plaatselijke bevolking over hoe Teheran economisch en sociaal zou functioneren. De veranderende rol van Iraanse planners als bemiddelaar tussen buitenlandse deskundigen en lokale actoren, en de manier waarop zij zich de toekomstige sociaal-economische prestaties van Teheran voorstelden, helpt ons beter te begrijpen hoe Teheran-projecten werden ontwikkeld op basis van een (inter)nationale herpositionering van Teheran, in plaats van een eenzijdige oplegging van buitenlandse stedenbouwkundige innovaties.

De onderzoeksvraag wordt beantwoord door middel van twee specifieke methodologische benaderingen. De eerste benadering, 'nieuwe periodisering', daagt de conventionele periodisering van de stedelijke veranderingen in Teheran uit en biedt een meer boeiende en argumentatieve periodisering die de veranderende rol van planning en planners accentueert sinds de institutionalisering van een modern planningsregime in Iran. Het verdeelt de stedelijke planningspraktijk in Teheran in vier verschillende perioden en brengt transnationale discussies naar voren, terwijl het reflecteert op diverse politieke en sociaal-economische krachten.

In elke fase wordt de rol van verschillende actoren bij het opstellen van de Teheran masterplannen in een bepaalde periode onder de loep genomen, waaronder: het Eerste Teheran Masterplan (1966-1969); het Eerste Teheran Actieplan (1970-1973); Teheran's Central Business District (1975-1980); en het Eerste Teheran Strategic Spatial Plan (2000-2005). De nieuwe periodisering houdt zich niet alleen bezig met de transnationale planning van Teheran, maar ook met de kwestie van de stedelijke groei van Teheran als gevolg van de voortdurende (inter)nationale herpositionering. Elke fase laat dus zien hoe de verstrengeling van Teheran tussen nationale doelstellingen en aspiraties voor zijn wereldomvattendheid de Iraanse en buitenlandse planners op de proef stelde, een onderwerp van discussie werd voor een groep planners, en de stedenbouwkundige beslissingen en het stedenbouwkundig beleid overschaduwde.

De tweede methodologische benadering, 'wisselwerking tussen planningsideeën/-beleid/effecten', biedt een bijzondere lens om een reeks Teheran masterplannen onder de loep te nemen en te begrijpen hoe Iraanse planners buitenlandse planningsmodellen en -technieken gebruikten om hun eigen planningsagenda voor de stedelijke groei van Teheran te verwezenlijken. Door zorgvuldig onderzoek van de planningsdocumenten en -archieven biedt deze dissertatie een gedetailleerde analyse van het overkoepelende 'idee' achter elk plan, de vertaling ervan naar stedelijk 'beleid' en later hun bredere (on)gewenste 'impact' op de stad en haar regio's. Dit is een doorlopend thema dat door alle hoofdstukken van deze dissertatie loopt. De systematische nevenschikking en de opeenvolgende analyse van de Teheran masterplannen weerspiegelen de evoluerende traditie van stadsplanning in Teheran en de voortdurende verschuivingen in de transnationale aanpak ervan. Bovendien helpt dit ons in te zien hoe het cumulatieve effect van geïmporteerde planningsideeën en de vertaling daarvan in planningsbeleid uiteindelijk heeft geleid tot de onbelemmerde groei van Teheran, en vervolgens tot sociaal-ruimtelijke segregatie en stadsregio-ongelijkheden.

Deze dissertatie concludeert dat transnationalisme in Teheran niet statisch was, maar veeleer zeer dynamisch en veranderlijk. Door voortdurende verschuivingen in de transnationale benadering van de stadsplanningspraktijken in Teheran te onderkennen, worden drie verschillende maar onderling samenhangende soorten transnationale planningspraktijken in Teheran geïdentificeerd: 'interventie', 'onderhandeling', en 'interactie'. Deze dissertatie besluit met hoe transnationalisme aanleiding gaf tot de vorming van en de strijd tegen de moderne stedelijke planning in Iran, die uitmondde in het uitstoten van buitenlandse planners, marginalisatie van Iraanse planners, en een verschuiving in de politieke agenda voor de stedelijke groei van Teheran na de Islamitische Revolutie van 1979. Om de stedelijke groei van Teheran aan te pakken, roept de conclusie op tot een heroverweging van de rol van planning en planners in Iran na bijna vier decennia van marginalisatie en isolatie van het cohort van internationale planners.



Tehran's cityscape, the 2010s. Source: unsplash.com

1 Introduction

*Town planning, by its nature, is essentially concerned with shaping the future. This does not mean, however, that town planners are able to ignore the past... What is less obvious though is that the concerns and ideologies of the town planners themselves are also products of the past... And, not least, they have to live with the consequences of past planning decisions, expressed within the fabric of towns and cities.*¹

The 1980s marked a turning point in the role of urban planners and spatial planning in directing the future development of Iranian cities, in particular the capital city of Tehran. After the 1979 Islamic Revolution, the revolutionaries set anti-planning policies in Iran which lasted more than a decade. They discarded urban planning and regarded master planning as a 'Western' tool to take the control of development in Iran. The cessation of urban planning was seen as a way of cutting the hands of the so-called 'Westerners' from Iran's development. By seeing urban planning as a forced foreign system of development, the Islamic government discouraged master planning while promising a bright future that could not be realised without planning. The revolutionaries chose to ignore Iranian knowledge in urban planning which had emerged during the Pahlavi regime in a very international context. As a result, Iranian planners were marginalized and urban planning was stigmatized. This refusal of urban planning was a reaction to planning practices in the 1960s and 1970s when Iranian planners closely collaborated with foreign experts to project master plans for the fast-growing Iranian cities, in particular Tehran. During this time, many leading architects and urban planners began to work on Tehran urban projects such as Victor Gruen (1903-1980), Constantinos Doxiadis (1913-1975), Louis Kahn (1901-1974), Richard Llewelyn-Davies (1912-1981), Michel Écochard (1905-1985), Ian McHarg (1920-2001), and Moshe Safdie (1938-) among others. To manage the sprawling city, Iranian and foreign planners envisioned a series of master plans for Tehran including the First Tehran Master Plan (1966-1969), Tehran Action Plan (1972), and the plan for Tehran Central Business District (1975). The provisioning of these plans was based on transnational exchange of planning ideas and the intimate collaboration of international experts with local counterparts. In this thesis, this system of urban planning in Tehran is referred to as 'transnational planning'.

¹ Stephen V. Ward, *Planning and Urban Change*, 2nd ed. (London: Sage Publications, 2004).

The changing political system after the 1979 Islamic Revolution gave rise to public and scholarly criticism of transnational planning during the Pahlavi regime, calling it 'Westernization'. Iran's strong political and economic ties with the United States during the Cold War geopolitics greatly influenced the way that transnational planning of Tehran has been interpreted and criticized. Scholars of Tehran modern planning place the history of Tehran's urban planning in the sphere of the Cold War, viewing Tehran master plans as a one-way imposition of foreign planning ideas to the capital. The existing literature has typically approached Tehran urban projects in terms of how, in the political atmosphere of the Cold War, big-name foreign planners, as omnipotent protagonists, exercised personal control over the planning of the entire city, while pursuing the desires of the authoritarian and pro-American Shah. This narrative, by flattening the complexity of transnational planning of Tehran, strengthens the common belief that global powers directed urban planning in the so-called developing countries during the Cold War. Such an approach regards the local professionals and planners "silent, oppressed, impotent – if not outright invisible".²

Aiming to revive the history of Tehran urban planning, this thesis argues that planning before the Islamic Revolution was not 'Western', on the contrary, it was a very local practice. By omitting multiple local agents, in particular Iranian planners, from historical narratives, scholars of Tehran modern planning represent master planning as a practice under the direct control and influence of foreigners, who fully disregarded the local context. However, Iranian planners arguably played an instrumental role in transnational planning of Tehran. They developed their own planning agenda through learning from foreign experts and selectively incorporating their planning ideals. They were foreign-trained professionals with a dual position as private and public planners who facilitated connections between local authorities and foreign experts. Considering political and economic shifts in Iran, they selectively decided on which foreign planners to invite, what planning ideas to import, how to adjust them to fit the local context, and if necessary, reject them. Their contribution to Tehran urban development, therefore, merits attention and recognition. Unravelling their overlooked role as mediator between foreign experts and local actors, and the way they directed the future development of Tehran, help us have a deeper understanding of how Tehran urban projects were developed based on (inter)national re-positioning of Tehran, rather than a one-way imposition of foreign urban planning innovations. Moreover, this helps us recognize the evolving tradition of urban planning in Tehran and constant shifts in urban planners' role and urban planning values over time and projects.

² Joe Nasr and Mercedes Volait, *Urbanism: Imported or Exported? Native Aspirations and Foreign Plans* (London: Wiley Academy, 2003)

1.1 Research focus

The second Pahlavi period (1941–1979) marked the highest of Iran’s international interconnections.³ The integration of Iran’s oil economy with global political and economic forces affected every aspect of development and societal change.⁴ Moreover, Iran’s international relations had an enormous impact on the establishment of a modern planning system and urban planning practices. Particularly, Tehran urban growth was heavily tied up to globalization processes, to the extent that Tehran urban changes cannot be thoroughly understood from either a national nor a global perspective, but a transnational one. The prefix ‘trans’ in ‘transnational’ means beyond, across, or transcending.⁵ Transnationalism, thus, refers to border-crossing practices which are formed based on national conditions while transcending them.⁶ In transnational discourse, the recognition of globalization processes on patterns of nation-state-building is fundamental.⁷ In his book *Transnational Urbanism: Locating Globalization*, political scientist Michael Peter Smith conceptually distinguishes ‘globalization’ and ‘transnationalism’.⁸ He argues that globalization discourses are largely detached from particular national territories, national boundaries, and national identities.⁹ In order to give voice and power to nations, national actors, and policies in the globalization processes, Smith coined the term “transnational urbanism” which indicates cross-border interconnectivity and thus emphasizes the interplay of local, national, and global networks.¹⁰ By focusing on local practices of globalization, the concept of transnationalism calls for equal attention to both global and local in globalization processes.

³ Roham Alvandi, *The Age of Aryamehr : Late Pahlavi Iran and Its Global Entanglements*, Gingko-St Andrews Series (London: Gingko Library, 2018).

⁴ Ibid.

⁵ Stefan Krätke, Kathrin Wildner, and Stephan Lanz, eds., *Transnationalism and Urbanism* (Routledge, 2012).

⁶ Ibid.

⁷ Ibid.

⁸ Michael Peter Smith, *Transnational Urbanism : Locating Globalization* (Malden, MA: Blackwell, 2001).;

⁹ Ibid.

¹⁰ Anthony King, *Spaces of Global Cultures: Architecture, Urbanism, Identity* (Routledge, 2004), 128.; Carola Hein, “Crossing Boundaries: The Global Exchange of Planning Ideas,” in *Making Cities Global: The Transnational Turn in Urban History*, ed. K. Sandoval-Strausz and Nancy H. Kwak (Penn Press, 2017).; Stefan Krätke, Kathrin Wildner, and Stephan Lanz, “The Transnationality of Cities: Concepts, Dimensions and Research Fields. An Introduction,” in *Transnationalism and Urbanism* (Routledge, 2012).

The transnational turn in the historiography of Tehran urban planning can help us ground cross-border ‘networks’ and ‘flows’ in the urban environment, interrogating their influences on Tehran urban development.¹¹ ‘Flows’ refer to the movements of people, goods, capital, information, ideas, symbols, and politics in time and space, whereas ‘networks’ refer to structural interactions between various agents and centres of activity.¹² This thesis interrogates the interplay of multiple agents in planning decisions by recognizing the impact of local-global interconnectivities. Transnational agents can be organized into three levels of global, national, and local, plus “the ones that are cross-levelled or interscalar”.¹³ In transnational planning of Tehran, global agents included the World Bank, Harvard Institute for International Development, the Ford Foundation, and planning agencies such as Doxiadis Associates. They exercised influence on Tehran urban projects from technical and financial aspects. The national agents consisted of the Plan Organization, the ministry of Architecture and Urban Development, and the High Council of Architecture and Urban Planning. To serve the needs of the state, the national agents developed planning initiatives and policies to support cross-border networks and to promote transnational exchange. Local agents such as Tehran municipality and Tehran Development Council functioned at the scale of the city. Among these agents, there were foreign-trained Iranian planners who arguably operated at multiscale levels. As public and private planning agents, they found themselves entangled with not only foreign experts, but also diverse local, national, and global political and economic actors.

By scrutinizing the role of multiscale agents in Tehran master plans, this dissertation aims at reviving the crucial but overlooked role of Iranian planners in Tehran master planning. It particularly interrogates how local planners were engaged in a dialogue with pioneering international planners to negotiate Tehran’s urban future, and how master planning became a powerful tool affecting not only the (re)formation of the city but also local imagination about how Tehran would economically and socially function. These Iranian planners were often from leading families with political ties and even direct contact with the Shah, and they received government funding to study abroad. When they returned to Iran they brought

¹¹ K. Sandoval-Strausz and Nancy H. Kwak, eds., *Making Cities Global: The Transnational Turn in Urban History* (Penn Press, 2017).

¹² Stefan Krätke, Kathrin Wildner, and Stephan Lanz, eds., *Transnationalism and Urbanism* (Routledge, 2012).

¹³ Clara Irazabal, “Transnational Planning: Reconfiguring Spaces and Institutions,” in *Transnationalism and Urbanism*, ed. Stefan Krätke, Kathrin Wildner, and Stephan Lanz (Routledge, 2012).

with them the connections and planning knowledge from their countries of study: mainly the USA, France, England, Italy, and Switzerland. They had a dual position of maintaining their own practice while closely working for the government.

To avoid writing another hero history by accentuating the role of Iranian planners, this dissertation discovers a more complex network of actors and interrogates interplay between multiple global, national and local agents involved in Tehran urban projects. Indeed, the goal is not to deny the significant role of big-name foreign planners, but rather to place them in a wider network of actors, and explore how they framed Tehran's urban problems while coming from a very different context, how they formulated planning proposals in a close collaboration with locals, and how such collaborations shaped the local's imagination about the future of Tehran.

While engaging with transnational planning of Tehran, this thesis is also concerned with the issue of Tehran urban growth as a result of its constant (inter)national re-positioning. The concept of growth in this study goes beyond the physical expansion and demographic shifts to include economic growth of the city and its political role at national and global levels. It investigates how Tehran's entanglement between national goals and aspirations for its globality challenged Iranian and foreign planners, became a subject of discussion for a group of planners, and overshadowed urban planning decisions and planning policies in the long run. Therefore, the underlying goal of this dissertation is to answer the following question:

What role did Iranian planners play in Tehran master planning at a time of transnational exchange of planning ideas and how did they incorporate foreign urban models to achieve their own goal of urban growth (1930–2010)?

The main research question is answered through the following sub-questions:

- 1 How did a transnational planning system in Iran emerge from cross-border flows and networks shaped during the world wars and the Cold War geopolitics?
- 2 How did the collaboration of foreign and Iranian planners shape on Tehran master plans, and how did those plans affect Tehran urban growth?
- 3 How did the 1979 revolution and a sudden change in Iran's international relations affect transnational planning and, in turn, the political agenda in relation to the growth of Tehran?

1.2 A review of literature

While the growing studies on the history of Tehran urban planning have contributed to our understanding of the impact of global, national and local agents on Tehran urban development, they do not fully account for the role of multiscale agents therein, particularly of Iranian planners. Their contribution to transnational planning of Tehran has been largely neglected in studies of Tehran's urban development. The persistence of this historiographic absence prevents us from acknowledging the role of Iranian planners who mediated power relations in national and international networks, and strived to delineate their own planning agenda. To have a better understanding of why and how their role has been excluded from Tehran urban planning history, this section takes a critical look at growing studies on Tehran's urban development. Historiography of urban planning is not merely limited to the relationship between planning, policy, and place, but it is also highly dependent on the way that these stories are framed and narrated. As urban planner Leonie Sandercock beautifully explains:

*...the writing of histories is not simply a matter of holding a mirror up to the past and reporting on what is reflected back. It is always a representation, a textual reconstruction of the past, rather than a direct reflection of it. What we see is shaped by the questions we ask, which in turn are shaped by the (sometimes implicit, sometimes explicit) theories that we bring up to our subject.*¹⁴

Existing urban studies of Tehran can be categorized into four major groups based on their different frameworks and transnational narratives: the first group of scholars, who were mainly urban geographers, placed their focus on the analysis of physical transformation of Tehran due to its constant demographic shifts. The second group studied Tehran urban changes through a very political lens and labelled transnational planning of Tehran a top-down 'Westernization' project. The third group called for attention towards the overlooked provisioned master plans for Tehran. By including political, economic and social discussions to the development of these urban plans, they represented Tehran urban projects a tool serving a dictator Shah. The last group shifted the focus from the authoritarian Shah and his personal control over Tehran's spatial development to a more complex network of actors who largely affected Tehran urban changes, yet overlooking the role of Iranian planners.

¹⁴ Leonie Sandercock, *Making the Invisible Visible: A Multicultural Planning History* (University of California Press, 1998).

The first group of studies on Tehran urban development emerged in the 1970s. The Iranian geographer Hooshang Bahrambeygui, the French geographer Bernard Hourcade, and the Austrian geographer Martin Seger were among the first scholars who studied Tehran urban changes since the mid-twentieth century, when Tehran started to grow rapidly.¹⁵ By scrutinizing a series of National Development Plans, they provided insight into the increasing contrast between Tehran and the rest of Iran, and in turn the concentration of power and capital in Tehran, and eventually the contrasting pattern of development within the city itself. Although these studies offered a detailed analysis of the rapid expansion of Tehran and its changing physical, social and demographic character, they mainly focused on Tehran socio-spatial transformation, without a particular attention to the emerging discipline of urban planning, envisioned master plans, and their contribution in rapid growth of the city.

The second group, despite having different focuses, shared a common perspective towards modern urban planning practices in Tehran, labelling Tehran urban development 'Westernization', a blind imitation of American and European planning ideals.¹⁶ In their view, Tehran was an object which was fully planned, designed and built based on 'Western' urban models without respecting the local context. This group of scholars promoted a Western-local binary which essentially rested on their concern that the authentic identity of the capital city was destroyed by foreign influences and their transplanted urban models which largely disregarded the needs of the locals. These studies were heavily influenced by the political and social turmoil triggered by the 1979 Islamic Revolution. They appeared in the extremely sensitive atmosphere of the 1980s, when the former Pahlavi regime collapsed and the revolutionaries called the regime corrupt, authoritarian, and fully dependent to the so-called 'Western' countries. Influenced by the political atmosphere of the time, this group of scholars harshly criticized the Pahlavi regime for ruining Iranian culture by opening the country's gates towards 'Western' culture, technology, and their way of living. In such negative atmosphere towards 'West', the modern urban planning

¹⁵ Hooshang Bahrambeygui, "Tehran: An Urban Analysis" (Durham University, 1972).; Bernard Hourcade, "Téhéran : Évolution Récente D'une Métropole," *Méditerranée, deuxième série* 16, no. 1 (1974).; Martin Seger, *Teheran: Eine Stadtgeographische Studie* (Springer-Verlag, 1978).

¹⁶ Amirahmadi Hooshang and Kiafar Ali, "Tehran: Growth and Contradictions," *Journal of Planning Education and Research* 6, no. 3 (1987).; Chahryar Adle and Bernard Hourcade, *Téhéran, Capitale Bicentenaire*, Bibliothèque Iranienne (Paris: Téhéran: Institut français de recherche en Iran, 1992).; Mohsen Habibi, *Az Shar Ta Shahr* (Tehran: University of Tehran, 1996).; Naser Mashadizadeh Dehghani, *Tahlili as Vizhegiha-E Barnamerizi-E Shahri Dar Iran* [Analysis of Urban Planning Features in Iran] (Tehran: University of Science and Technology Press, 1995).; Mohsen Habibi and Javad Salimi, *Ostokhan Bandiyeh Shahr-E Tehran* [Tehran's physical structure], vol. II (Tehran: Moavenat fanni va omrani shahr-e Tehran, 1996).

system and its reliance on foreign experts were also blamed for literally every adverse outcome in the city. This caused everyone to become disillusioned about the efficiency of modern planning, the necessity of its transnationalism, and even the validity of provisioned master plans for Tehran. The rising pessimism towards modern planning practices in general and its transnationalism in particular, heavily affected the historiography of modern urban planning of Tehran in the decades after the 1979 Islamic Revolution.

The third group of studies emerged in the mid-1990s, when the negativity towards master planning was gradually mitigated and there was a rising interest and need to resume urban planning practices after a decade of anti-planning policies. As a result, historiography of Tehran modern urban planning gained a new momentum. A notable contribution to these studies appeared in the work of Ali Madanipour who began to integrate wider political, social and economic discourses to Tehran modern urban planning history. His pioneer book of *Tehran: the Making of a Metropolis* (1998) was a turning point in framing Tehran's urban development through the lens of various political, economic, and social forces.¹⁷ Through extensive archival study, he presented how, under different forces, Tehran was transformed from a small village into a rapidly growing metropolis. His works became a source of inspiration for an increasing number of following studies, triggering rising interests towards archival studies and investigating the provisioned master plans for Tehran.¹⁸ Later on, foreign and Iranian scholars such as Sanjoy Mazumdar, Wouter van Stiphout, Asef Bayat, Farshid Emami, Talinn Grigor, and Hamed Khosravi brought new perspectives to modern urban planning discourse in Tehran by analysing Tehran urban projects.¹⁹ They were all fascinated by the state's political and economic strategies and the way that its social engineering physically manifested in Tehran. Despite offering some analysis of Tehran urban plans, they did not go beyond the argument of the former group of scholars.

¹⁷ Ali Madanipour, *Tehran: The Making of a Metropolis*, World Cities Series (Chichester: John Wiley & Sons, 1998).

¹⁸ "City Profile, Tehran," *Cities* 16 (1999); "Urban Planning and Development in Tehran," *Elsevier* (2006).

¹⁹ Sanjoy Mazumdar, "Autocratic Control and Urban Design: The Case of Tehran, Iran," *Journal of Urban Design* 5, no. 3 (2000); Wouter van Stiphout, "The Saddest City in the World: Tehran and the Legacy of an American Dream of Modern Town Planning," *The New Town* 2 (2006); Asef Bayat, "Tehran: Paradox City," *New Left Rev* 66 (2010); Farshid Emami, "Civic Visions, National Politics, and International Designs: Three Proposals for a New Urban Center in Tehran (1966-1976)" (Massachusetts Institute of Technology, 2011); Hamed Khosravi, "Camp of Faith: On Political Theology and Urban Form" (2014); Talinn Grigor, "Tehran a Revolution in Making," in *Political Landscapes of Capital Cities*, ed. Jessica Joyce Christie (2016).

They mostly restricted studying urban planning practices to the dominant role of a totalitarian Shah who gave enough power to big-name American and European planners to plan a modern capital. Although their works clarify various influences of the state on Tehran urban changes, they do not depict a thorough image of transitional planning practices at work. They represented foreign planners as the main protagonists with a hegemonic power on controlling Tehran urbanization and modernization. They presented modern urban planning as a subordinate profession to please an autocratic Shah, rather than a discipline that tackles rising problems of a rapidly growing city. This quote from Jeffrey Hardwick's monograph on Victor Gruen's collaboration on envisioning the first Tehran Master Plan can echo the common narrative in these studies:

*Gruen happened upon one client who perhaps could realize his modernizing dreams for reshaping a city... He was hired by the Shah of Iran to re-design the capital city of Tehran... The Shah's pursuit of efficiency and Westernization led him to the United States for technical and economic support... The Shah called on Gruen. Gruen eagerly began re-planning Tehran. The Shah was the client that Gruen had long wanted. In this case a dictator capable of giving Gruen the land, power, and means to control every facet of the environment.*²⁰

The fourth group of studies aimed at re-framing Tehran modern urban planning history through globalization as a key factor to understand Tehran urban changes.²¹ Globalization discussions dominated the narratives of the new generation of scholars such as Mina Marefat, Azam Khatam, Kave Ehsani, Kian Tajbakhsh, and Azadeh Mashayekhi.²² They situated Tehran urban changes in a multiscalar context, offering a more in-depth analysis of the development of Tehran by involving diverse actors to urban discussions. In order to depict the dynamic mechanism of the centralized government, these scholars introduced an array of local actors including

²⁰ M. Jeff Hardwick, "Creating a Consumer's Century : Urbanism and Architect Victor Gruen, 1938-1968" (2000), 401.

²¹ Bruce Mazlish and Ralph Buultjens, "Conceptualizing Global History," (1993).; Sebastian Conrad, *What Is Global History?* (Princeton University Press, 2016).

²² Mina Marefat, "Fractured Globalization: A Case Study of Tehran," in *New Global History and the City*, ed. Elliott R. Morss (New Global History Press, 2004).; Azam Khatam, "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism" (York University, 2015).; Azadeh Mashayekhi, "Regimes of Urban Transformation in Tehran: The Politics of Planning Urban Development in 20th Century Iran" (Delft University of Technology, 2019).; Kaveh Ehsani, "Municipal Matters: The Urbanization of Consciousness and Political Change in Tehran.," *Middle East Report*, no. 212 (1999).; Kian Tajbakhsh, "Planning Culture in Iran: Centralization and Decentralization and Local Governance in the Twentieth Century (the Case for Urban Management and Planning)," in *Comparative Planning Cultures*, ed. Bishwapriya sanyal (New York and London: Routledge, 2005).

politicians, elites, and technocrats and their significant contributions to Tehran urban development, yet with less focus on Iranian urban planners and planning agencies. For instance, Khatam investigates the transformative role that the mayors of Tehran had in facilitating market-driven development of the city in the neoliberal atmosphere of the 1990s. Building upon Khatam's approach, Mashayekhi scrutinizes the overlooked role of non-state actors and religious-political groups in directing Tehran urban changes in parallel with the role of the centralized government. As these studies sought to create links between Iran's international relations and Tehran physical changes, their main focus remained principally on global-local relations, rather than urban design and planning of the city.

1.3 Relevance and contribution

Since the inception of modern urban planning movements, international circulation of planning knowledge has been a key part in planning practices.²³ As Patsy Healey explains:

*Wherever and whenever elites and activists have been concerned about the qualities of their cities and territories, they have looked about for ideas to help inspire their development programmes. And people have always travelled from place to place, offering suggestions about ways of solving problems or improving conditions in one place based on their experiences in other places.*²⁴

The transnational approach to planning history can therefore shed a new light on our increasingly interconnected world and its effects on urban planning practices in a local context.²⁵ Historiography of transnational planning is not historically limited to tracing the movement of urban models from one place to the other, but more about the

²³ Stephen V Ward, "Planning Diffusion: Agents, Mechanisms, Networks, and Theories," in *The Routledge Handbook of Planning History*, ed. Carola Hein (New York and London: Routledge, 2018).

²⁴ Patsy Healey, "The Transnational Flow of Knowledge and Expertise in the Planning Field," in *Crossing Borders : International Exchange and Planning Practices*, ed. Patsy Healey and Robert Upton (New York: Routledge, 2010).

²⁵ K. Sandoval-Strausz and Nancy H. Kwak, eds., *Making Cities Global: The Transnational Turn in Urban History* (Penn Press, 2017).

political and economic conditions in which urban planning ideas are transferred, the agents who support or hinder such transmission, and also cultural differences which affect adoption, adaptation or even rejection of those ideas.²⁶ Over time, historiography of transnational planning became more subtle, as scholars gradually became more conscious about conditions of transmission, and the overlooked role of local actors with different power levels therein. To depict a more nuanced picture of transnational planning, scholars such as Joe Nasr and Mercedes Volait shifted the spotlight from major actors to subaltern groups including “ordinary people and obscure individuals” emphasizing “their capacity to react, resist, contest and adapt” imported planning ideas.²⁷

To provide a deeper understanding of international circulation of planning knowledge, Stephen Ward placed the dissemination of planning ideas on a spectrum with two extremes: “borrowing” and “imposition” [table 1-1].²⁸ In the first extreme, “decision makers in receiving countries can exert progressively more control over what is adopted”.²⁹ To indicate the varying degrees of local mediation, he distinguished “borrowing” into three types: “undiluted, selective, and synthetic”. Major countries of Western Europe and the USA are regarded as the characteristic examples of this typology. In the latter extreme, receivers who make no specific interventions depend completely on an external urban planning tradition. Furthermore, Ward defined the three categories of “imposition”: negotiated, contested, and authoritarian.³⁰ This typology includes colonial countries and newly subjugated territories.

But where does Tehran fit within Ward’s categorization? This thesis argues that transnational exchange of urban planning ideas in Tehran does not properly fit in either “borrowing” or “imposition” categories, but rather at the edge of both. This is mainly due to a more complex and dynamic relationship between foreign and local agents, as a result of (inter)national re-positioning of Tehran. Although Ward’s typology of planning diffusion demonstrates how power relations between involved countries affect the type of diffusion of planning ideas, it limits our understanding

²⁶ Robert Freestone, “Writing Planning History in the English-Speaking World,” in *The Routledge Handbook of Planning History*, ed. Carola Hein (New York and London: Routledge, 2018), 129.

²⁷ Joe Nasr and Mercedes Volait, *Urbanism: Imported or Exported? Native Aspirations and Foreign Plans* (London: Wiley Academy, 2003).; Eric R Wolf, *Europe and the People without History* (Univ of California Press, 2010).

²⁸ Stephen V Ward, “Planning Diffusion: Agents, Mechanisms, Networks, and Theories,” in *The Routledge Handbook of Planning History*, ed. Carola Hein (New York and London: Routledge, 2018).

²⁹ Ibid.

³⁰ Ibid.

of transnational planning in Tehran. Such categorization offers a static concept based on global hierarchies, and thus cannot capture the dynamics and changing relations between various global, national and local agents. Despite being useful to understand the evolution of global power relations at different levels over time, such binary categorizations limit our understanding when it comes to urban studies.³¹ These binaries are too limiting in particular to understand the past and future of cities, which are not well fitted in the easy classification of the world to East-West, developed-developing countries, First-Second-Third World, and more recently global North-South.³² This not only affects our perception of historical paths of development of those cities seen as subaltern and trapped in an 'us-and-them' binary, but more importantly obscures our imagination about their future.

According to the critics of the world categorization, the dichotomy between global North and South has resulted in the ignorance about cities which belong neither to the North nor to the South, as they share commonalities with both.³³ While offering a new perspective in the typology of planning diffusion, the case of Tehran is not yet documented or represented in transnational planning literature. One reason for the absence of Tehran in transnational studies can be the scholarly focus on either global north cities (rich countries with democratic societies which are geographically dispersed but economically united) or global south cities (including Latin American, African and Asian countries which share some commonalities: a long history of colonization, a weak economic system based on agriculture and lower per capita income).³⁴ However, cities like Tehran cannot be well-defined as neither north nor south, due to having characteristics of both. The case of Tehran can add to the field of transnational planning by revealing how changing Iran's international relations brought about constant shifts in the type of local-foreign collaborations from one urban project to the other.

31 Klaus R Kunzmann, "Urban Planning in the North: Blueprint for the South?," in *Managing Urban Futures* (Routledge, 2016).; Martin J Murray, "Re-Engaging with Transnational Urbanism," in *Locating Right to the City in the Global South*, ed. Shenjing He Tony Roshan Samara, Guo Chen (London and New York: Routledge, 2013).

32 John Minnery, Donovan Storey, and Jawoto Setyono, "Lost in Translation? Comparing Planning Responses to Urban Growth in the Global North and South," *Urban Geography* 33, no. 6 (2012).

33 Martin Müller, "In Search of the Global East: Thinking between North and South," *Geopolitics* 25, no. 3 (2020).; Loretta Lees Hyun Bang Shin, Ernesto López-Morales, "Introduction: Locating Gentrification in the Global East," *Urban Studies* v53, n3 (2016).; Jennifer Robinson, "Global and World Cities: A View from Off the Map," *International journal of urban and regional research* 26, no. 3 (2002).

34 Madina Tlostanova, "The South of the Poor North: Caucasus Subjectivity and the Complex of Secondary "Australism"," *Global South, The* 5, no. 1 (2011).; Duanfang Lu, *Third World Modernism: Architecture, Development and Identity* (Routledge, 2010), 2.

TABLE 1.1 Typology of planning diffusion

Type	Indigenous role	External role	Typical mechanism	Level of diffusion	Key actors	Potential for distinctiveness	Characteristic examples
Synthetic borrowing	Very high	Very low	Indigenous planning/movements plus wide external contacts	Theory and practice	Indigenous	Very high	Major countries of Western Europe and USA
Selective borrowing	High	Low	External contacts with innovatory planning tradition	Practice and some theory	Indigenous	High	Smaller countries of Western Europe
Undiluted borrowing	Medium	Medium	Indigenous deference to innovative external planning tradition	Practice with little or no theory	External with some indigenous	Fairly low	Dominions of British Empire, Japan and some European examples
Negotiated imposition	Low	High	Dependence on external planning tradition	Practice	External with some indigenous	Low	Aid-dependent countries (e.g., Africa)
Contested imposition	Very low	Very high	High dependence on one external planning tradition	Practice	External	Low	"Enlightened" colonial planning
Authoritarian imposition	None	Total	Total dependence on one external planning tradition	Practice	External	None	Newly subjugated territories

Source: Stephen Ward

1.4 Research Method

The data for this study is collected from various primary and secondary sources. Sources, such as the work of Homa Katouzian, Ervand Abrahamian, Ali Ansari, and Kamran Matin are of great importance in depicting the changing political, economic and social context in Tehran, and also its international relations.³⁵ Besides relying on relevant secondary sources, extensive archival study is conducted to revisit Tehran master plans and discover the interplay between foreign and local actors. These archives include: planning reports, correspondences, municipal reports, planning policy documents, evaluation and statistical reports, national development plans, architectural magazines, news articles, maps, aerial photos, photographs and also formerly conducted interviews with key figures of Tehran master plans. The primary

³⁵ Homa Katouzian, *The Political Economy of Modern Iran : Despotism and Pseudo-Modernism, 1926-1979* (London Macmillan, 1981).; Ervand Abrahamian, *Iran between Two Revolutions* (New Jersey: Princeton University Press, 1982).; Ali M. Ansari, *Modern Iran since 1921: The Pahlavis and After* (London: Pearson Education, 2003).; Kamran Matin, "Recasting Iranian Modernity: International Relations and Social Change," *Iranian Studies; Iranian Studies*. (Hoboken: Taylor and Francis, 2013).

sources are mainly collected from the archives of the municipality of Tehran and the Plan Organization. Since urban planning archives are not well-documented in Iran, many of the necessary archives are collected from international libraries including but not limited to the UCL Library, Library of Congress, Yale Library, and MIT Libraries. Moreover, conducting unstructured interviews with pioneer Iranian planners, who were also involved in former Tehran urban projects, such as Dariush Borbor, Ferydoon Rassouli, and Mohsen Habibi, provided critical insights to understand how transnational planning practices operated in the local context of the city. Additionally, the recently published autobiography of Fereydoon Ghaffari (managing director of the first Tehran Master Plan), *My Journey: From Anzali to Los Angeles*, offered significant information regarding collaborations between local and foreign experts during the Pahlavi regime.³⁶

To depict a more nuanced picture of Tehran master planning at the time of transnational exchange, each archive offers its own particular evidence. Municipal reports and correspondence provide valid evidence about the complex process of the invitation of well-known foreign planners, and the nature of their collaboration with local counterparts. Planning reports and the in-depth analysis of the physical and socio-economic structure of the city they offer, reveal how dealing with uncontrolled growth of Tehran affected the delineation of planning agenda by the group of international and Iranian urban planners. This helps to gain a deeper understanding of how Tehran master plans were conceptualized by a group of urban planners who adjusted foreign urban models to fit in with the local context. Evaluation reports and planning policy documents are valuable sources to discover how local planning agencies interpreted and criticized those urban visions and the extent to which they were translated to urban policies. Chronological maps, aerial photos, and architectural magazines discussing Tehran urban changes are of great importance in investigating the impacts that planning ideas and policies left on the physical and social organization of the city.

³⁶ Fereydoon Ghaffari, *My Journey: From Anzali to Los Angeles* (CreateSpace Independent Publishing Platform, 2018).

New periodization

This dissertation challenges the conventional periodization of Tehran urban changes in the existing literature which is mainly based on political and socio-economic movements accepting a very static pre-and post-revolution period in Iranian urban planning practices. Instead, it offers a more engaging and argumentative periodization which underlines the changing role of planning and planners in Tehran urban growth at the time of transnational exchange of urban planning ideas. The goal is not to ignore the wider influences of political, economic and social dimensions on urban planning practices, as each period per se underlines the changing global and local conditions, but to let urban planning as discipline, profession and practice speaks for itself, rather than getting lost in political and economic discussions.

This thesis divides history of modern urban planning practices in Tehran into four different but interrelated phases: the advent of transnational planning (1930-1960); close collaboration of local-foreign planners (1960-1980); anti-planning policies (1980-1990); a turn in transnational planning (1990-2010) [Table 1-2]. This periodization brings transnational planning of Tehran to the fore, while reflecting on diverse political and socio-economic forces. To investigate the mechanism of transnational planning of Tehran, each phase focuses on provisioned urban plans in a particular period of time, and interrogates the role of multiple actors therein. However, this study is not a detailed description of every individual plan, nor is it the evaluation of the success and failure of those plans, as they are either partly realized or remain on paper. Instead of taking a very critical position towards Tehran urban plans, each phase offers a fresh perspective to re-read those plans, by giving a voice to the overlooked actors who played a particular role in directing them. Dissection of Tehran master plans through the lens of multiple actors offers a unique opportunity for a renewed interpretation of transnational planning of Tehran, and the way Iranian urban planners steered Tehran urban developments while collaborating with foreign counterparts.

Each phase marks a shift in the role of Iranian planners and their type of collaboration with foreign experts in directing Tehran master plans on the one hand, and a shift in Tehran urban growth policies on the other. Moreover, the systematic juxtaposition and the successive analysis of Tehran master plans mirror the changing direction of urban planning practices and concerns over time and project. It shows how urban planning thought has evolved not only by foreign influences, but also by being influenced by changing foreign-local relations. The new periodization thus helps to present a bigger picture of the changing role of urban planners and the constant shifts in planning thoughts and values, and in turn depict a more comprehensive view of the evolution of Tehran urban planning practices under the influence of various (inter)national political, economic and social forces.

TABLE 1.2 New periodization of history of urban planning in Tehran

	Planning era	Urban plans	Planning concern	International relations
Phase 1 1930-1960	The advent of transnational planning	<ul style="list-style-type: none"> - Arterial Street Plans (1930s) - Mass housing projects (1940-1960) - Tehran urban development (1957-1960) 	Facilitating rapid expansion of industries and accommodating growing populations	Cold War geopolitics and Iran's international relations
Phase 2 1960-1980	Close collaboration of local-foreign planners	<ul style="list-style-type: none"> - The first Tehran master plan (1966-1969) - The first Tehran Action plan (1973) - The plan for Tehran's Central Business District (1971-1975) 	Importing planning knowledge and technology to facilitate rapid modernization of Tehran as a national and global centre	The booming oil economy and rising Iran's dependency to the world powers
Phase 3 1980-1990	Anti-planning policies	<ul style="list-style-type: none"> - Cessation of master planning 	Rising negativity towards modern planning and instead prioritising the right of growing urban poor to the city	The 1979 Islamic Revolution and sudden cessation of Iran's international relations
Phase 4 1990-2010	A turn in transnational planning	<ul style="list-style-type: none"> - Upgrading the first Tehran master plan (1987-1991) - The first Tehran strategic spatial plan (2000-2005) 	Striving to make a localized and Islamic planning system by ceasing the collaboration with American and European planners	The rise of neoliberalism and the revolutionaries' effort to make Iran independent from the so-called West

Source: Author

Idea/policy/impact

Through the careful examination of Tehran master plans, this dissertation offers a detailed analysis of the overarching 'idea' behind each plan, their translation to urban 'policy' and later on their broader (un)wanted 'impact' on the city and its regions.³⁷ It shows that the role of foreign and Iranian urban planners was not merely limited to shape urban ideas. As advisors, they were always engaged in translating urban ideas into urban policies. Moreover, foreign and local planners actively reacted to the impacts of planning ideas and policies by reflecting on emerging (geo)political tensions, changing economic situation, societal challenges and cultural shifts, as well as environmental concerns. This shaped a feedback loop of ideas, polices, and impacts which became a driving force to envision a new

³⁷ Stephen V. Ward, *Planning and Urban Change*, 2nd ed. (London: Sage Publications, 2004).

master plan, inviting different group of foreign experts, and delineating different types of foreign-local collaborations. The interplay between planning ideas, planning policies, and planning impact is therefore a continuing theme that runs through all the chapters of this dissertation. It provides a particular lens to scrutinize Tehran master plans and to gain a better understanding of how transnational planning operated in reality.

1.5 Research outline

This dissertation consists of seven chapters. Following this introductory chapter, the five body chapters answer the three sub-questions and reflect on the four delineated planning phases.

Chapter 2 answers the *sub-question 1*; 'How did a transnational planning system in Iran emerge from cross-border flows and networks shaped during the world wars and the Cold War geopolitics?'. It thus examines *phase one*; 'The advent of transnational planning' in 1930-1960. This phase begins with Iran's involvement in the world wars and the influence of the Cold War geopolitics in its international relations. This chapter demonstrates how Iran's international relations affect the institutionalization of a modern planning regime and promoted a long-term collaboration of foreign and local experts to accelerate the modernization and industrialization of the country.

Chapters 3, 4, and 5 reflect on the *sub-question 2*; 'How did the collaboration of foreign and Iranian planners shape on Tehran master plans, and how did those plans affect Tehran urban growth?' To answer this question, these three chapters take the transnational turn in Tehran modern urban planning as the main focus and scrutinize *phase two*; 'Close collaboration of local-foreign planners' in 1960-1980. To do so, they respectively explore the formation and realization of the First Tehran Master Plan (1966-1969), the Tehran Action Plan (1972) and the plan for Tehran Central Business District (1975). Investigating the interplay between multiple global, national and local actors in these urban projects is therefore the central theme unifying these three chapters. Although each of them unpacks the planning agenda for Tehran in a specific time and socio-economic condition, presenting a complete story of idea, policy, and impact of a single plan highlights the driving forces behind envisioning the next plan.

Chapter 6 answers *sub-question 3*; ‘How did the 1979 revolution and a sudden change in Iran’s international relations affect transnational planning and the growth agenda of Tehran?’. This chapter, therefore, concentrates on *phase three and four* together and interrogates a radical shift in transnational planning after the 1979 Islamic Revolution, and in turn in the role of planners and planning in Tehran urban development. Furthermore, it investigates how this change in the planning system affected Tehran urban growth.

Chapter 7 answers the main research question; ‘What role did Iranian planners play in Tehran master planning at a time of transnational exchange of planning ideas and how did they incorporate foreign urban models to achieve their own goal of urban growth (1930-2010)?’. It reflects on the changing role of Iranian planners in Tehran master planning, and specifies different types of transnational planning over time and projects. This chapter recapitulates how in different political and economic circumstances local agents worked with their foreign counterparts, and how they embodied foreign planning ideals to achieve their own goal of urban growth in Tehran.



Lalezar Street, Tehran, the 1930s. Source: Unknown

2 The Advent of Transnational Planning

Tehran's Industrialization and its Uncontrolled Urban Growth (1930-1960)

2.1 Introduction

Before the establishment of the High Council of Architecture and Urban Planning in 1966, Iran did not have any urban planning authorities. Moreover, there was no university offering urban planning programmes and there were almost no trained urban planners, except a few young Iranians who graduated from European or American universities and returned to the country. As a result, development plans and early urban projects were almost entirely prepared by foreign consulting engineers.³⁸ In the 1930s, Street Plan emerged as the first generation of urban plans that was mainly provisioned with international civil engineers.³⁹

³⁸ Bahram Farivar Sadri, *Tahavolat-E Tarhrizi Shahri Iran Dar Dorane Moaser* [Contemporary Urban Planning Changes in Iran] (Tehran: Iranian Society of Consulting Engineers, 2014), 106.

³⁹ Dariush Borbor and Ahmad Saeidnia, "Problems and Prospects of Master Plans in Iran," in *Urban Planning conference* (2018).

It was a very rudimentary imposition of street designing and widening projects upon the prevailing framework of the existing city.⁴⁰ They did not have any clear goal of conceptualizing the future development pattern of the city. Later, in the 1950s, the second generation of urban plan emerged, known as Director Plan. It was a slightly improved version of the former plan, and more responsive to the physical structure of the city. The study of German planner, Peter Georg Ahrensof, *The Development of the City of Tehran: An Urban Planning Study of its Future Design* in 1957 is an example of this.⁴¹ However, the work of foreign professionals and the type of their collaboration with locals saw a shift after the institutionalization of a modern planning system in the early 1960s.

This chapter shows how Iran's international relations in the early twentieth century triggered the involvement of foreign agencies with Tehran urban development, and how Iranians heavily relied on a collaborative international procedure to set up a modern planning system. The first section examines how the early development projects in Iran grew out of Iran's international relations before and during the world wars. This section interrogates the (in)direct impact of these projects on early urban changes of Tehran. The second section highlights a shift in Iran's international relations and its reliance on America's support to accelerate the development and modernization of the country. The third section scrutinizes how America's financial and technical aids made the establishment of a modern planning regime (the Plan Organization) possible in Iran. The next section debates the changing national position of Tehran and the way that its rising population greatly affected the social and physical structure of the city, necessitating the provision of a master plan to manage its uncontrolled expansion. By focusing on the advent of master planning, the last section explores how close collaboration of young Iranian planners with foreign counterparts was placed at the centre of national planning agenda in the early 1960s. It unpacks how Iran's international relations triggered a close collaboration with foreign planners and facilitated importing foreign urban models and technology to the country.

⁴⁰ Ibid.

⁴¹ Peter Georg Ahrens, "Die Entwicklung Der Stadt Teheran Einestadtebauliche Untersuchung Ihrer Zukunfiigen Gestaltung," (1960).

2.2 World Wars and the initiation of foreign-assisted development projects

The involvement of foreign experts in Tehran urban projects dates back to the early stages of its development in the 1930s and 1940s, when Tehran had become the national political and economic centre of Iran. Tehran's extreme centrality grew out of the ambitious projects of state- and nation-building, which began with the foundation of the Pahlavi regime, and reached to its climax during post-war developments. The changing national position of Tehran affected the socio-spatial re-organization of the city and made Tehran urban development a highly important national project in which its prosperity was expected to be guaranteed by international assistance, as locals lacked expertise. This section discusses the three main projects which triggered an extensive alteration, modernization and industrialization of Tehran; the construction of the first trans-Iranian railways, rapid industrialization, and the demolition of Tehran's walls and its extensive reconstruction and urban renewal. These projects could not have happened without technical and financial aid coming from global powers.

Being a subject to the constant interference of the imperial powers of Russia and Britain, in the early 1920s Iran was financially devastated and weak, and at the edge of internal disintegration.⁴² During the years of the first World War, Iran's national survival was highly dependent on the establishment of a strong central government who could restore national unity, territorial integrity, and economic stability. The rising values and ideologies of re-building the nation and creating a national identity affected the emerging conception of a nation-state. The ideology of nationalism in Iran had two different but interconnected dimensions for Iranian nationalists; internally making a unified nation, and externally securing the emancipation of the nation from the world powers and their invasions.⁴³ The rising ideology of nationalism provided the impetus for reformist intelligentsia to support the foundation of a centralized government in Iran, which could substitute the administrative chaos and centralize the country by the consolidation of power.⁴⁴

⁴² Frances Bostock and Geoffrey Jones, *Planning and Power in Iran: Ebtehaj and Economic Development under the Shah* (London, England: F. Cass, 1989).

⁴³ E. Chehabi Houchang, "Staging the Emperor's New Clothes: Dress Codes and Nation-Building under Reza Shah," *Iranian Studies* 26, no. 3-4 (1993): 222.

⁴⁴ M. Reza Ghods, "Iranian Nationalism and Reza Shah," *Middle Eastern Studies* 27, no. 1 (1991): 37.

State-building, therefore, became in a way equal to nation-building.⁴⁵ In the political and economic turmoil of the time, Reza Khan, then military officer, directed a coup in February 1921, forcing the corrupt Qajar Shah to assign him as a minister of war. In 1925, with British backing, Reza Shah suppressed rebellions, appointed himself the Shah, and established the Pahlavi dynasty with a centralized dictatorial control over the country.⁴⁶ By the time of his coronation, Reza Shah was considered as “a stabilizing nationalist force” who could re-build the country by bringing back the political and economic independence.⁴⁷

Reza Shah succeeded in achieving international stability of the country, and selected the capital city of Tehran as the site of his power, from where he could stabilize his position by transforming a multi-ethnic empire into a unified nation-state.⁴⁸ Consolidating his power in 1925, he immediately institutionalized a centralized national government in Tehran. Soon after the foundation of a new government, Reza Shah pursued an ambitious program of combining nationalism with modernization and secularism.⁴⁹ He strove for shaping a modern country “united as one instead of divided by multiple religious and tribal groups”.⁵⁰ As a consequence, Tehran which was first appointed as the capital in 1789, became the political, economic, social and cultural centre of the country.⁵¹ Subsequently, the provinces lost their fiscal autonomy and decision-making powers to Tehran.⁵² As historian James Moncreiff Balfour reminds us, Iran during the reign of Reza Shah “was ruled by Tehran and Tehran was ruled by perhaps three hundred men”.⁵³

⁴⁵ E. Chehabi Houchang, "Staging the Emperor's New Clothes: Dress Codes and Nation-Building under Reza Shah," *Iranian Studies* 26, no. 3-4 (1993).

⁴⁶ Washington United States Holocaust Memorial Museum, DC, "Iran During World War II," <https://encyclopedia.ushmm.org/content/en/article/iran-during-world-war-ii>.

⁴⁷ M. Reza Ghods, "Iranian Nationalism and Reza Shah," *Middle Eastern Studies* 27, no. 1 (1991).

⁴⁸ Talinn Grigor, "Tehran a Revolution in Making," in *Political Landscapes of Capital Cities*, ed. Jessica Joyce Christie (2016).

⁴⁹ Mina Marefat, "Fractured Globalization: A Case Study of Tehran," in *New Global History and the City*, ed. Elliott R. Morss (New Global History Press, 2004).

⁵⁰ United States Holocaust Memorial Museum, "Iran During World War II".

⁵¹ Mehrzad Boroujerdi, "The Centrality of Tehran in Iranian Sociopolitical Life," (2015).

⁵² Hooshang Amirahmadi, "Regional Planning in Iran: A Survey of Problems and Policies," *Developing Areas* 20, no. 4 (1986): 504.

⁵³ Boroujerdi, "The Centrality of Tehran in Iranian Sociopolitical Life."

To run the ambitious project of the fast-paced modernization of Iran, Reza Shah mainly relied on Germans' technical and financial assistance, who, unlike Britain or the Soviet Union, did not have any track record of either invading Iran or interfering with its internal political and economic affairs.⁵⁴ Since the establishment of Nazi Germany in 1933, German politicians actively sought to undermine the strength of European imperial powers through influencing economic and strategic developments in the Middle East regions.⁵⁵ Intending to decrease trade with the Soviet Union, Reza Shah leaned on German industrial and technical aid. By 1940, almost half of all Iranian imports came from Germany and half of its exports went there.⁵⁶

By taking advantage of Iran's international relations, Reza Shah initiated the construction of the first trans-Iranian railways (1927-1938); one of his pioneering actions to modernize and unify the country.⁵⁷ Although the Shah aimed at reorganizing territorial regions throughout the country via revolutionizing Iran's transportation system, the construction of the nation-wide railway was by no means a purely national project. Indeed, without foreign technical and financial aid, Reza Shah was not able to realize this ambitious project. Despite the long-time interest of Russia and Britain in the construction of a railway passing through Iran to connect India and Europe, in 1924 Reza Shah signed a contract with American and German companies to begin feasibility studies and to undertake the construction of the railway in the south and north, respectively.⁵⁸ Connecting Tehran to the north (Pahlavi Port) and to the south (Shahpur Port), the Trans-Iranian Railways remarkably improved the national communication system, while strengthening the centralization of Tehran. The newly developed railway enabled the nationalist government to unify the nation by overcoming the existing fragmentation and integrating various ethnic communities throughout the country.⁵⁹ By linking major regions to Tehran, this nation-wide railway played a significant role in the centralization of Tehran, and in turn, in its rising population.⁶⁰ More specifically, during the Second World War, the railway system facilitated the influx of population from more remote regions towards the centre of power, Tehran.

⁵⁴ United States Holocaust Memorial Museum, "Iran During World War II".

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Madanipour, *Tehran: The Making of a Metropolis*, 13.

⁵⁸ Stephanie Cronin, "Iran and the Rise of Reza Shah: From Qajar Collapse to Pahlavi Power," *Middle Eastern Studies* 36, no. 1 (2000).

⁵⁹ Madanipour, *Tehran: The Making of a Metropolis*, 14.

⁶⁰ Victor Gruen and Abdolaziz Farmanfarmaian, "Tehran Comprehensive Plan," (Tehran: The Plan Organization, 1966-1969).

Industrialization was another ambitious project of the new government. By the concentration of most of industries in the capital, Tehran in addition to be a centre of decision-making turned to be a new industrial centre.⁶¹ In the mid-1930s, as home to almost 43% of the country's total industries, Tehran, a formerly unimportant city in terms of industry, became the second industrial centre of the country, after the oil region of Khuzestan.⁶² Despite all the state's efforts to force industrialization in Iran, manufacturing had relatively minor influence on the national economy, and the old economic system still dominated.⁶³ However, the higher rate of industrialization in Tehran increased the attractiveness of the capital, offering the hope of employment and better standards of living.⁶⁴ Rapid industrialization, therefore, resulted in the start of the phenomenon of migration, from peripheral cities and villages, to urban centres. Tehran in particular saw a dramatic influx of working-class migrants, who mainly resided in the south and southwest of the city where new industries were concentrated. The expansion of workers' residential quarters in the south Tehran changed the image of southern areas to be unprivileged and socio-economically problematic districts.⁶⁵

These two projects triggered explosive growth of Tehran in one way or the other. To facilitate the expansion of the city, Reza Shah commanded the demolition of the city walls.⁶⁶ In the early 1930s, Tehran was still a traditional walled city characterized by its central core which contained the old bazaar, the mosque, religious schools and other institutions surrounded by residential quarters.⁶⁷ In that time a third of the population lived outside the walls.⁶⁸ The rising population necessitated the removal of the city's nineteenth-century fortifications. Between 1932 and 1937, under the control of Tehran's mayor, the city walls and its gate were destructed.⁶⁹ All of the ditches surrounding the city were filled in and transformed into wide boulevards [Figure 2.1].

61 Eckart Ehlers and Willem Floor, "Urban Change in Iran, 1920-1941," *Iranian Studies* 26, no. 3-4 (1993).

62 Khatam, "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism", 68.

63 Ehlers and Floor, "Urban Change in Iran, 1920-1941."

64 Robert B Potter and Sally Lloyd-Evans, *The City in the Developing World* (Routledge, 2014), 14.

65 Ehlers and Floor, "Urban Change in Iran, 1920-1941."

66 Khosravi, "Camp of Faith: On Political Theology and Urban Form" 184.

67 Ehlers and Floor, "Urban Change in Iran, 1920-1941."

68 Madanipour, "Urban Planning and Development in Tehran" 433.

69 Grigor, "Tehran a Revolution in Making," 354.



FIG. 2.1 Removal of Tehran's traditional walls in 1930s. / Source: Victor Gruen and Abdolaziz Farmanfarmaian, 'The Tehran Comprehensive Plan', 1966-1969.

Authorities demolished the city walls to allow for constant population growth, to respond to an increasing demand for mobility, and to reimagine the capital city as a bridge to the world market.⁷⁰ Tehran's expansion from a compact city with a single dominant centre, to a socially segregated urban structure, began with the destruction of Tehran's walls. This fundamentally changed the city's traditional physical and social structure, by allowing the population to move out of the congested central core into fringe areas.

Tehran in the 1930s, therefore, saw a comprehensive program of urban reconstruction and renewal. The Street Widening Act, enacted in 1933, was the legal basis of its drastic urban renewal program [Figure 2.2].⁷¹ Street widening plans were the work of foreign civil engineers, without carrying out any urban studies or considering urban requirements. This type of plan was a very rudimentary imposition of street designing and widening projects upon the prevailing framework of the existing city.⁷²

⁷⁰ Madanipour, *Tehran: The Making of a Metropolis*, 44.

⁷¹ Mina Marefat, "The Protagonists Who Shaped Modern Tehran," in *Téhéran: Capitale Bicentenaire*, ed. Chahryar Adle, and Bernard Hourcade (Inst. Français de Recherche en Iran, 1992).; Grigor, "Tehran a Revolution in Making," 356.

⁷² Dariush Borbor and Ahmad Saeidnia, "Problems and Prospects of Master Plans in Iran," in Urban Planning conference (2018).



FIG. 2.2 Tehran urban renewal project, Toopkhooneh square in 1930s. / Source: Alex Nebraska.

The superimposed infrastructure of streets cut through the traditional urban fabric of Tehran. In addition to widening narrow streets in the central areas, a number of major arteries in the outskirts of the city were rapidly constructed, connecting the central zone to outlying areas of the city.⁷³ In line with the development of the outer areas and street networks, affluent families left the congested central areas and moved to less dense areas in the northern and western peripheries. The relocation of affluent people was coupled with the re-filling of the deserted central area with the urban poor and newcomers.

The southern areas, closed to growing industries, were also occupied by rural migrants who came to the capital in search of employment. As a result of the dispersal and spatial redistribution of the population, the social infrastructure of the city gradually transformed.⁷⁴ Despite the rapid socio-cultural segregation of the city, the clustering of urban activities in the old centre ensured that a diverse mix of people continued to gather there, regardless of their social class or status.

⁷³ Zahra Ahari Mohsen habibi, Rashid Emami, "As Foro Rikhtan Baroha Ta Andishehe Shahrha," [From Demolishing Fortifications to Thoughts of Highways: History of Urban Design in Tehran from 1930 till 1966.] *Soffeh Journal* 50, no. 20 (2009): 87.

⁷⁴ Hamidreza Rabiei-Dastjerdi and Maryam Kazemi, "Tehran: Old and Emerging Spatial Divides," in *Urban Change in Iran: Stories of Rooted Histories and Ever-Accelerating Developments*, ed. Fatemeh Farnaz Arefian and Seyed Hossein Iradj Moeini (springer, 2016).

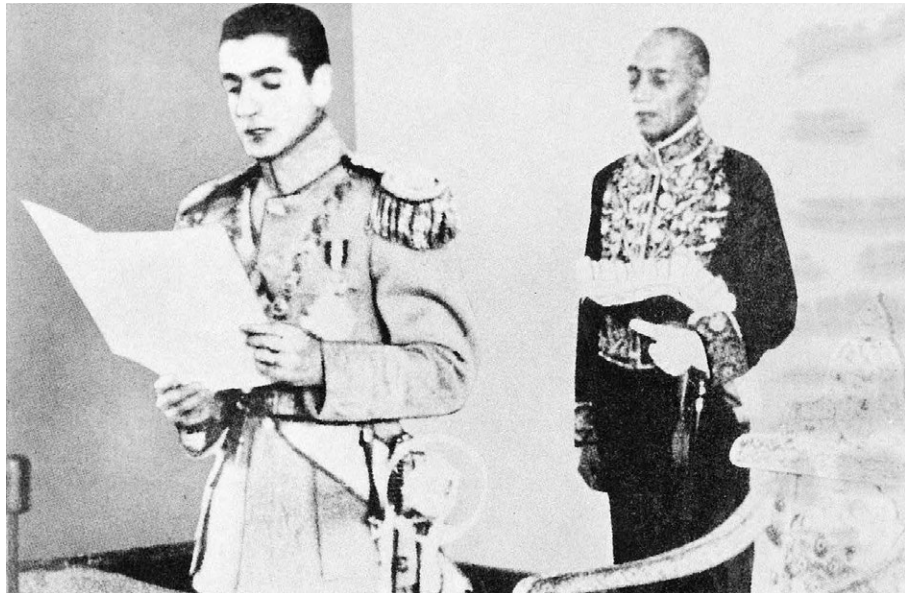


FIG. 2.3 Inauguration of Mohammad Reza Shah in 1941. / Source: Catherine Legrand and Jacques Legrand.

Germany's involvement in Iran's development projects eventually led to the abolishment of Reza Shah from power, as Great Britain and the Soviet Union were not in agreement with his connection to Nazism.⁷⁵ They forced his abdication in 1941, and appointed his young son, Mohammad Reza, as King of Iran [Figure 2.3].

In 1942 the Soviet Union and Great Britain signed an agreement to provide Iran with economic assistance during and after the end of the Second World War. They also agreed to leave Iran soon after the war ended. During the allied occupation of Iran (1941-1945), Iran was completely under the direct control of Great Britain and the Soviet Union. Iranian manpower, as well as newly constructed trans-Iranian railway and road networks, was largely deployed by their troops for the purpose of the war.⁷⁶ Iran's internal condition was exacerbated by an enormous influx of Jewish refugees from Poland and a widespread famine in the country in 1942. This led to the death of huge numbers of the population and resulted in devastating effects on Iran's political and economic system, in which Reza Shah had put much effort in its re-construction.

⁷⁵ Abrahamian, *Iran between Two Revolutions*.

⁷⁶ United States Holocaust Memorial Museum, "Iran During World War II".

In the wartime, for the security reasons, a huge group of people migrated to Tehran.⁷⁷ As a result, Tehran's population had tripled in a short time - from 500,000 in the 1937 to nearly 1,5 million in 1945.⁷⁸ Despite the withdrawal of British forces from Iran at the end of the war in 1945, the Soviets extended their stay in north-west Iran, in Azerbaijan. This marked the beginning of the USA's great obsession with Iran's occupation by the Soviets.⁷⁹

2.3 The Cold War Geopolitics and the rise of America's intervention

By backing Mohammad Reza Shah through economic aid and military support, the United States became the most dominant foreign power in Iran [Figure 2.4].⁸⁰ Americans did not have an interventionist history in Iran, which made them a reliable friend for Mohammad Reza Shah, who aimed at protecting the country from the long-term intervention of Russia (then Soviet Union). On one hand, European countries which had been adversely affected by the world wars could no longer play a central role in internal affairs of Iran. On the other hand, serving the war-stricken countries in Europe transformed the United States to the supreme economic power globally. In order to prevent the expansion of communism, or any other totalitarian political system, the USA foreign strategies which emphasized liberty and the development of the free-market aimed at the political alignment of "free" nations, the so-called Third World countries.⁸¹ The oil beneath Iran as well as its long border with the Soviet Union attracted the USA officials. Rendering stability and security in the Middle Eastern region, particularly Iran, became one of the major priorities of then president of the United States, Harry Truman (1945-1953).

⁷⁷ Bruno De Meulder Rana Habibi, Seyed Mohsen Habibi, "Re-Visiting Three Neighbourhoods of Modern Tehran: Chaharsad-Dastgah, Narmak and Nazi-Abad," in *Urban Change in Iran: Stories of Rooted Histories and Ever-Accelerating Developments*, ed. Fatemeh Farnaz Arefian Seyed Hossein Iradj Moeini (Springer, 2016).

⁷⁸ Gruen and Farmanfarmaian, "Tehran Comprehensive Plan."

⁷⁹ Pamela Karimi, *Domesticity and Consumer Culture in Iran: interior revolutions of the modern era* (Routledge, 2013), 87.

⁸⁰ Madanipour, *Tehran: The Making of a Metropolis*, 7.

⁸¹ Lefteris Theodosis, "'Containing' Baghdad: Constantinos Doxiadis program for a Developing Nation," *DC PAPERS, revista de crítica y teoría de la arquitectura*, no. 1 (2008): 167-9.



FIG. 2.4 Mohammad Reza Pahlavi with US President Truman Washington, 1949. / Source: U.S. National Archives and Records Administration.

The United States took advantage of the rising tendency of rapid development and industrialization in the Third World countries by setting up a number of international technical and economic institutions to counteract communist enslavement. American politicians, who were preoccupied with the Chinese Communist Revolution in the late 1940s, saw “education and rationalism through science” as reliable countermeasures to Communism.⁸² According to anthropologist Arturo Escobar, capital, science, and technology became the three main tools that could enable Truman to extend “the American dream of peace and abundance” across the world.⁸³ In 1949, in Truman’s inaugural speech, addressed the low-level standard of living in “underdeveloped areas”, and announced his concept of a “fair deal” for the entire world:

[...] For the first time in history, humanity possesses the knowledge and the skill to relieve the suffering of these people... Greater production is the key to prosperity and peace. And the key to greater production is a wider and more vigorous application of modern scientific and technical knowledge.⁸⁴

⁸² Francis X Sutton, “The Ford Foundation’s Urban Programs Overseas: Changes and Continuities,” *Philanthropy and the City: An Historical Overview* (2000): 2.; Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (Cambridge University Press, 2005), 11.

⁸³ Arturo Escobar, *Encountering Development: The Making and Unmaking of the Third World*, (Princeton, N.J.: Princeton University Press, 2012).

⁸⁴ *Ibid.*, 3.

American foreign aid in Iran became an instrument for the political and cultural seduction of local elites, granting access to their local markets and also military system, while preventing pro-Communist governments to gain power.⁸⁵ To extend its political influence, the United States initiated financial aid programs such as the Point Four Program and the Marshall Plan which were dedicated to regions with political and social instabilities, Western Europe and the Middle East region.⁸⁶ Iran was among the first countries in the Middle East where the Point Four program was implemented in 1950.⁸⁷ It was a tailored program that directly targeted Iranian society with the underlying objective of improving sectors such as “health care, education, agriculture, housing, and urban planning”.⁸⁸ In addition, the international exchange of students, cultural exhibitions, and extensive media programs became the main American policies in Iran.⁸⁹ In this regard, Iranian universities were exposed to an American education system for the first time. The Point Four Program concentrated on improving the domestic condition of Iranian society, particularly young women, by creating “a less labour-intensive way of life and developing ‘good taste’ in decorating and furnishing their homes”.⁹⁰

American international development agencies intervened in the rapid development of Iran, under the guise of providing technical and financial aid.⁹¹ To integrate underdeveloped countries into the global capitalist economy, a number of American philanthropic institutions, such as the Ford Foundation and the Rockefeller Foundation, expanded their programs in many developing countries. Established by Henry Ford in the 1930s, the Ford Foundation became “one of the largest US private foundation in urban affairs”.⁹² In 1950, the new president of the Ford Foundation Paul Hoffman, who was the key coordinator of the Marshall Plan, re-modelled the foundation to extend its activities to outside world.⁹³ He regarded the economic development of “poor countries” necessary for the success of “free” and “peaceful”

⁸⁵ Westad, *The Global Cold War: Third World Interventions and the Making of Our Times*, 25-26.

⁸⁶ Lefteris Theodosis, ““Containing” Baghdad: Constantinos Doxiadis program for a Developing Nation,” *DC PAPERS, revista de crítica y teoría de la arquitectura*, no. 1 (2008).

⁸⁷ Khatam, “Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism” 91.

⁸⁸ Karimi, *Domesticity and Consumer Culture in Iran | Middle East Research and Information Project*, 88.

⁸⁹ Deborah Kisatsky, “Voice of America and Iran, 1949-1953: Us Liberal Developmentalism, Propaganda and the Cold War,” *Intelligence and National Security* 14, no. 3 (1999): 163.

⁹⁰ Karimi, *Domesticity and Consumer Culture in Iran | Middle East Research and Information Project*, 89.

⁹¹ Khosravi, “Camp of Faith,” 229.

⁹² Tom Avermaete, “The Ford Foundation’s Footprint,” *Canadian Centre for Architecture (CCA)* (2015).

⁹³ Michelle Provoost, “New Towns on the Cold War Frontier,” in *Crimson* (2007).

world against Communism.⁹⁴ Hoffman described development projects of the Ford Foundation “as ‘white bread’, the innocent, soft bread, with no particular taste, which everybody likes”.⁹⁵ In the thirty years from 1951 to 1981, the Ford Foundation became one of the largest American philanthropic institutions, conducting various development programs to transform developing countries into “modern rational civilization”.⁹⁶ By initiating a program called “Overseas Development”, the Ford Foundation directed three quarters of its investments to developing countries.⁹⁷ It established development programs in the various fields of “industry, agriculture, technical education, and knowledge transfer”.⁹⁸ To guarantee the success of the projects, the Ford Foundation closely collaborated with the prestigious American universities of Harvard and MIT.

2.4 Institutionalization of a modern planning regime

Shortly after the end of the Second World War, in Iran, like many other developing countries, a series of national development plans was initiated to ameliorate the economic turmoil and to accelerate industrialization and modernization of the country. In the political atmosphere of the Cold War, and with the rising intervention of international development agencies, a government-sponsored institution known as the Plan Organization was established in 1948 to supervise

⁹⁴ Francis X Sutton, “The Ford Foundation’s Urban Programs Overseas: Changes and Continuities,” *Philanthropy and the City: An Historical Overview* (2000).

⁹⁵ Michelle and Keeton Provoost, Rachel, *New Towns for the 21st Century : The Planned Vs. The Unplanned City* (Amsterdam: International New Town Institute, 2010).

⁹⁶ Sutton, “The Ford Foundation’s Urban Programs Overseas: Changes and Continuities,” 1.; Avermaete, “The Ford Foundation’s Footprint.”; Ambe J Njoh, “Europeans, Modern Urban Planning and the Acculturation of ‘Racial Others’,” *Planning Theory* 9, no. 4 (2010): 376.

⁹⁷ Sutton, “The Ford Foundation’s Urban Programs Overseas: Changes and Continuities,” 1.

⁹⁸ Lefteris Theodosis, “Victory over Chaos? Constantin A. Doxiadis and Ekistics 1945-1975” (2015), 104.

planning development activities in the country.⁹⁹ This organization became, in a way, the continuation of the Point Four programme, facilitating American loans and technical aid.¹⁰⁰ Therefore, breaking down the traditional socio-economic system and integrating Iran with the world capitalist system of economy, became the main objectives of the Plan Organization.¹⁰¹ By initiating a top-down project of national development, this organization became the main institution to realize the King's aspiration of modernization and industrialization.¹⁰² The major ambition of Mohammad Reza Shah was to shape the country in a way that would make Iran a "showcase of modernization" in the region.¹⁰³ The Shah's direct support of the Plan Organization by allocating national oil revenues as well as huge loans from the Point Four Program, the Ford Foundation, and the World Bank, all empowered the Plan Organization and gave it an exceptional autonomy to play a central role in initiating planned development at a national level.¹⁰⁴

The rise of national planning in Iran cannot be thoroughly interpreted if it is not considered as a joint project involving both local and foreign experts and agencies.¹⁰⁵ In Iran national planning, as a powerful instrument to facilitate national development and accelerate economic growth, grew out of international relations. Although the initiative of national planning in the country was entirely Iranian, international development agencies have played central role since the beginning. The rising focus on regional development necessitated a remarkable scale of intervention and development which required foreign financial and technical aid.¹⁰⁶ To realize ambitious national and regional projects, Iran benefited hugely from the Cold War geopolitics, and aimed at attracting international technical and financial assistance.

⁹⁹ Azadeh Mashayekhi, "Tehran, the Scene of Modernity in the Pahlavi Dynasty: Modernisation and Urbanisation Processes 1925–1979," in *Urban Change in Iran*, ed. Fatemeh Farnaz Arefian Seyed Hossein Iradj Moeini (Springer, 2016), 108.

¹⁰⁰ Parvane Nadernezhad, "Daramadi Bar Faaliatha-E Sazman-E Barname Dar Zaman-E Riasat-E Abolhassan Ebtehaj," [A review of the Plan Organization's activities during the Leadership of Abolhassan Ebtehaj.] *Payame Baharestan*, no. 16 (2012): 887.

¹⁰¹ *Ibid.*, 889.

¹⁰² Azadeh Mashayekhi, "The 1968 Tehran Master Plan and the Politics of Planning Development in Iran (1945–1979)," *Planning Perspectives* (2018).

¹⁰³ M. Reza Shirazi, *Contemporary Architecture and Urbanism in Iran: Tradition, Modernity, and the Production of 'Space-in-Between'* (Cham, Switzerland: Springer, 2018), 18.

¹⁰⁴ Jeffrey W. Cody, *Exporting American Architecture 1870–2000*, (Hoboken: Routledge, 2002), 149.; Mashayekhi, "The 1968 Tehran master plan and the politics of planning development in Iran (1945–1979)," 7.

¹⁰⁵ Obert B Potter and Sally Lloyd-Evans, *The City in the Developing World* (Routledge, 2014).

¹⁰⁶ Rachel Kallus, "The Crete Development Plan: A Post-Second World War Israeli Experience of Transnational Professional Exchange," *Planning Perspectives* 30, no. 3 (2015).

Between the two World Wars were pioneering years of experimental regional planning in various countries worldwide, namely European ones.¹⁰⁷ The outbreak of the Second World War in 1939 brought with it a new urgency to regional planning, “firstly as a means of organizing for civil defence, and then to prepare for post-war reconstruction”.¹⁰⁸ Later, during the post-war period, regional planning expertise and technological advancement in those countries became commodified, to be imported to rapidly emerging economies, such as Iran.

National planning was not an alien objective, forced upon Iran by foreigners.¹⁰⁹ According to a member of Harvard Advisory Team, George Benedict Baldwin, who was long involved in Iranian national planning practices, the initiative of national planning in Iran was entirely Iranian, although American organizations played significant roles in shaping the planning effort in the country.¹¹⁰ He continued that “the leading part was played by a remarkable and controversial Iranian figure, Abolhassan Ebtehaj”, who was the managing director of the Plan Organization during the years of its greatest success.¹¹¹ To improve the functionality of the organization, in 1954 the Shah personally appointed Ebtehaj as the head of the Plan Organization.¹¹² As a former board member of Iran’s National Bank and the pioneer of the concept of economic planning in Iran, he was an internationally well-known figure.¹¹³ Ebtehaj was regarded “Iran’s first technocrat”.¹¹⁴ Ruling the Plan Organization between 1954-1959, Ebtehaj played a key role in the fundamental restructuring of the organization and creating an efficient planning institution. Moreover, he took advantage of the financial support of the Ford Foundation to employ foreign experts and professionals to provide Iranians with economic and development consultancy.¹¹⁵

¹⁰⁷ Uralan Wannop and Gordon E Cherry, “The Development of Regional Planning in the United Kingdom,” *ibid.* 9, no. 1 (1994).

¹⁰⁸ *Ibid.*

¹⁰⁹ George Benedict Baldwin, “Planning and Development in Iran,” (The John Hopkins Press Baltimore, 1967), 24.

¹¹⁰ *Ibid.*

¹¹¹ *Ibid.*

¹¹² Parvane Nadernezhad, “Daramadi Bar Faaliatha-E Sazman-E Barname Dar Zaman-E Riasat-E Abolhassan Ebtehaj,” [A review of the Plan Organization’s activities during the Leadership of Abolhassan Ebtehaj.] *Payame Baharestan*, no. 16 (2012).

¹¹³ Encyclopaedia Iranica, “Abolhassan Ebtehaj.”

¹¹⁴ Bostock and Jones, *Planning and Power in Iran: Ebtehaj and Economic Development under the Shah*.

¹¹⁵ Khatam, “Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism,” 99.

The development project in Iran became a transnational project, as the Plan Organization relied heavily on a collaborative international procedure to set up a modern planning system and to successfully realize national and regional projects. Transnationalism of the nation-state project inextricably linked Iran's economic progress to the global powers and helped the government to strengthen its diplomatic ties with other countries. The Plan Organization as a "technocratic headquarter" facilitated the involvement of international development companies in Iran.¹¹⁶ Between 500-700 employees were recruited in the Plan Organization which was located in Tehran. They were all capable engineers and administrators, including a large group of young European-trained Iranians who had recently returned to the country, as well as an international group of foreign advisors organized by Harvard University.¹¹⁷ In spite of the fact that a greater number of Iranian analysts supplemented and supported staff, by 1959 the Plan Organization's personnel consisted of fourteen American experts in "management improvement in the Plan Organization; national manpower development in Iran; and supporting cultural background studies".¹¹⁸ To conduct feasibility studies, the Plan Organization relied on Harvard advisory team.¹¹⁹ As George Benedict Baldwin, a member of Harvard Advisory team, explained:

*The Iranian planners were having difficulty generating a sufficient number of well-thought-out projects that could give specific content to their general objectives. ... Ebtehaj signed a contract with Morrison-Knudsen International to conduct a survey of projects and programs that could form the basis of a development plan. The ten American engineers who soon thereafter arrived in Iran completed their field work within four months.*¹²⁰

According to the Plan Organization archives, an agreement was established between the Iranian and the United States governments to collaborate on Iran's development projects: "Iranian managers had something to learn, and would learn in the Iranian cultural context; and that American advisors had something to teach, and would teach from the American cultural context".¹²¹ The agreement not only indicates the willingness of Iranian officials towards cultural and social reforms in Iran, but also specifies the vast socio-cultural influence that the Plan Organization had country-wide.

¹¹⁶ Cyrus Schayegh, "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. 3 (2012).

¹¹⁷ Baldwin, "Planning and Development in Iran."

¹¹⁸ The Plan Organization, *The Third Development Plan* (1962-1968).

¹¹⁹ Baldwin, "Planning and Development in Iran," 38.

¹²⁰ *Ibid.*, 27-28.

¹²¹ The Plan Organization, *The Third Development Plan* (1962-1968).

However, the collaboration between Iranian and American advisors in national development projects was not straightforward. As Baldwin stated:

*The history of Harvard advisory team reflects the cultural tension and functional ambiguities inherent in such operations. Frustrations and annoyances are not occasional individual reactions, they are constant and common to all individuals, on both sides. These frictions are tolerated by the “advisees” only because they recognize certain functional imperatives, certain things that have to be done on which foreigners can help.*¹²²

The Plan Organization, in collaboration with American advisors, undertook the preparation and realization of the National Plans which were essentially regional projects to create incentives for economic growth in the most profitable regions, rather than to improve under-developed urban and rural areas.¹²³ For the newly established government of Iran, national planning generated a tremendous amount of interest, and it was regarded as the best way of advancing Iran’s national identity, through building the nation. Regional planning and regionalization of developmental efforts were among the underlying objectives of these national plans.¹²⁴

In this regard, the First (1949–1955) and Second (1956–1962) National Development Plans clearly favoured the exploitation of Iran’s natural resources and the development of large-scale infrastructural and industrial projects, including telecommunication, highway and road building, the constructions of dams, ports and airports, as well as the development of heavy industries.¹²⁵ The Plan Organization commissioned a number of American firms to assist with the preparation and realization of these development projects.¹²⁶ Among them, Morrison-Knudsen and Overseas Consultants played crucial roles, particularly in the development of energy infrastructure in the country. Morrison-Knudsen encouraged the internal use of Iran’s huge oil and gas to fuel the expanding factories and industries.¹²⁷ Building upon Morrison-Knudsen’s mixed

¹²² Baldwin, “Planning and Development in Iran,” 36.

¹²³ Rachel Kallus, “The Crete Development Plan: A Post-Second World War Israeli Experience of Transnational Professional Exchange,” *Planning Perspectives* 30, no. 3 (2015).

¹²⁴ Ali Shakoori, “Regionalism Versus Centralism: An Analysis of Failure of Regional Planning in Iran,” *Journal of Social and Economic Development* 18, no. 1–2 (2016).

¹²⁵ Nadernezhad, “Daramadi Bar Faaliatha-E Sazman-E Barname Dar Zaman-E Riasat-E Abolhassan Ebtehaj,” [A review of the Plan Organization’s activities during the Leadership of Abolhassan Ebtehaj.], 890.

¹²⁶ Cyrus Schayegh, “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. 3 (2012).

¹²⁷ *Ibid.*

approach of production and consumption, in 1949 Overseas Consultants regarded electricity as an essential energy, not only for powering industries, but importantly as “a sign of modernity” to raise standards of living.¹²⁸

The first National Development Plan, however, was not successful, as planning and implementation did not have clear functions within the Plan Organization.¹²⁹ Moreover, economic difficulties of the time greatly reduced the possibility of completing proposed projects. Due to British sanctions imposed on Iranian oil after the 1951 oil nationalization, the Plan Organization faced serious financial and administrative difficulties in the execution of the first National Development Plan.¹³⁰ However, the second National Development Plan was more successful, coinciding with the 1955 Amity Treaty between the US and Iran and greatly benefiting from the new economic relation between the two countries. Thus, the second plan received considerable funds for transport and energy infrastructures as American companies were more interested in large-scale development projects in Iran.¹³¹ Because of the growing population and rising demand for energy in Tehran, the Plan Organization initiated two main energy-related projects in the Tehran region; the construction of the enormous hydro-electric dam of Karaj (1958-1961) adjacent to Tehran, and the construction of the first oil refinery in the south of Tehran (1962-1967).¹³² The construction of Karaj Dam in the Tehran region was among the most important projects of the second National Development Plan, which would not have been realised without the direct assistance of the American consultants at Mavara' Bahar Institute.¹³³

The first two National Development Plans did not have a vision of regional balance and equity.¹³⁴ The surging desire for accelerating national economic growth and rapid development focused the Plan Organization's interest on resource-rich regions.¹³⁵ During the first two plans, regional planning became a powerful

¹²⁸ Ibid.

¹²⁹ Harry W. Richardson, “Regional Planning in Iran,” *Growth and Change* 6, no. 3 (1975).

¹³⁰ Encyclopaedia Iranica, “Ebtehaj, Abolhassan,” <http://www.iranicaonline.org/articles/ebtehaj-abolhassan>.

¹³¹ Schayegh, “Iran's Karaj Dam Affair: Emerging Mass Consumerism, the Politics of Promise, and the Cold War in the Third World.”

¹³² Anjuman-E Naft-E Iran, *Oil Industry in Iran* (Tehran: Iranian Petroleum Institute, 1963), 111.

¹³³ Schayegh, “Iran's Karaj Dam Affair: Emerging Mass Consumerism, the Politics of Promise, and the Cold War in the Third World.”

¹³⁴ Hooshang Amirahmadi, “Regional Planning in Iran : A Survey of Problems and Policies,” *Journal of developing areas*, (1986).

¹³⁵ Ibid.

apparatus for the development of regions with unexploited resources including oil, gas, coal, copper, iron and even ground water.¹³⁶ Throughout the first two national plans, regional planning was delineated as “intensive investment in regions with natural resources capable of attaining maximum economic output” or “utilization of regional resources for national growth”.¹³⁷ Improvement in the general condition of underdeveloped regions was not a priority. In this regard, developmental activities were distributed in naturally and potentially resourced-rich areas.¹³⁸ The oil province of Khuzestan was among the first of the regions to be developed. In the first two plans “towns in a favourable position were more able to take advantage of the Plan Organization’s subsidies than those less well off”.¹³⁹ This demonstrates that the ultimate beneficiaries of the first two plans were the Plan Organization and international corporations, rather than local people.

The underlying goal of the first two national development plans was to promote the economic development of the country rather than improve living conditions in growing urban regions and underdeveloped rural areas. At the end of the realisation of the first two plans, the Plan Organization was criticized for monopolizing the national planning power through its centralized structure.¹⁴⁰ Capital-oriented and growth-pole policies of the Plan Organization widened the already existing regional disparities between rural and urban areas. Besides, the Plan Organization had an influence upon the concentration of political and decision-making power in the capital. With the Plan Organization, every single decision of the national planning was made by the collaboration of Iranian and international planners located in Tehran. More crucially, the Shah also had influence upon the decisions made by the Plan Organization. Ali Shakoory explains that “the Shah’s opinion was implicitly asked and was taken into account to formalize the plans”.¹⁴¹ According to the centralized system of the Plan Organization, regional planners had a minor role in the top-down procedure of national planning. Therefore, the centralized nature of the political and administrative structure in the capital greatly hindered the equal regional development at national level.¹⁴²

¹³⁶ Ibid.

¹³⁷ Ibid., 504.

¹³⁸ Shakoory, “Regionalism Versus Centralism: An Analysis of Failure of Regional Planning in Iran,” 206.

¹³⁹ Organization, *The Third Development Plan*.

¹⁴⁰ Richardson, “Regional Planning in Iran.”

¹⁴¹ Ibid., 209.

¹⁴² Amirahmadi, “Regional Planning in Iran : A Survey of Problems and Policies.”; Shakoory, “Regionalism Versus Centralism: An Analysis of Failure of Regional Planning in Iran.”

2.5 Power consolidation in Tehran and rapid urban change

Following the power concentration in Tehran, its centralization was further exacerbated in the early 1950s. Apart from being the centre of political and economic administration and decision-making, Tehran also became a centre of banking, commerce, culture, and transportation. This centrality made Tehran by far the largest and prosperous city in Iran.¹⁴³ As the country's second largest industrial city, Tehran attracted working class families, who migrated to the city in hope of job and better life. The increase in opportunity for bureaucratic work also made Tehran a promising place for emerging middle-class groups, so Tehran began to grow so rapidly. In only a decade, the population increased from 1.5 million in 1945 to nearly 2 million in 1955.¹⁴⁴ The growth of Tehran was a drain on the rural population, which consequently suffered from huge economic and social disparity and inequality.¹⁴⁵ In fact, the ever-growing discrepancies between Tehran and other regions further attracted migrants to the capital. The sudden shift in Tehran's population brought about many problems, including providing the newcomers with housing, urban amenities, education, and employment.¹⁴⁶

Tehran's urbanization was "population urbanization", which magnetically absorbed the rural population while hindering the social development and economic growth of farther territories. Moreover, rural migrants who enthusiastically moved to Tehran found themselves completely alone. There were no organizations to support their transition to urban life, and they were not even able to benefit from existing facilities in the city.¹⁴⁷

¹⁴³ Vincent Francis Costello, "Tehran," in *Problems and Planning in Third World Cities*, ed. Michael Pacione (London: Croom Helm, 1981).

¹⁴⁴ Ehsan Naraghi, "Motaleat Va Tahghighate Ejtemae (Social Studies)," in *Baresi Masael Ejtemae Tehran [the Examination of Tehran's Social Problems]* (Tehran: Motaleat va tahghiqate ejtemae, 1964), 11.

¹⁴⁵ Farhad Kazemi and Lisa Reynolds Wolfe, "Urbanization, Migration, and Politics of Protest in Iran," in *Population, Poverty, and Politics in Middle East Cities*, ed. Michael E Bonine (University Press of Florida, 1997).

¹⁴⁶ Mohamad Reza Jalili, "Citizenship in Industrial and Developing Countries," *Art and Architecture* 41-42 (November 1977).

¹⁴⁷ Ibid.

Subsequently, Tehran quickly transformed into a disharmonious city in which a minority of privileged citizens were living with a majority of unprivileged newcomers.¹⁴⁸ This caused more political, economic and social tensions in the society.

Tehran's accelerating population growth transformed the housing shortage into a housing crisis on an unprecedented scale. Informal settlements and squats rapidly expanded on Tehran's fringe areas where urban services, potable water and electricity were not available. In this period, mass housing became the main tool to tackle the housing crisis.¹⁴⁹ To accommodate the rising population of the capital, the Plan Organization's efforts were mostly focused on the provision of accommodation for the growing governmental employees and their families. This eventually led to the construction of several low-cost housing projects in the city's peripheries. The first two National Development Plans played a significant role through "subsidising housing projects, and encouraging and assisting private enterprise in building houses for those of lower income groups".¹⁵⁰

There is a well-established body of scholarship focusing on Tehran's state-led housing projects, including the work of Pamela Karimi, Rana Habibi, Hamed Khosravi and Mohammad Ali Sedighi.¹⁵¹ They all have scrutinized the emergence of early modern mass housing projects in Tehran under the influence of European models, the complex procedure of their localization, and the lasting impacts on Tehran's housing form, as well as social change.¹⁵²

¹⁴⁸ Ibid.

¹⁴⁹ Rana Habibi, Bruno De Meulder, and Seyed Mohsen Habibi, "Re-Visiting Three Neighbourhoods of Modern Tehran: Chaharsad-Dastgah, Narmak and Nazi-Abad," in *Urban Change in Iran*, ed. Fatemeh Farnaz Arefian and Seyed Hossein Iradj Moeini (Springer, 2016).

¹⁵⁰ The Plan Organization, *First Seven-Year Development Plan*, vol. Volume III (1949), 237.

¹⁵¹ Pamela Karimi, *Domesticity and Consumer Culture in Iran : interior revolutions of the modern era* (Routledge, 2013); Hamed Khosravi, "Camp of Faith: On Political Theology and Urban Form", TU Delft (2014); Mohammad Ali Sedighi, "Inhabitable Voids: Housing Design in Iran's Period of High-Modernisation", TU Delft (2020); Habibi, Rana. *Modern middle-class housing in Tehran: reproduction of an archetype: episodes of urbanism 1945–1979* (BRILL, 2020).

¹⁵² See Seyed Sedighi and T. U. Delft, "Kuy-E Narmak: A Resilient Heritage of Modern Housing in Tehran, Iran," (TU Delft Open, 2016); Habibi, Meulder, and Habibi, "Re-Visiting Three Neighbourhoods of Modern Tehran: Chaharsad-Dastgah, Narmak and Nazi-Abad."

Tehran's mass housing projects exacerbated congestion in central areas and triggered the further expansion of outer areas. Without having a comprehensive plan, the Plan Organization took immediate action in response to the pressing housing problem in Tehran. To mitigate severe housing shortage, the second National Development Plan promoted a more active role for the government in the provision of housing.¹⁵³ In order to finance the construction of affordable housing in Tehran's peripheries through long-term loans, the government worked into close collaboration with Mortgage Bank, Construction Bank, and Industry Bank and several public sector agencies.¹⁵⁴ At the same time, the government seized large areas of land around Tehran as public property for the rapid development of low-cost housing projects.¹⁵⁵

Subsequently, a number of new mass housing projects for low- and middle- income groups were constructed in the immediate post-war period up until the early 1960s. These included: 400-unit housing (1944-1946), Kuy-e-Narmak (1956), Kuy-e-Kan (1958), Shahr Ara (1958-1959), Nazi-Abad (early 1960s), and Kuy-e-Nohome-Aban (1965-1966).¹⁵⁶ As a result, mass housing projects began to mushroom around the city [Figure 2.5]. However, the areas in which these projects were located only provided very basic services for residents.¹⁵⁷ Hence, the city centre had to provide infrastructure and services for an ever-increasing population.¹⁵⁸ This resulted in a duality in the city's structure, with a congested city centre contrasting with dispersed residential peripheries [Figure 2.6].¹⁵⁹

¹⁵³ Madanipour, *Tehran: The Making of a Metropolis*, 143.

¹⁵⁴ Fereydone Mahdavi, "Moshkel Maskan [Housing Problems]," in *Baresi Masael Ejtemae Tehran [the Examination of Tehran's Social Problems]* (Tehran: Motaleat va tahghiqate ejtemae, 1964), 317.

¹⁵⁵ Khosravi, "Camp of Faith," 222.

¹⁵⁶ *Ibid.*, 221.

¹⁵⁷ Madanipour, *Tehran: The Making of a Metropolis*, 42.

¹⁵⁸ D. Golistani, "Poreje Yek Haste Markazi Barae Qarbe Tehran [a New Urban Centre for the West Part of Tehran]," in *Barresi Masaele Ejtemae Shahre Tehran* (Tehran: Tehran University, 1962), 191.

¹⁵⁹ *Ibid.*

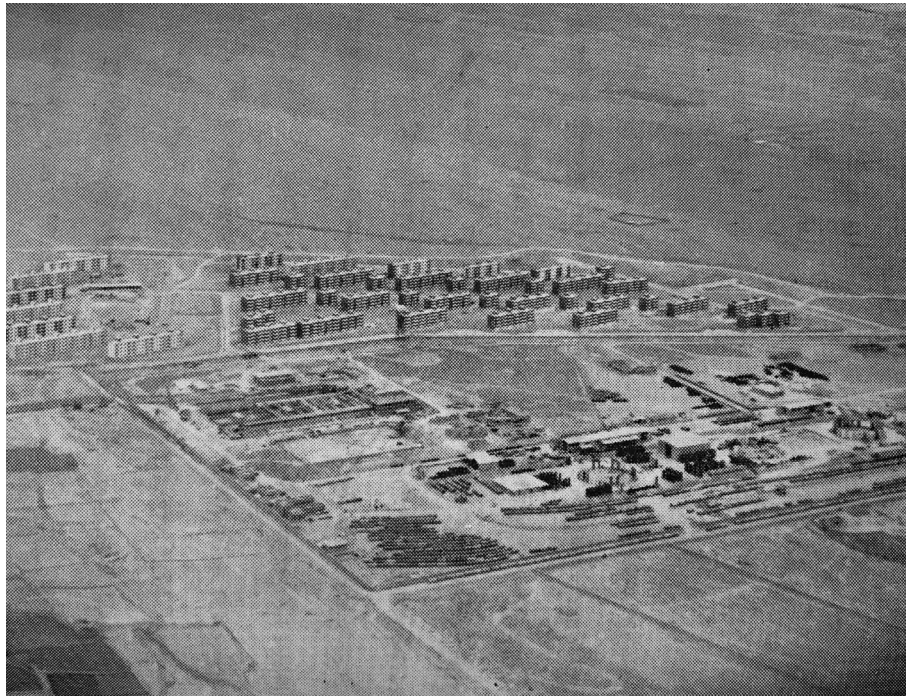


FIG. 2.5 Construction of the low-cost housing complex of Kuy-e Kan in Tehran's fringe. / Source: Saadeddin Roshdieh. *Urbanism and Urban Planning in Iran*. Tehran, 1964.

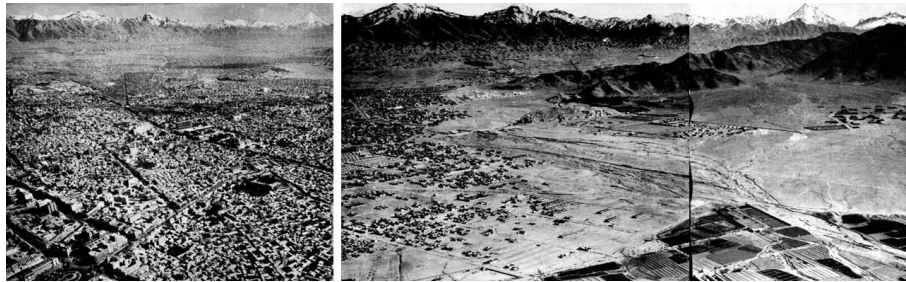


FIG. 2.6 The contrast between overcrowded central areas and scattered residential peripheries in Tehran in the mid-1960s. / Source: Victor Gruen and Abdolaziz Farmanfarman, 'The Tehran Comprehensive Plan', 1966-1969

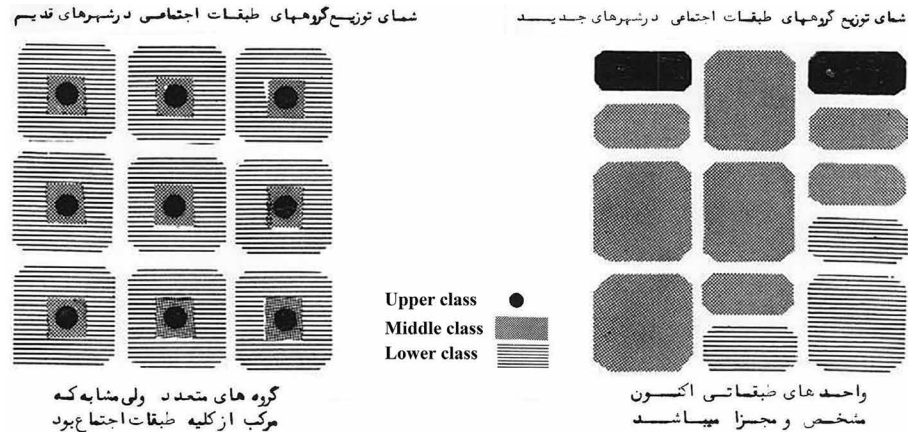


FIG. 2.7 The changing social structure of Tehran through the physical re-distribution of the population. / Source: Victor Gruen and Abdolaziz Farmanfarmaian, 'The Tehran Comprehensive Plan', 1966-1969.

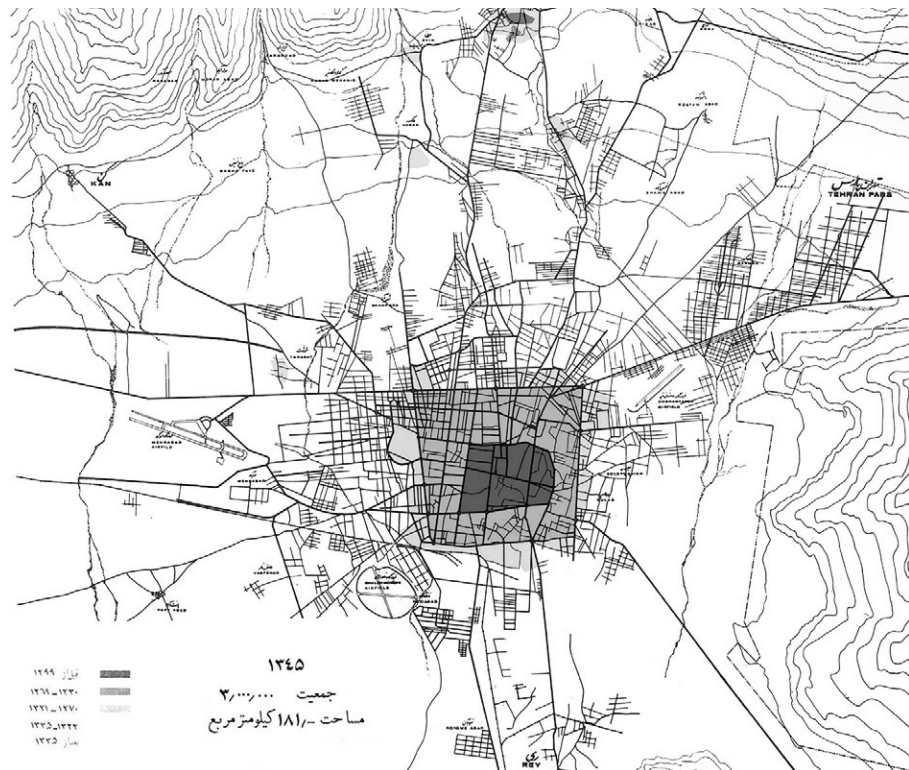


FIG. 2.8 The chronological pattern of growth in Tehran till 1966. / Source: Victor Gruen and Abdolaziz Farmanfarmaian, 'The Tehran Comprehensive Plan', 1966-1969.

Dispersed state-led mass housing projects did little to ameliorate social tensions and housing shortage in the capital.¹⁶⁰ Those projects were unable to keep up with Tehran's incremental housing demands, especially when Tehran's urban population reached 3 million in the mid-1960s.¹⁶¹ On the one hand, the construction of new housing projects around Tehran became a stimulus for further expansion of the city, whilst on the other, the socio-spatial redistribution of the population had a specific influence on the social and physical structure of the city [Figure 2.7]. The chaos and congestion in the old central district induced the spatial redistribution of the population.¹⁶² In line with the development of the outer areas, affluent families left congested central districts and moved to less dense areas in the northern and western peripheries. Moreover, the rising number of privately owned cars and the extension of bus services encouraged even more movement of middle- and high-social class groups to the peripheries.¹⁶³ As affluent people relocated, the deserted spacious traditional courtyard houses in the centre were divided to small rooms and filled by the urban poor and newcomers from distant cities and villages. By sharing these courtyard houses, low-income families could benefit from lower rental prices.

Throughout this period, Tehran was rapidly growing outward into the surrounding countryside without any specific urban plan in place. This meant that the post-war expansion of Tehran occurred without any control, the extent to which the then mayor of Tehran commented that "the buildings and townlets have been developed by whoever has wanted in whatever way and wherever they have wanted".¹⁶⁴ As a result of this unconsidered and fragmented development of the city, Tehran became "a number of towns connected to each other in an inappropriate way" [Figure 2.8].¹⁶⁵ In fact, until the mid-1960s city planning in Iran was not a part of any cohesive national development policy.¹⁶⁶

¹⁶⁰ Michael Pacione, *Problems and Planning in Third World Cities* (London Croom Helm, 1981), 24.

¹⁶¹ Ehsan Naraghi, "Motaleat Va Tahghighate Ejtemae (Social Studies)," in *Baresi Masael Ejtemae Tehran [the Examination of Tehran's Social Problems]* (Tehran: Motaleat va tahghiqate ejtemae, 1964).

¹⁶² Rabiei-Dastjerdi and Kazemi, "Tehran: Old and Emerging Spatial Divides."

¹⁶³ Hoshang Bahrambeygui, "Tehran: An Urban Analysis," (1977): 131.

¹⁶⁴ Madanipour, *Tehran: The Making of a Metropolis*, 40.

¹⁶⁵ Ibid.

¹⁶⁶ Victor Gruen and Abdolaziz Farmanfarmaian, "The Comprehensive Plan of Tehran," in *Second Stage* (March 1969).

2.6 The advent of master planning

The extreme consolidation of political and economic power in Tehran and its subsequent centrality in the mid-1960s afflicted Iran with the disease of 'primate city'. In simplified terms, "urban primacy denotes a condition where a largest city in a country superordinate in both size and national influence".¹⁶⁷ At that time, Tehran was seven times larger than the second largest city in the country, Esfahan.¹⁶⁸ About a third of Iran's urban population lived in the capital, with a population of around 3 million.¹⁶⁹ The city authorities did not have any clear vision about the possible future of the city population and subsequent urban challenges. The only thing that they were well aware of was the urgency of envisioning an urban plan which could guide Tehran's future development and control its unbridled growth, as Tehran was swiftly moving towards becoming an uncontrollable metropolis.

In 1962 the Plan Organization declared that "future extension of cities will be closely controlled by municipalities and will be based on Master Plans".¹⁷⁰ Through instigating the third National Development Plan (1962-1968), the Plan Organization encouraged city planning and preparation of the master plans for all major cities. In fact, the third National Development Plan was the first effort in directing comprehensive urban planning in Iran.¹⁷¹ The third plan, realised by a close collaboration between Iranian planners and American advisors, Harvard Advisory Team, highlighted the significance of urbanization for further development and national economic growth:

*Cities and towns play a key role in the process of development. Urbanization is an important factor in the race between increased productivity and population growth, because it provides the milieu for modern industry on the one hand and the environment for change on the other.*¹⁷²

¹⁶⁷ Potter and Lloyd-Evans, *The City in the Developing World*, 57.

¹⁶⁸ Amirahmadi, "Regional Planning in Iran : A Survey of Problems and Policies," 515.

¹⁶⁹ The Plan Organization, "The Third Development Plan," (1962-1968).

¹⁷⁰ Ibid.

¹⁷¹ Bostock and Jones, *Planning and Power in Iran: Ebtehaj and Economic Development under the Shah*.

¹⁷² The Plan Organization, "The Third Development Plan," (1962-1968).

Due to a serious lack of planning knowledge and experience in Iran, the managing director of the Plan Organization, Ebtehaj, initiated a new phase of the Iranian planning system. He laid a foundation for a stronger collaboration of Iranians with foreign advisors, who would transfer their knowledge and experience to Iranian counterparts.¹⁷³ For Ebtehaj, collaboration with foreign experts was the most effective way of training a generation of local experts.¹⁷⁴ As a result, in the early 1960s, the Plan Organization passed a strategic rule in favour of newly founded Iranian firms. It compelled foreign companies to collaborate with Iranian firms, giving a minimum share of 50% revenue and work for local firms.¹⁷⁵ This rule attracted many foreign-trained Iranian architects and planners to enthusiastically return to the country and register their architecture and planning firms with the Plan Organization. This resulted in a remarkable shift in the number of registered Iranian consulting firms in a short period, including Borbor, A. Farmanfarmaian, Sardar-Afkhami, Marjana, Ali-Abedi, and Khazeni, which became the most active firms in the field of urban and regional planning.¹⁷⁶

Moreover, Iran's fast-paced economic growth made it an attractive destination for foreign companies, particularly American ones.¹⁷⁷ In this regard the Plan Organization announced:

*In order to ensure that its many projects, from the largest multi-purpose river valley development to the smallest school house, are designed and executed efficiently and according to the most modern techniques, the Plan Organization has utilized experienced consulting engineers and construction firms from a number of countries.*¹⁷⁸

¹⁷³ Abdolaziz Farmanfarmaian, "Farmanfarmaian Az Tarhe Jame Tehran Che Migoyad?," (Tehran: Shahrnegar, 2006).

¹⁷⁴ See: Nadernezhad, "Daramadi Bar Faaliatha-E Sazman-E Barname Dar Zaman-E Riasat-E Abolhassan Ebtehaj," [A review of the Plan Organization's activities during the Leadership of Abolhassan Ebtehaj.]; and Bostock and Jones, *Planning and Power in Iran*.

¹⁷⁵ Bahram Farivar Sadri, *Tahavolat-E Tarhrizi Shahri Iran Dar Dorane Moaser* [Contemporary Urban Planning Changes in Iran] (Tehran: Iranian Society of Consulting Engineers, 2014).

¹⁷⁶ *Ibid.*, 107.

¹⁷⁷ Cody, *Exporting American Architecture 1870-2000*. 149.

¹⁷⁸ The Plan Organization, "The Third Development Plan," (1962-1968).



FIG. 2.9 The High Council of Urban Planning. / Source: Veröffentlichung des Büros Ihrer Hoheit (Farah Pahlavi), 1352 (1975).

Urban planning in Iran gained ground with the establishment of the Ministry of Housing and Development in 1964.¹⁷⁹ In order to establish urban planning policies, the twelve ministers of the time, who were considered to have direct or indirect involvement in the urban planning process, were brought together under the leadership of Naser Badie to shape the High Council of Architecture and Urban Planning in 1966 [Figure 2.9].¹⁸⁰ This council was “responsible for formulating the overall urban planning policies, providing comprehensive plans for major urban centres, approving urban development projects, and supervising housing rules and regulations”.¹⁸¹ Soon after the council was established, the Ministry of Housing and Development commissioned the provision of 14 master plans for major cities.¹⁸²

¹⁷⁹ The name of the ministry changed to the Ministry of Housing and Urban Development later on in 1974.

¹⁸⁰ Borbor and Saeidnia, “Problems and Prospects of Master Plans in Iran.”

¹⁸¹ Gholam Hossein Karbaschi, “The Role of Decision Making Processes in Urban Management Systems (Case Study of Tehran)” (Newcastle University, 2013), 84.

¹⁸² Sadri, *Tahavolat-E Tarhrizi Shahri Iran Dar Dorane Moaser [Contemporary Urban Planning Changes in Iran]*, 105.

The master plan for Bandar Lengeh, in south Iran, was the first plan approved by the High Council of Architecture and Urban Planning in 1967.¹⁸³ Intensive activities of Iranian consulting firms and their rising experience, notably due to their intimate collaboration with foreign experts, led to the first emergence of the field of urban planning in the early 1970s at Iranian universities.¹⁸⁴

2.7 Conclusion

Transnationalism was a dominant feature of planning practices in Iran from the early stages of the formation of the Plan Organization. This chapter demonstrates that transnational planning practices in Iran constantly changed due to shifts in Iran's international relations, and varying local conditions in the country. The world wars and the Cold War geopolitical atmosphere put Iran at an international intersection facilitating the intervention of global powers, namely Great Britain, the Soviet Union, Germany, and later on the United States in Iran's internal affairs. Their constant presence in the country and close interactions with the Iranian government resulted in the involvement of many international development agencies in large-scale development projects. After the establishment of the Plan Organization in 1948, the involvement of international agencies in Iran's national development was principally based on the invitation of the Plan Organization technocrats, who were in search of technical and financial aid to re-build the country and create a new national identity. The Plan Organization, therefore, had a dual position in involving international professionals whilst serving the country and training local experts by facilitating their close collaborations with foreign counterparts. International development agencies were selected by Iranian professionals in the belief that they would bring the specific expertise required to industrialize and modernize the country. Moreover, the Cold War geopolitics and the rising aspiration of modernization and industrialization made Iran a promising destination for foreign development agencies. These international projects also provided Iran and all countries involved with equal opportunities to strengthen diplomatic ties.

¹⁸³ Ibid.

¹⁸⁴ Ibid., 112.

Since its rise, Tehran's importance and urban challenges were closely linked with national conditions and development policies. For the newly established regime of Pahlavi, national and regional planning received a tremendous amount of interest and it was regarded as the optimal way of advancing Iran's national identity through an extensive alteration and modernization of the country. With the goal of accelerating national economic growth, regional planning was a governmental mechanism to develop industrial and infrastructural projects benefiting from resource-rich areas. The early national development plans were not only provisioned in a very international context, but also their realization was fundamentally dependent on technical and financial support from foreign countries. However, these plans resulted in both regional disparity and Tehran's centrality. The political and economic centralization of Tehran not only attracted the considerable part of capital and population from all over the country, but also hindered the economic growth and proper development of other regions. The early physical intervention in Tehran was limited to street widening and urban renewal projects, to make Tehran a modern capital for the new nation with assistance of foreign engineers. Later on, in the late 1950s, as a reaction to an alarming increase of rural-urban migration and accelerating urban problems, planning priorities shifted towards master planning that still relied on the assistance of foreign planning agencies. After almost 15 years of national planning, master planning in Iran gained ground in the mid-1960s, when the first TMP was envisioned in a very international context. The second chapter scrutinizes how the notion of transnational planning affected the conceptualization and formation of the first Tehran Master Plan (TMP), which became one of the most significant urban planning documents in Iran to this day.



Keshavarz Boulevard, Tehran, the 1960s. Source: Unknown

3 Foreign Planners as Figureheads

Dilemma of Accommodating or Limiting Tehran Urban Growth (1960-1970)

The First Tehran Master Plan (TMP)

3.1 Introduction

To deal with growing problems of Tehran, the Plan Organization, initiated a new phase in transnational planning practices by enabling intimate collaborations between young Iranian planners and American and European professionals. In 1965, the Plan Organization commissioned the first TMP and invited the Iranian architectural firm Abdolaziz Farmanfarmaian Associates (AFFA) and the American planning and architectural firm Victor Gruen Associates to envision the plan.¹⁸⁵ Gruen regarded himself an urban surgeon and a specialist in “urban heart disease”.¹⁸⁶ At the time of the invitation from the Plan Organization, Gruen’s

¹⁸⁵ Thos H. McLeod and Field Supervisor, *National Planning in Iran : A Report Based on the Experiences of the Harvard Advisory Group in Iran* (Regina: Sask., 1964), 264.

¹⁸⁶ Victor Gruen, *The Heart of Our Cities: The Urban Crisis: Diagnosis and Cure* (London: Thames and Hudson, 1964).

gigantic shopping centres and downtown renovation projects made him “a media celebrity”.¹⁸⁷ His notion of shopping centres heavily influenced his concept of urban model for future cities. Gruen elaborated his ideal metropolis “A Cellular Metropolis of Tomorrow” in his 1964 book, *The Heart of Our Cities*. Gruen and Farmanfarmaian established a joint venture office in Tehran and Iranian planner Fereydoon Ghaffari, who worked in Gruen’s office, was appointed the managing director of the project. The TMP is widely credited to Gruen, who was a well-known planner and architect, but arguably he just served as a figurehead to validate the formation of the first planning document for Tehran by young local planners, whose endeavour was to delineate their own planning agenda for Tehran’s urban future.

Starting with a brief review of the institutionalization of modern planning regime in Iran, the first section of this chapter examines how the 1960s national policies regarding the development of architectural and urban projects attracted international experts and foreign-trained Iranian planners to the country to supervise emerging urban plans. By focusing on the TMP and its internationalization, the second section traces the commission of the plan and offers insight in to the largely unknown procedure of the selection of the planning team and the invitation of Gruen’s firm. It uncovers the priorities and motivations of local actors in forming this joint venture. The third section reconstructs extensive transnational dialogues between local planners and their foreign counterparts. By examining the conception of the TMP and its underlying principles, this section also reveals the complex process in which Gruen’s visionary urban model evolved, with the input of local planners. The next section examines the further development and implementation of the TMP in the 1970s. It discusses how the proposed concept of neighbourhood units and housing policies affected dramatic transformation of Tehran’s social organization and led to the rapid growth of informal settlements in and around the city. The final section reflects on the rising criticism towards the TMP and its development strategies.

¹⁸⁷ Rosemary Wakeman, *Practicing Utopia: An Intellectual History of the New Town Movement* (Chicago: University of Chicago Press, 2016), 280.

3.2 Transnational building of a modern planning regime in Iran

In 1962, in the midst of the Cold War and under the direct influence of John F. Kennedy's presidency, Mohammad Reza Shah launched the White Revolution, generally known as a top-down modernization project [Figure 3.1].¹⁸⁸ Due to rising socio-political unrest in Iran, Kennedy pressured the Shah to initiate comprehensive reforms in the country.¹⁸⁹ The Kennedy Administration hoped that the White Revolution reforms could prevent a Communist-inspired revolution in Iran, and thus funnelled money in to the country to stabilize the US position in the Middle East during the Cold War contest. Apart from ameliorating rising tensions, the Shah's key ambition of the White Revolution was to make Iran, and specifically Tehran, a showcase of modernization in the region.¹⁹⁰ The White Revolution, therefore, embraced fundamental social and economic reforms in which land reform was among the most influential.¹⁹¹ Many of the White Revolution reforms targeted traditional ruling classes: ulema (traditional religious leaders) and their allies, bazaaris (traditional merchants), who were big landowners and enjoyed a great deal of control over national economic and social affairs.¹⁹² Their politico-economic power presented a considerable barrier to the Shah's modernization project.¹⁹³ Ulema and bazaaris saw modernization and industrialization as threats "to the traditional Islamic way of life" and therefore "to their economic and social supremacy".¹⁹⁴ Thus, they became the main opponents of the White Revolution and mobilized mass support against the Shah.¹⁹⁵

¹⁸⁸ Kamran Matin, *Recasting Iranian Modernity: International Relations and Social Change*, Iranian Studies (London: Routledge, 2013).

¹⁸⁹ April R. Summitt, "For a White Revolution: John F. Kennedy and the Shah of Iran," *The Middle East Journal* 58, no. 4 (2004): 564.

¹⁹⁰ M. Reza Shirazi, *Contemporary Architecture and Urbanism in Iran: Tradition, Modernity, and the Production of 'Space-in-Between'* (Cham, Switzerland: Springer, 2018).

¹⁹¹ Mohammad Reza Pahlavi, *Answer to History*, (New York: Stein and Day, 1982), 193.

¹⁹² Madanipour, *Tehran: The Making of a Metropolis*.

¹⁹³ Mashayekhi, "The 1968 Tehran master plan and the politics of planning development in Iran (1945–1979)," 9.

¹⁹⁴ Frances Bostock and Geoffrey Jones, *Planning and Power in Iran: Ebtehaj and Economic Development under the Shah* (London, England: F. Cass, 1989), 112.

¹⁹⁵ April R. Summitt, "For a White Revolution: John F. Kennedy and the Shah of Iran," *The Middle East Journal* 58, no. 4 (2004).



FIG. 3.1 President John F. Kennedy meets with Mohammad Reza Shah at the White House in 1962. / Source: Robert Knudsen. White House Photographs. John F. Kennedy Presidential Library and Museum, Boston.

To accelerate modernization and make it compatible with global standards, the Plan Organization aimed at nurturing a generation of local experts through internationalization of Iran's development projects.¹⁹⁶ The inception of collaboration between Iranian and foreign planning firms became a turning point in modern planning practices in Iran.¹⁹⁷ Foreign-trained Iranian professionals played a significant part in channelling well-known architects and planners from their countries of study towards Iran. Moreover, the growing economic condition and the fast-paced modernization of the country made Iran a favourable destination for foreign firms. Directed by foreign-trained Iranian planners, a modern planning regime was conceived in Iran in which Iranian urban planners, played a prominent role.¹⁹⁸

As discussed in Chapter 2, the birth of the Iranian modern planning system can be dated to the establishment of the Ministry of Housing and Urban Development (MHUD) in 1964 and of the High Council of Architecture and Urban Planning (HCAUP) in 1966, with the support of the Plan Organization.¹⁹⁹

¹⁹⁶ Nadernezhad, "Daramadi Bar Faaliatha-E Sazman-E Barname Dar Zaman-E Riasat-E Abolhassan Ebtehaj," [A review of the Plan Organization's activities during the Leadership of Abolhassan Ebtehaj]," 889.

¹⁹⁷ Ibid.

¹⁹⁸ Dariush Borbor, (2019).

¹⁹⁹ Seyed Mohsen Habibi, (2019).

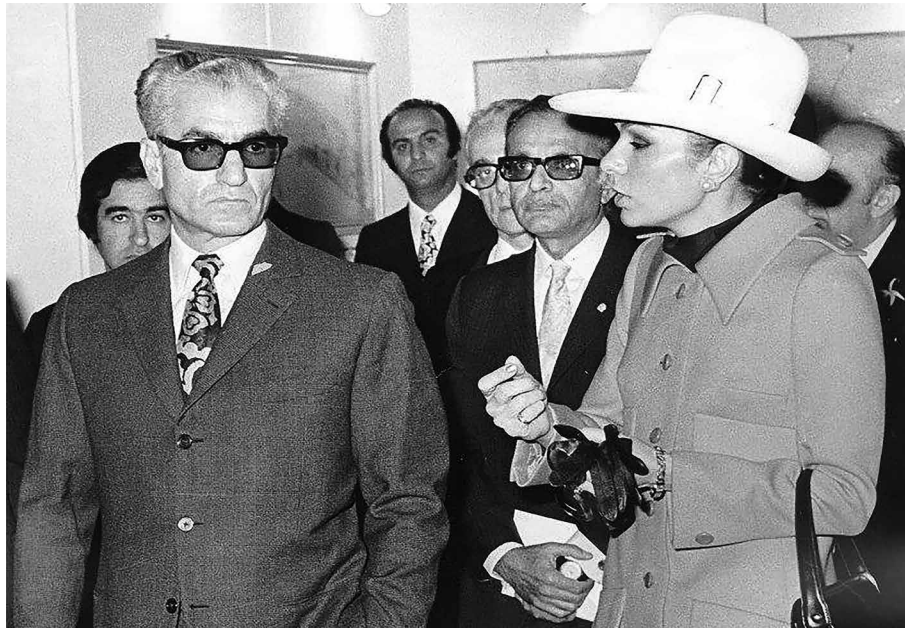


FIG. 3.2 The Shah and Queen Farah visit the High Council of Architecture and Urban Planning in 1966. Amir Abbas Hoveyda (Prime Minister), Naser Badi (Director of the Council), and Dariush Borbor (Urban Planning Consultant) are also present in the photo. / Source: Dariush Borbor

The MHUD was responsible for “programs and projects related to urban planning, land use, urban water supply and sanitation, new development and housing”.²⁰⁰ Soon after its establishment, the MHUD commissioned master plans for 14 major cities in Iran.²⁰¹ In order to formulate overall urban planning policies and approval strategies for the upcoming master plans, in 1966 the HCAUP was formed.²⁰² The council consisted of the twelve ministers who were serving at the time with French-trained Iranian architect Naser Badi, as director. Badi was the former head of the Planning Department in the Tehran Municipality [Figure 3.2]. The Plan Organization became responsible for administering the contracts of the master plans and the HCAUP took charge of related technical matters.²⁰³

²⁰⁰ Domestic and International Business Administration U.S. Department of Commerce, Bureau of International Commerce, *Iran: A Survey of U.S. Business Opportunities* (1977), 71.

²⁰¹ See: Mashayekhi, “The 1968 Tehran master plan and the politics of planning development in Iran (1945–1979),” 14.

²⁰² Gholam Hossein Karbaschi, “The Role of Decision Making Processes in Urban Management Systems (Case Study of Tehran)” (Newcastle University, 2013).

²⁰³ Dariush Borbor, (2019).

To ensure that joint-ventures of national and international planners with a variety of training backgrounds would respect the local context in Iranian cities, the HCAUP required the preparation of two different but related phases for each master plan.²⁰⁴ The first phase was dedicated to general studies of the city including its social, economic and physical features.²⁰⁵ The second phase, named the Detailed Plan, introduced the urban plan with detailed recommendations for its realization.²⁰⁶

3.3 Internationalization of the TMP

The formation of the TMP and the intricacy involved in selecting eligible and qualified planners to conceive the most prominent planning document for Tehran indicate the emerging role of Iranian professionals in a newly born modern planning system. In 1965, the first TMP was commissioned by the deputy director of the Plan Organization, Mohammad Ali Safi Asfia.²⁰⁷ The Plan Organization first insisted on the leadership of foreign-trained Iranian planners who had recently founded their own architecture and planning firms in the country.²⁰⁸ Since none of them were experienced enough to guarantee the development of the plan, the Plan Organization appointed four newly established local planning and architectural firms to form a consortium.²⁰⁹ The consortium consisted of Dariush Borbor, British-trained urban planner; Ali Adibi, American-trained civil engineer; Farrokh Hirbod, American-trained urban planner; and AmirAli Sardar Afkhami, French-trained architect.²¹⁰

While the appointed Iranian planners battled for their own position and supremacy in the planning process, they invited Gruen to help to reinforce the formation of the consortium. Hirbod, who had worked for Victor Gruen Associates, proposed inviting

²⁰⁴ The Plan Organization, *The Third Development Plan*.

²⁰⁵ Sadri, *Tahavolat-E Tarhrizi Shahri Iran*, 108.

²⁰⁶ Ibid.

²⁰⁷ Farmanfarmaian, "Farmanfarmaian Az Tarhe Jame Tehran Che Migoyad?."

²⁰⁸ Fereydoon Ghaffari, *My Journey: From Anzali to Los Angeles* (CreateSpace Independent Publishing Platform, 2018).

²⁰⁹ Dariush Borbor, (2019).

²¹⁰ Ibid.

Gruen to collaborate with the locals.²¹¹ Gruen immediately discussed the issue with Fereydoon Ghaffari, an Iranian architect who was working at Victor Gruen Associates since his graduation in 1955. Ghaffari studied architecture at the University of Southern California; he had, however, been involved in urban planning projects in the Gruen's office since the beginning of his professional career.²¹² Ghaffari travelled to Tehran to meet the Iranian architects of the consortium. Local planners offered Victor Gruen Associates to be "the sub-consultant of the consortium", but Gruen refused to participate in the project as a sub-consultant.²¹³ Ghaffari explained:

*...the meeting with the architects was not what I expected. Instead of trying to define the process of hiring a foreign consultant and preparing the master plan—as suggested by the government—the architects were arguing, each over the position of his firm within the consortium. Each architect wanted to be the head of the consortium group.*²¹⁴

As the members of the consortium could not reach a consensus, the Plan Organization abandoned the hope of establishing a collaborative group that would work together on the TMP.²¹⁵ The Minister of Housing and Urban Development then invited Abdolaziz Farmanfarmaian, Iranian architect who had graduated from the Ecole des Beaux Arts, to take lead of the plan. Farmanfarmaian had strong political ties within the government, as his family included one of the most influential politicians of the time, and his brother, Manucher Mirza Farmanfarmaian, was the director of the National Iranian Oil Company. Farmanfarmaian had returned to Iran in 1950 and founded his architectural company, Abdolaziz Farmanfarmaian Associates (AFFA). The 15-story building of the National Iranian Oil Company Headquarters, constructed in Tehran between 1961 and 1964, was among his most prominent projects at that time.²¹⁶ During his career, Farmanfarmaian became a close friend of the Shah, which possibly influenced the Plan Organization's decision to consider AFFA a trustworthy firm to develop the TMP.²¹⁷ According to Fereydoon Rassouli, Iranian planner who had worked on the TMP, Farmanfarmaian was possibly

²¹¹ Ibid.

²¹² Ghaffari, *My Journey: From Anzali to Los Angeles*.

²¹³ Ibid., 112.

²¹⁴ Ibid., 111.

²¹⁵ Babak Hajian, "Chehel Va Chahar Salegi-E Tasvib-E Avalin Tarh-E Jam-E Tehran," *Donyay-e eghtesad* 2008.

²¹⁶ Carola Hein and Mohamad Sedighi, "Iran's Global Petroleumscape: The Role of Oil in Shaping Khuzestan and Tehran," *Architectural Theory Review* 21, no. 3 (2016).

²¹⁷ Fereydoon Rassouli, (2019).

the best choice for the most important planning project of the country, as his firm was “the most advanced architectural and engineering government consultant” in Iran.²¹⁸

After the dismantling of the consortium of Iranian planners, AFFA, as the selected firm, required to be partnered with an expert foreign planner, since it had neither experience in urban planning nor any urban planners on its team.²¹⁹ Ghaffari played an instrumental role in awarding the contract to Victor Gruen Associates. With the knowledge that Farmanfarmaian was in search of a foreign partner, Ghaffari contacted him and proposed Victor Gruen Associates as the partner. According to Ghaffari, “Farmanfarmaian [was] already acquainted with the work of Victor Gruen Associates, and its designs of shopping centres, but he did not know that it was also a planning firm”.²²⁰ Their meeting resulted in Gruen making a short trip to Tehran to meet with Farmanfarmaian.²²¹ Gruen proposed that “the two firms form a joint venture to undertake the study”, and suggested that Ghaffari “should be appointed as the general manager of the joint venture and given the responsibility of preparing the plan”.²²² Gruen also selected Edgardo Contini as the partner in charge of the Tehran project. Contini had obtained a degree in civil engineering in Rome and was one of the partners of Victor Gruen Associates.²²³

Gruen’s influence upon the Tehran project resulted from his role as a national figurehead, legitimizing the work of young local professionals in a country in which a modern planning system was still in its formation. At that time, media and architectural magazines credited the TMP to Gruen, but the supervision of a well-known foreign planning firm helped in reinforcing the formation of the most significant urban vision for Tehran, in which Ghaffari played a pivotal role [Figure 3.3].²²⁴ In 1966, Ghaffari moved to Tehran to set up the joint venture and negotiate the contract with the Plan Organization.²²⁵

²¹⁸ Ibid.

²¹⁹ Ibid.

²²⁰ Ghaffari, *My Journey: From Anzali to Los Angeles*, 121.

²²¹ Farmanfarmaian, “Farmanfarmaian Az Tarhe Jame Tehran Che Migoyad?”

²²² Ghaffari, *My Journey: From Anzali to Los Angeles*, 123.

²²³ Associates Victor Gruen, *Victor Gruen Associates : Architecture, Planning, Engineering* ([Los Angeles, Calif.]: Victor Gruen Associates, 1966).

²²⁴ “The Comprehensive Plan for Tehran,” *Art and Architecture* No 5 (1970).

²²⁵ Ghaffari, *My Journey: From Anzali to Los Angeles*, 124.



FIG. 3.3 The planning team working on the TMP in the Tehran office in 1968. Fereydoon Ghaffari, in the middle of the photo who has a pen in hand, presents the plan to the team. / Source: Fereydoon Ghaffari.

After renting a three-story building located across the street from Farmanfarmaian's office, Ghaffari initiated an international effort to recruit staff for the joint venture.²²⁶ Over the following few months, the office grew to a number of twenty employees, including: Khosrow Moaveni, the assistant general manager, and Ghaffari's cousin, with a degree in traffic and transportation from the University of California, Berkley; David Yeadon, a British urban planner who became the senior planner of the project; the architect Robert Shaffer, who was already working on rural development projects in Tabriz, Iran.²²⁷ Additionally, there were a number of young Iranian junior architects working with the team, who were recent graduates of the University of Tehran's School of Architecture, including Fereydoon Rassouli, Noshin Ehsan, and Fereshteh Bekhrad.²²⁸ Later on these young architects, who gained experienced from the Tehran project, became the main players in further elaborations of the TMP in the mid-1970s.

²²⁶ Ibid., 125.

²²⁷ Ibid.

²²⁸ Ibid.

Directed by Fereydoon Ghaffari, the joint venture involved multiple local and international actors who closely collaborated to negotiate Tehran's urban problems and plot the future of the city. Several local agencies and organizations cooperated with the planning team, namely the Plan Organization, the Ministry of Housing and Development, the Ministry of Transport, the Ministry of Water and Power, Iran's Central Bank, the Tehran Municipality, the Statistical Centre of Iran, and the newly established Social Research Institute.²²⁹ Moreover, Ghaffari selected the Dutch Economic Institute as the consultant on economic issues, and the American firm of Amman and Whitney for input regarding engineering and infrastructure planning.²³⁰

3.4 Conceptualization of the TMP and the interplay between local and foreign planners

Prior to the establishment of the TMP, local actors and city authorities had their own development agendas emanating from the changing demographic, economic, and social structure of the city. The 1962 land reforms exerted a dramatic impact on Tehran and its pattern of population growth, and the implementation of national land reforms gave rise to massive rural-urban migration.²³¹ Many peasants who could not repay their bank loans were attracted by increased job opportunities in Tehran.²³² As a result, in the mid-1960s, Tehran's population reached approximately 2.8 million, almost one third of Iran's urban population.²³³ At that time, Tehran's urban expansion involved "under-regulated, private-sector driven and speculative development", and the Tehran municipality was not capable of controlling this process.²³⁴

²²⁹ Gruen and Farmanfarmaian, "Tehran Comprehensive Plan."

²³⁰ Ibid.

²³¹ Kamran Matin, "Recasting Iranian Modernity: International Relations and Social Change," *Iranian Studies*; *Iranian Studies*. (Hoboken: Taylor and Francis, 2013).

²³² Masoud Kamali, *Multiple Modernities, Civil Society and Islam: The Case of Iran and Turkey* (Liverpool University Press, 2006), 217.

²³³ The Plan Organization, *The Third Development Plan*.

²³⁴ Madanipour, "Urban Planning and Development," 435.

By swiftly integrating surrounding towns and villages, the city was growing in a disjointed manner in all directions.²³⁵ This process transformed Tehran into “a number of towns connected to each other in an inappropriate way”.²³⁶

In the mid-1960s, the historical centre of Tehran was a dominant political, economic, and administrative hub that provided infrastructure and services for an ever-growing population.²³⁷ The concentration of power, jobs, and industries further exacerbated Tehran’s politico-economic centrality on the national scale.²³⁸ Central Tehran was becoming home to all of the headquarters of Iranian banks and insurance companies.²³⁹ This also attracted foreign firms to establish new branches in the capital.²⁴⁰ Tehran was becoming an international cosmopolitan city.²⁴¹ All of the newly arriving services and companies accumulated in the central district, taking advantage of the proximity of existing commercial and business activities.²⁴²

The increasing congestion of Tehran’s centre encouraged the spatial redistribution of the population which exacerbated the existing social polarization in the capital.²⁴³ Outlying residential areas were mainly expanding towards two old settlements, Shemiran in the north, and Ray in the south, without being accompanied by sufficient growth of economic, social and civic facilities. In line with the development of the outer areas of Tehran and the expansion of street networks, affluent families left the congested central areas and moved to less densely populated places in the northern and western peripheries.²⁴⁴ As affluent people relocated, the deserted central areas were refilled by the urban poor and newcomers from distant cities and villages. The less privileged preferred to reside near their workplaces in the centre, both to pay less for public transportation and to benefit from low rental prices in this densely populated area where families shared spacious traditional courtyard houses.²⁴⁵

²³⁵ Ibid.

²³⁶ Ibid.

²³⁷ Madanipour, *Tehran: The Making of a Metropolis*, 11.

²³⁸ Boroujerdi, “The Centrality of Tehran in Iranian Sociopolitical Life.”

²³⁹ Ibid.

²⁴⁰ Hooshang Bahrambeygui, “Tehran: An Urban Analysis” (Durham University, 1972), 108.

²⁴¹ Mehrzad Boroujerdi, “The Centrality of Tehran in Iranian Sociopolitical Life,” (2015).

²⁴² Bahrambeygui, “Tehran: An Urban Analysis,” 70.

²⁴³ Hamidreza Rabiei-Dastjerdi and Maryam Kazemi, “Tehran: Old and Emerging Spatial Divides,” in *Urban Change in Iran: Stories of Rooted Histories and Ever-Accelerating Developments*, ed. Fatemeh Farnaz Arefian and Seyed Hossein Iradj Moeini (Springer, 2016).

²⁴⁴ Madanipour, *Tehran: The Making of a Metropolis*.

²⁴⁵ Bahrambeygui, “Tehran: An Urban Analysis,” 136.

Aside from the rising problems in the city centre and its extreme congestion, the Shah personally showed a great interest in developing modern commercial centres in Tehran.²⁴⁶ The Shah was a progressive man who desired Tehran to be a modern capital, as with the most advanced urban development worldwide.²⁴⁷ He considered the new urban centre as a way of meeting Tehranis' ravenous demand for the consumption of goods and services. More crucially, he saw them as offering a powerful opportunity to bring about political and socio-economic changes, and the possibility of diminishing the dominance of the old city centre and the bazaar. This, in turn, would reduce the influence of traditional ruling class, the ulema and the bazaaris, who enjoyed strong control over the city centre and the Tehran bazaar. The Tehran bazaar was primarily "a wholesale and import-export marketplace" involved in large-scale commerce which constantly played a crucial role in major political episodes.²⁴⁸

The Shah's economic policies and the State's focus on extensive industrialization posed a major threat to the role of the Tehran bazaar.²⁴⁹ Arang Keshavarzian stressed that "Mohammad Reza Shah was public and virulent in his disdain for bazaaris".²⁵⁰ He asserted that the Shah's opposition "had its roots in the modernist developmental ideology that denied the bazaar's relevance to national and international commerce and predicted its demise".²⁵¹ In his book *Answer to History*, published a few years after the 1979 Islamic Revolution, the Shah explained his intention of decreasing the position of bazaars, notably the Tehran bazaar, in order to hasten national economic growth:

*Bazaars are major social and commercial institutions throughout the Mideast. But it remains my conviction that their time is past. The bazaar consists of a cluster of small shops. There is usually little sunshine or ventilation so that they are basically unhealthy environs. The bazaaris are a fanatical lot, highly resistant to change because their locations afford a lucrative monopoly. [...] I could not stop building supermarkets, I wanted a modern country. Moving against the bazaars was typical of the political and social risks I had to take in my drive for modernization.*²⁵²

²⁴⁶ Fereydoon Rassouli, (2019).

²⁴⁷ Ibid.

²⁴⁸ Arang Keshavarzian, *Bazaar and State in Iran: The Politics of the Tehran Marketplace* (Cambridge University Press, 2007), 25.

²⁴⁹ Kamali Masoud, "Multiple Modernities and Islamism in Iran," *Social Compass* 54, no. 3 (2007).

²⁵⁰ Arang Keshavarzian, *Bazaar and State in Iran: The Politics of the Tehran Marketplace* (Cambridge University Press, 2007), 133.

²⁵¹ Ibid.

²⁵² Mohammad Reza Pahlavi, *Answer to History*, (New York: Stein and Day, 1982), 156.

The local actors' development agenda for Tehran was shaped not only in response to local reality, but also global interests. They highlighted the concept of new urban centres as a way to give Tehran a modern urban pattern.²⁵³ Prior to the commission of the TMP, Gruen's multifunctional shopping centres had been already celebrated in Iran and local professionals embraced the concept of modern centres. In 1962 the newly established Social Research Institute organized its first seminar on "the Examination of Tehran's Social Problems".²⁵⁴ The seminar participants underlined the necessity of establishing American-style multifunctional centres to serve newly developed areas in Tehran.²⁵⁵ It was emphasized that further study and investigation would be necessary to determine the most strategic locations for these new urban cores, but preferably that they would occupy the then-vacant lands in the urban fabric.²⁵⁶

Soon after the establishment of the joint venture, the Iranian planners in the team dived into studying the changing socio-economic context of the city. Relying on the research conducted by the Social Research Institute in Tehran University and their own social surveys studying 27 different districts in the city, the planning team underlined the changing traditional behaviour of Iranian society.²⁵⁷ Based on existing data and statistics, they mapped the location and the number of religious, cultural, recreational and market places in Tehran, and highlighted the rising tendency of families towards using modern recreational facilities rather than traditional and religious urban spaces.²⁵⁸ The planners concluded that:

*As a result of diminutions of family ties and an associated increase in education, the 'norms' of social behaviour will rapidly change, influenced particularly by the urbanized countries. The old shopping patterns will disappear; the bazaar and the downtown centre are likely to diminish in importance, and the demand will arise for large 'out-of-town' centres fully equipped with parking, restaurants, supermarkets and community facilities. People will become more aware of their environment and the demand for adequate living space, public services and community facilities will increase.*²⁵⁹

²⁵³ Fereydoon Rassouli, (2019).

²⁵⁴ Zahra Ahari and Mohsen habibi, Rashid Emami, "As Foro Rikhtan Baroha Ta Andishehe Shahrha," [From Demolishing Fortifications to Thoughts of Highways: History of Urban Design in Tehran from 1930 till 1966.] *Soffeh Journal* 50, no. no. 20 (2009),13.

²⁵⁵ "Nakhostin Seminar Barresi-E Masael-E Ejtemaei Shahr-E Tehran 1341," (1964), 189-97.

²⁵⁶ Ibid.

²⁵⁷ Gruen and Farmanfarmaian, "Tehran Comprehensive Plan."

²⁵⁸ Ibid.

²⁵⁹ Tehran Development Council Secretariat, *An Analysis of the Tehran Comprehensive Plan*, Technical Report, No. 1 (Tehran: Tehran Development Council. Secretariat., 1976), 9.

Changing demographic, social and economic condition of Tehran and the rising problems of the congested old city centre compelled the planners to think of a new urban organization for the city. According to the growth trends of previous decades, the planning team, in collaboration with the Netherlands Institute of Social Studies, estimated that Tehran's population could increase from the existing level of 3 million to around 16 million by 1991.²⁶⁰ This was firmly objected by the Minister of Water and Power, estimating that Tehran's limited water sources could only provide for a maximum population of 5.5 million.²⁶¹ Despite the fact that controlling Tehran urban growth had become the main priority of the Plan Organization, the planning team who had believed in Tehran's potential population growth attempted to come up with a new urban organization capable of flexible growth, accommodating a greater population in the future.²⁶²

An operation was needed to hybridize Gruen's urban model with the wider social and economic structure of Tehran. Gruen's notion of a future city was heavily influenced by his background in retail planning. Understanding Gruen's urban model, therefore, necessitates the investigation of how his notion of shopping centres eventually culminated in his concept of the urban model "A Cellular Metropolis of Tomorrow".²⁶³ Gruen was such a powerful influence on all areas of store modernization in America; interior design, shop window fronts, chain stores, department stores, shopping centres, as well as downtown renewal. The idea of mass consumer market in America first emanated from the economic stagnation of the 1920s.²⁶⁴ As a reactionary response to revive the recessed economy, the 1930s economic theorists believed that "consumption would end the Great Depression".²⁶⁵ As such, "the rise of the consumer in the nation's economy and mentality had an immediate impact on retailing".²⁶⁶

²⁶⁰ Ibid.

²⁶¹ Sadri, *ahavolat-E Tarhizi Shahri Iran Dar Dorane Moaser [Contemporary Urban Planning Changes in Iran]*.

²⁶² Tehran Development Council Secretariat, *An Analysis of the Tehran Comprehensive Plan*, Technical Report, No. 1 (Tehran: Tehran Development Council. Secretariat., 1976).

²⁶³ Victor Gruen, *The Heart of Our Cities: The Urban Crisis: Diagnosis and Cure* (London: Thames and Hudson, 1964).

²⁶⁴ See: Lizabeth Cohen, "A Consumers' Republic: The Politics of Mass Consumption in Postwar America," *Journal of Consumer Research* 31, no. 1 (2004).

²⁶⁵ M. Jeffrey Hardwick, *Mall Maker: Victor Gruen, Architect of an American Dream* (Philadelphia: University of Pennsylvania Press, 2004), 40.

²⁶⁶ Ibid.

In the consumerist atmosphere of the time, not only companies re-styled their products, but also architects and designers were invited to fashion stores and make them alluring.²⁶⁷ Gruen had the unique fortune among the others to revolutionize American retailing system. He was an Austrian architect, who escaped Hitler's occupation of Austria in 1938, and emigrated to America in search of new life and career. His theory was simple, "the more time people spend enjoying themselves in the commercial environment, the more money they would spend".²⁶⁸ Moreover, Gruen saw shopping mall not only as "a healing force, and economic stimulus",²⁶⁹ but also as a new type of urban public space which can offer "a solution that will profit everyone".²⁷⁰

Gruen introduced shopping centres as versatile spaces with a magnetic power, like "weapons for the counterattack against urban sprawl and anti-city chaos".²⁷¹ By fantasizing about "a Europeanization of America", Gruen hoped that his regional shopping centres would offer an antidote to the problem of American cities as "communities without heart".²⁷² To reform the suburban landscape of American cities, he drew inspiration from European downtowns and sought to insert an urban-like experience to American suburbs. The realization of a number of regional shopping centres projects catapulted Gruen to the national stage and made him a national celebrity.²⁷³

In the 1960s, rapid sprawl of American cities and what their future was preoccupied Gruen. All projects of regional shopping centres and downtown renewals led Gruen to acknowledge the strong tie between retail and how a city would develop, forcing him to rethink city's urban structure at large.²⁷⁴ Gruen predicted that "the shopping centre would be the most important city planning strategy in the twentieth century".²⁷⁵ Gruen's urban model was essentially a developed version of Howard's concept of a Garden City, and was influenced by Christaller's Central Place Theory, and also from the regionalist approach attributed to Lewis Mumford and Patric Geddis.²⁷⁶ His urban model was conceived as a concentric metropolis with ten satellite towns,

²⁶⁷ Ibid.

²⁶⁸ Ibid., 4.

²⁶⁹ Ibid., 92.

²⁷⁰ Ibid., 120.

²⁷¹ Gruen, *The Heart of Our Cities: The Urban Crisis: Diagnosis and Cure*, 203.

²⁷² Hardwick, *Mall Maker: Victor Gruen, Architect of an American Dream*.

²⁷³ Ibid., 103.

²⁷⁴ Ibid., 163.

²⁷⁵ Ibid., 155.

²⁷⁶ Madanipour, "Urban Planning and Development." 435

with a mega-centre uniting them. The mega-centre, the heart of the city, plus the centres of all satellite towns served as the foci of the metropolis and transportation network hubs, together forming the main structure of the city [Figure 3.4].

In Gruen's ideal city, the centre had hierarchical types in different scales: metro-centre, city-centre, town-centre, and community centre.²⁷⁷ On the one hand, for the even distribution of facilities and services among all city-centres, Gruen designed ten self-sufficient satellite towns; on the other hand, the city's growth was controlled by connecting these centres into a mega-centre, functioning in a metropolitan scale.

Despite its concentric pattern, Gruen's proposal can also be considered as a fragmented city constituting of ten inward-looking self-contained satellite towns, with a central mega-core. Arguably, the model could only work as a coherent city if the mega-centre properly functioned to interconnect all satellite towns. By focusing on shopping centres, Gruen imagined retail as the driving force to create an improved metropolitan life.²⁷⁸ However, Gruen's solution to downtown's problems in parallel with his continuing advocacy of regional shopping centres placed him in a deeply paradoxical position.²⁷⁹ Attracting people from far away, these gigantic suburban developments further jeopardized the life of already suffering downtowns.²⁸⁰ In his urban theory and its application, Gruen faced a great deal of controversy. He utilized regional shopping centres as a weapon to curb further sprawl. However, with their powerful allure, they attracted a new population and stimulated urban expansion.

Considering Tehran's local realities, the TMP's planning team avoided a direct transferral of Gruen's urban model. They scrutinized his original concept of the future metropolis and rejected its centripetal form radiating from the city centre.²⁸¹ Instead, they called for shifting attention from the old city centre, riddled with socio-political and physical problems, to modern centres of activities, dispersed throughout the city. The planners' attempted to come up with an urban organization capable of gradual growth. By examining possible physical structures for Tehran and evaluating the geographical parameters of the city, including the mountains in the north and the desert in the south, the TMP established that a westerly linear expansion would provide the most strategic structure for the future expansion of the city.

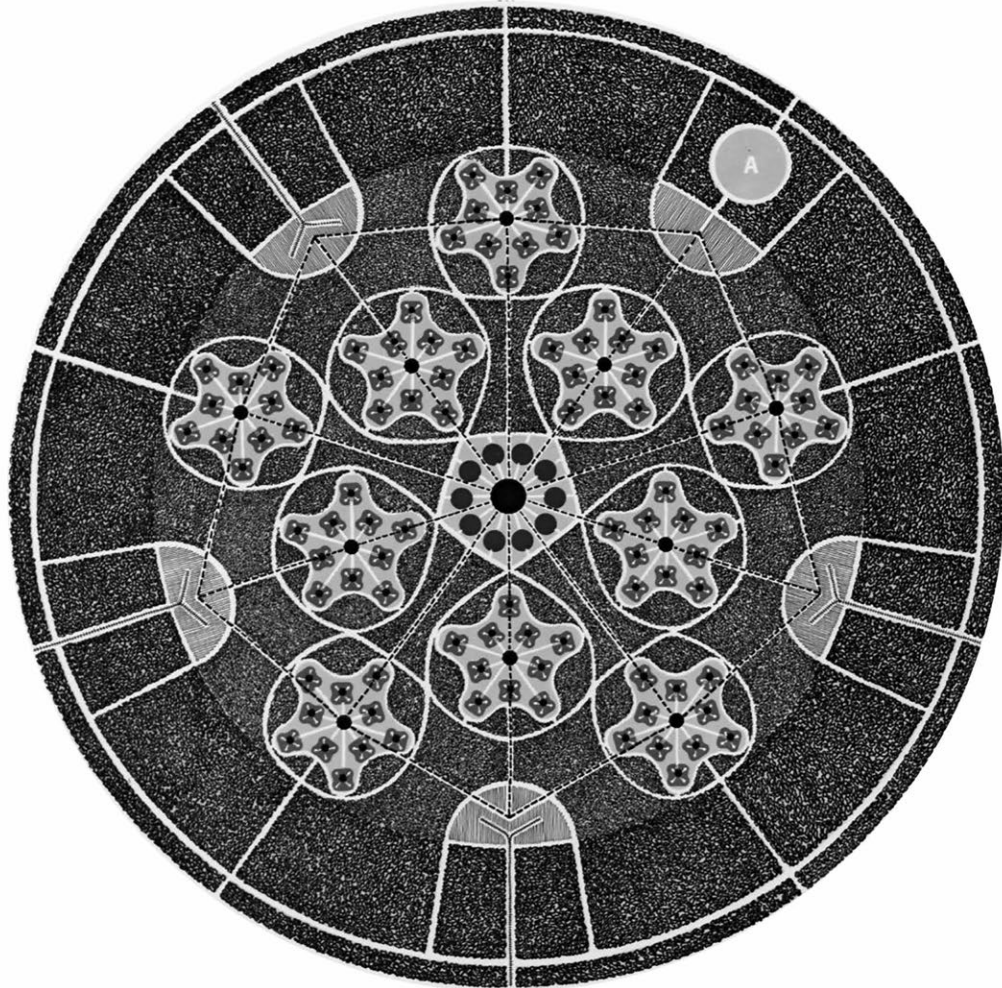
²⁷⁷ Gruen, *The Heart of Our Cities: The Urban Crisis: Diagnosis and Cure*, 276.

²⁷⁸ Hardwick, *Mall Maker: Victor Gruen, Architect of an American Dream*, 221.

²⁷⁹ *Ibid.*, 209.

²⁸⁰ *Ibid.*, 217.

²⁸¹ Gruen and Farmanfarmaian, "Tehran Comprehensive Plan."



SCALE 0 1 2 3 4 5 6 MILES

LEGEND

- A** Airport
- Railroad
- Industrial Area
- - - - Rapid Transit
- Regional Parks
- City Recreation } Open Space
- Local Recreation }
- Urban Centers
- CR** Connections with National Railroad Network
- CH** Connections with National Highway Network

FIG. 3.4 Gruen's concept of the metropolis of tomorrow including ten satellite towns united by a mega-centre. / Source: Victor Gruen Papers, American Heritage Centre, University of Wyoming

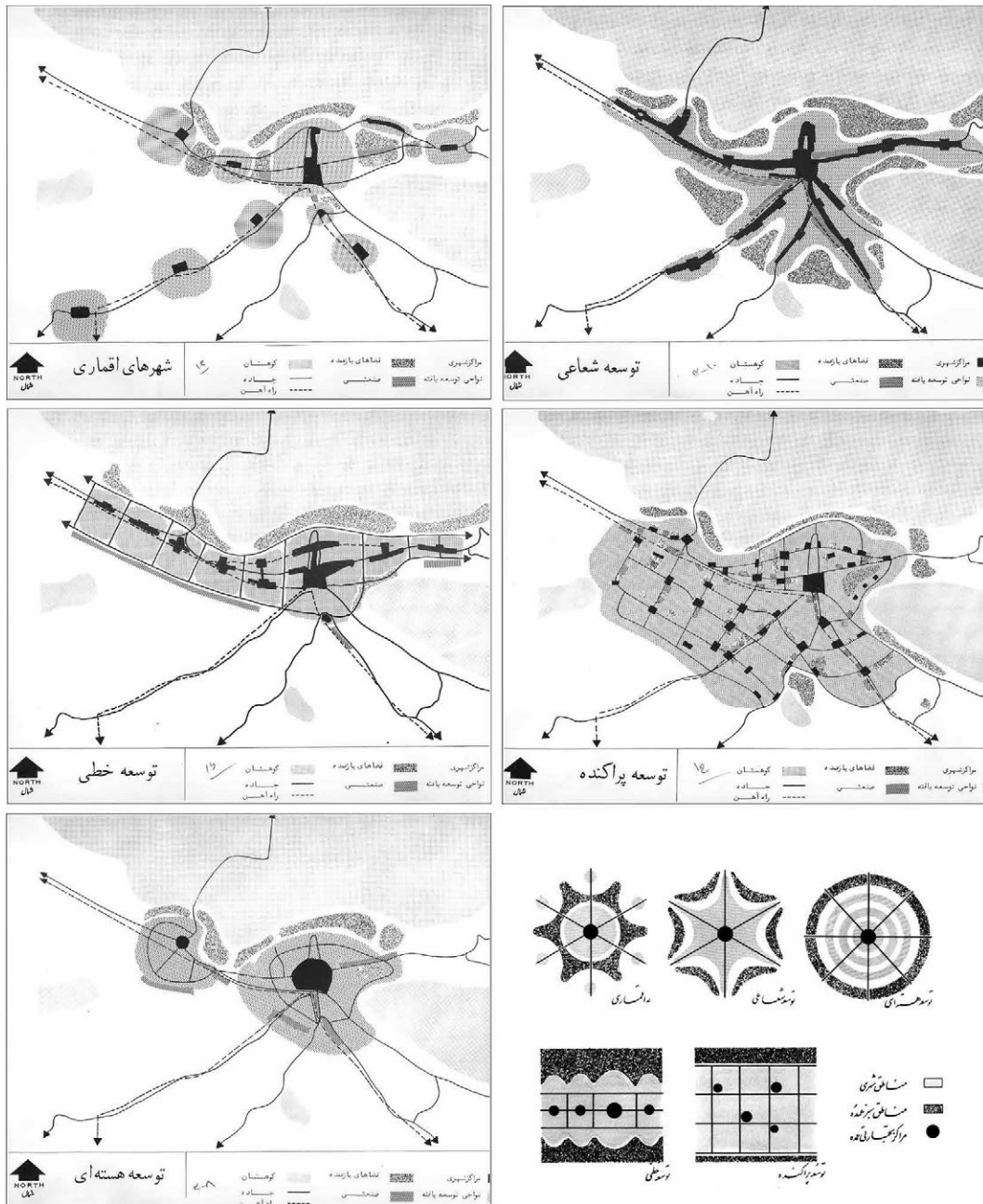


FIG. 3.5 Five alternatives for Tehran's pattern of urban growth. / Source: Victor Gruen and Abdolaziz Farmanfarmaian, "The Comprehensive Plan of Tehran"

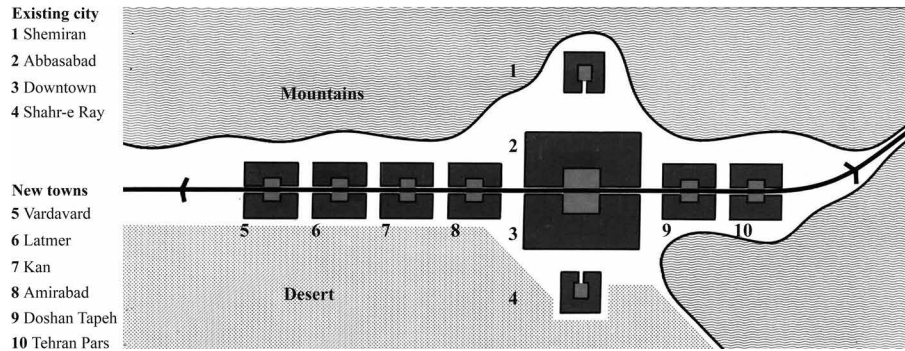


FIG. 3.6 The linear urban structure for Tehran proposed by the TMP. / Source: Victor Gruen and Abdolaziz Farmanfarman, "The Comprehensive Plan of Tehran".

After completing data collection and a preliminary analysis of alternative urban forms [Figure 3.5], Ghaffari asked Contini (the Victor Gruen Associates partner in charge of the Tehran project) to send an urban planner and a transportation specialist from the Los Angeles office to join the planning team for further consultations.²⁸² On a few occasions, Contini also came to Tehran to participate in the development of the technical dimensions of the plan.²⁸³ The planning team examined the domination of the old city centre and aimed to redistribute the service facilities agglomerated there amongst the centres of six new satellite towns positioned on an east-west axis. Figure 3.6 shows how the proposed new satellite towns were located on a linear axis running perpendicular to the existing north-south axis. Each new satellite town, with a population of 300,000-500,000, would consist of communities of 20,000-30,000 people united by a centre of activities. In turn, each community would be divided into smaller units consisting of neighbourhoods of 5,000 people, served by smaller scale centres including a school, a park, and neighbourhood commercial spaces. The expansive farmlands in the west of Tehran were considered assets for the expansion of the city. Counting on these empty lands, the TMP almost tripled the city's area from 180 km² to 600 km², pushing the growth of the city westward.

²⁸² Ghaffari, *My Journey: From Anzali to Los Angeles*, 126.

²⁸³ *Ibid.*, 128.

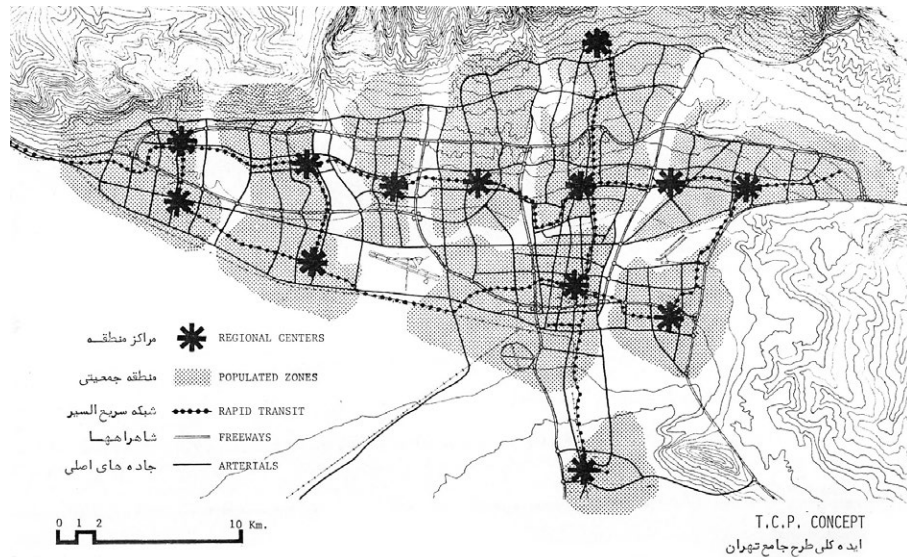


FIG. 3.7 The final proposal of the TMP indicates a rejection of the centripetal urban form. / Source: Victor Gruen and Abdolaziz Farmanfarmaian, "The Comprehensive Plan of Tehran".

Establishing new centres for activities became central to the restructuring of the urban form of Tehran [Figure 3.7].²⁸⁴ To assure the realization of the proposed linear structure, the planning team relied on the magnetic attraction of multifunctional urban centres, which would include a shopping centre, trade offices, governmental buildings, recreation facilities, and hotels.²⁸⁵ Using the lure of these modern centres of activities, the planners attempted to guide the extension of the city beyond its existing parts. The planners saw these new centres as focal points, with invaluable land filled with high-rise buildings [Figure 3.8]. The verticality of these new centres would contrast starkly with the general horizontality of the old central districts. The planning team emphasized the prompt development of Latmer, a new satellite town located at the western end of the proposed linear structure. Due to its strategic location, the planners provided detailed plans for this new satellite town. With plans for an Olympic centre, a huge recreational park, new universities, and the extension of Mehrabad airport, the satellite town of Latmer was projected to become one of the most attractive hubs of the capital, competing with the old city centre [Figure 3.9].²⁸⁶

²⁸⁴ Richard Sennett, "Boundaries and Borders," in *Living in the Endless City: The Urban Age Project by the London School of Economics and Deutsche Bank's Alfred Herrhausen Society*, ed. Deyan. Sudjic Richard. Burdett (2011).

²⁸⁵ Gruen and Farmanfarmaian, "Tehran Comprehensive Plan."

²⁸⁶ Ibid.

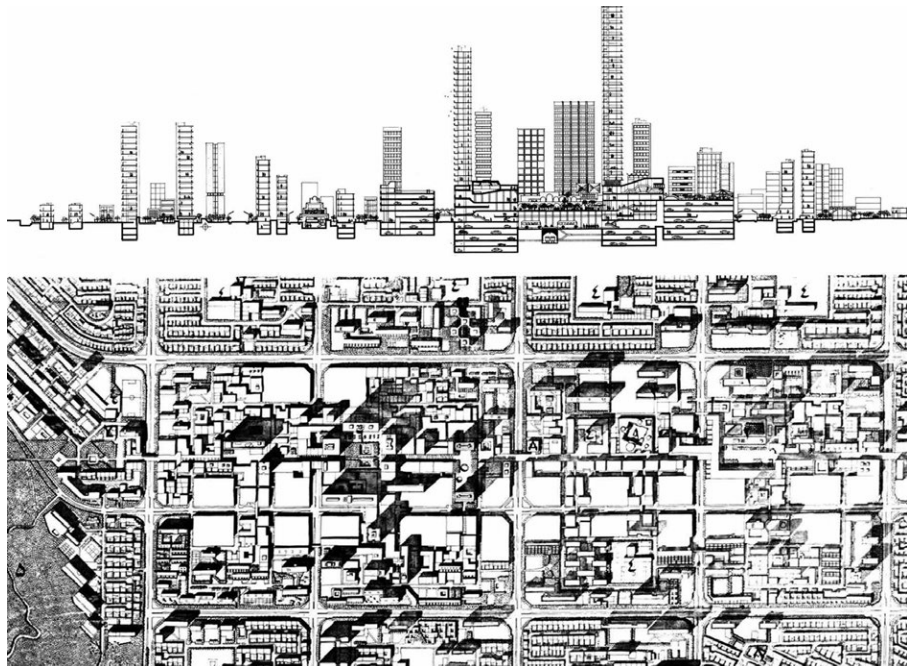


FIG. 3.8 The TMP proposal for the new centres of activity in Tehran. / Source: Victor Gruen and Abdolaziz Farmanfarmaian, "The Comprehensive Plan of Tehran".



FIG. 3.9 The TMP proposal for the development of empty stretches of land in the west of Tehran. / Source: Victor Gruen and Abdolaziz Farmanfarmaian, "The Comprehensive Plan of Tehran"

Based on a three-year close collaboration with national and international agencies and extensive research studies, the planners prepared a number of reports both in English and Persian, divided in to two phases. The first phase provided the socio-cultural and economic and physical analysis and recommendation for the future development of the city, and the second provided detailed plans and specific recommendations for the realization of the TMP. In November 1968, the first phase was approved by the HCAUP.²⁸⁷ It was at this time that Gruen travelled to Tehran for the second time to attend the presentation of the plan to the Iranian cabinet, headed by the Prime Minister Amir-Abbas Hoveyda.²⁸⁸ The participation of Gruen as a well-known planner in this formal meeting was more symbolic, to enhance the credibility of the final outcome. By the end of 1969, the second phase was completed and obtained final approval.²⁸⁹ The planning team also made one presentation to the Shah. This time Gruen did not attend the meeting as he had already retired from Victor Gruen Associates, and Iranian planners, Farmanfarmaian and Ghaffari, were in charge of presenting the plan to the Shah.²⁹⁰ The approval of the second phase came at the end of the one million dollar contract, and in turn the joint venture.²⁹¹ Farmanfarmaian hired some of urban planners of the TMP and Ghaffari returned to Victor Gruen Associates, and in 1971 he was appointed as Vice President, in charge of the planning department.²⁹²

²⁸⁷ Tehran Development Council Secretariat, *An Analysis of the Tehran Comprehensive Plan*, Technical Report, No. 1 (Tehran: Tehran Development Council. Secretariat., 1976).

²⁸⁸ Ghaffari, *My Journey: From Anzali to Los Angeles*, 128.

²⁸⁹ Ibid.

²⁹⁰ M. Jeff Hardwick, *"Creating a Consumer's Century : Urbanism and Architect Victor Gruen, 1938-1968"* (2000), 128.

²⁹¹ Ibid., 129.

²⁹² Ibid.

3.5 Local planners and the realization of the TMP

Following sudden economic changes in the early 1970s, the Plan Organization increased the budget allocated for Tehran's development projects, and intensified efforts to implement various parts of the TMP.²⁹³ Up until the early 1970s, the implementation of the TMP was largely confined to the construction of highway networks.²⁹⁴ This changed as the 1973 oil crisis brought about an unprecedented economic boom in Iran, when the country's oil revenues quadrupled in just a few months.

In order to guarantee the development and realization of large-scale urban projects by local architects and urban planners, the Plan Organization now required Iranian firms to form joint ventures with each other, rather than collaborating with foreign firms.²⁹⁵ It was at this time that Farmanfarmaian's firm merged with Reza Majd's office, making AFFA one of the biggest and busiest architectural companies in the country.²⁹⁶ It had almost 400 Iranian and foreign employees, with approximately 150 of them located in the Athens branch in Greece, working on the International Airport project in the south of Tehran.²⁹⁷ In 1975, AFFA was commissioned to envision detailed plans for the implementation of two new satellite towns that were integral parts of the TMP. Kan satellite town, in northwest Tehran with a population of 283,000, was planned to accommodate government employees of high and medium income.²⁹⁸ Lavizan satellite town, in northeast Tehran with a population of 266,000, was designed for low- and medium-income government workers.²⁹⁹

²⁹³ The Plan Organization, *The Fifth National Development Plan (1973-1978)*.

²⁹⁴ Abdolaziz Farmanfarmaian and Associates, "The New City of Lavizan," in *Phase one: Existing Condition and Conceptual Plan* (The Ministry of Housing and Urban Development, 1976), 18.

²⁹⁵ Dariush Borbor, (2019).

²⁹⁶ Edward Helgeson, ed. *Iran-U.S. Claims Tribunal Reports*, vol. 31 (Cambridge University Press, 1995), 74.; Abbas Milani, *Eminent Persians: The Men and Women Who Made Modern Iran, 1941-1979: In Two Volumes*, vol. 1 (Syracuse University Press, 2008), 149.

²⁹⁷ "Farmanfarmaian Az Tarhe Jame Tehran Migoyad," [Farmanfarmaian Says on Tehran's Master Plan.] *Shahrnegar* 36 (2006).

²⁹⁸ Abdolaziz Farmanfarmaian and Associates, "The New City of Kan," in *Phase two: Detailed Plan* (The Ministry of Housing and Urban Development, 1976).; and Costello, "Tehran."

²⁹⁹ Abdolaziz Farmanfarmaian and Associates, "The New City of Lavizan."

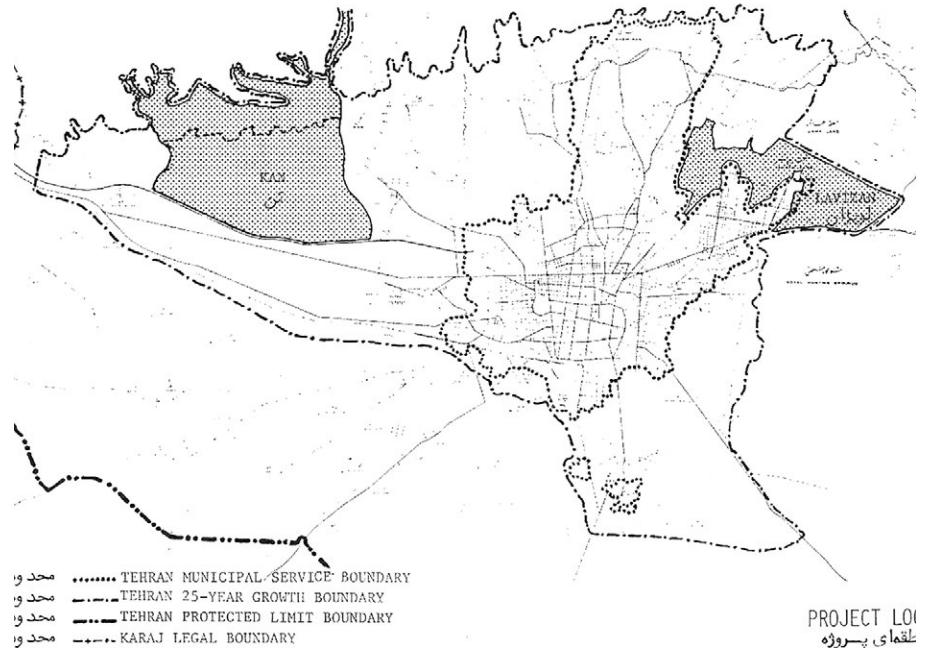


FIG. 3.10 The location of two new satellite towns, Kan and Lavizan. / Source: Abdolaziz Farmanfarmaian and Associates, “The New City of Lavizan”.

Figure 3.10 shows the location of the two towns in relation to the Tehran metropolitan region. The underlying goal was to establish the new towns as “strong regional magnets”, realizing the TMP’s concept of linear growth along an east-west axis.³⁰⁰

To elaborate on the plan for the satellite towns, Farmanfarmaian invited Ghaffari, the former director of the TMP, to join the office and establish a Planning Department to head these large-scale projects.³⁰¹ Ghaffari eagerly accepted the position and left Gruen Associates. This was a good time for him to make such a move as Gruen Associates was feeling the effects of global economic crisis. In contrast to the booming economy in Iran, the 1973 oil crisis brought an economic downturn to many developed countries worldwide, particularly the United States. The U.S. federal government decided to cut off loans to developers of new towns and new community projects and as a result, many urban projects in the United States were halted, which had dramatic effects on American architectural and planning firms.³⁰²

³⁰⁰ Ibid., 28.

³⁰¹ Ghaffari, *My Journey: From Anzali to Los Angeles*.

³⁰² Brent D Ryan, *Design after Decline: How America Rebuilds Shrinking Cities* (University of Pennsylvania Press, 2012), 6.

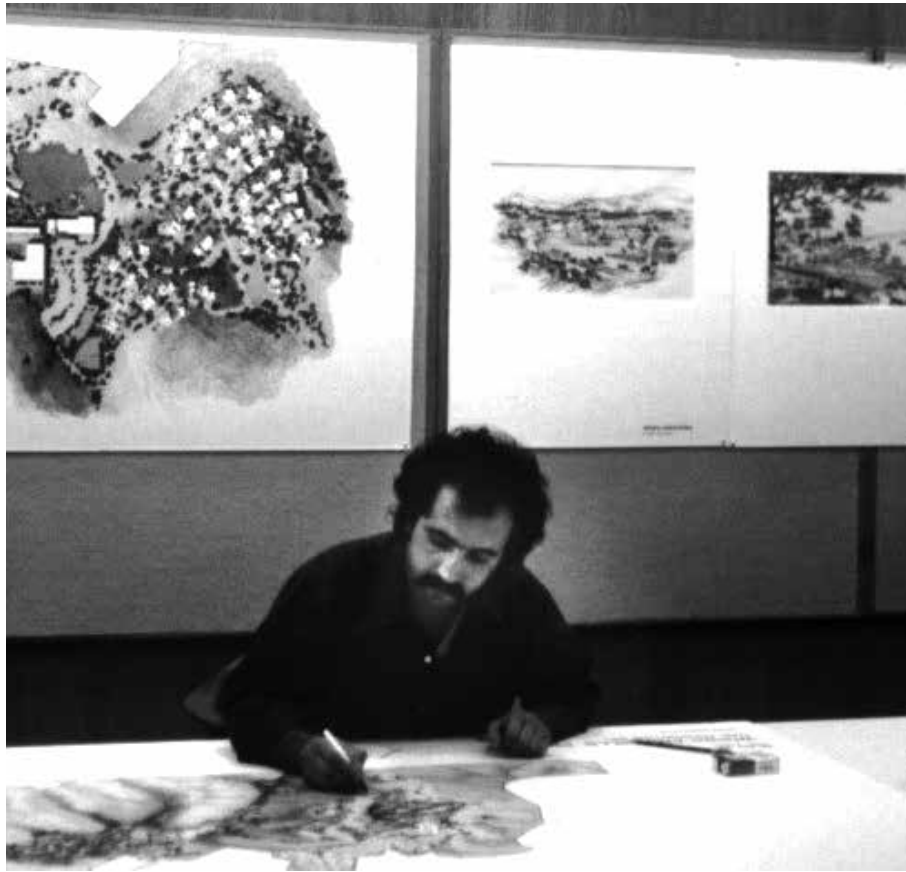


FIG. 3.11 Ferydoon Rassouli working on the new satellite town of Lavizan. / Source: Ferydoon Rassouli.

To establish the Planning Department in AFFA, Ghaffari invited Iranian planners Ferydoon Rassouli and Fereshteh Bekhrad, who were among those involved in the TMP [Figure 3.11]. Soon after its foundation, AFFA's Planning Department had a staff of 20, including mostly Iranians, with a few Americans.³⁰³ As with the TMP, basic units of neighbourhood and community provided the main structural order for all developments in Lavizan and Kan. A combination of transportation facilities, a mass transit system and a freeway network linked them with the rest of the city.³⁰⁴ All communities were clustered around a regional centre, comprising of commercial and recreational facilities, office buildings and high-rise apartments [Figure 3.12].³⁰⁵

³⁰³ Ghaffari, *My Journey: From Anzali to Los Angeles*.

³⁰⁴ Abdolaziz Farmanfarmaian and Associates, "The New City of Lavizan," 14.

³⁰⁵ *Ibid.*



FIG. 3.12 The urban structure of the new town of Kan in the west of Tehran. / Source: Abdolaziz Farmanfarmaian and Associates, "The New City of Kan".

To further proceed with realising the TMP, the municipality began to take possession of land to construct the new satellite towns of Kan and Lavizan, districts that were occupied by squatters at the time.³⁰⁶ As there was no plan to relocate those who would become homeless, the land preparation procedure resulted in serious conflict between the officials and those living there. In area where Lavizan was planned there was Shemiran Nu, a shantytown with a low-income population of nearly 60,000. Regardless, in 1978 Tehran's mayor, Gholamreza Nikpey ordered its demolition. According to Rassouli, who led the Lavizan project, residents resisted the officials who tried to demolish their homes by setting fire to Meidan Jaleh, a nearby square. The Shah's army intervened, open-firing on the 20,000 protesters in Meidan Jaleh, killing an estimated 400-900 people and wounding 4,000.³⁰⁷ This "sea of blood between the Shah and the people" led to further protests against the Shah's top-down modernization project, and in turn, the TMP.³⁰⁸

³⁰⁶ Fereydoon Rassouli.

³⁰⁷ Elizabeth Shakman Hurd, *The Politics of Secularism in International Relations*, vol. 112 (Princeton University Press, 2009), 75.

³⁰⁸ Abrahamian, *Iran between Two Revolutions*.

3.6 Rising criticism of the TMP

To meet the increasing demands of housing in Tehran, the TMP almost entirely relied upon market-led development and privatization of housing.³⁰⁹ This was in contrast to the attempts of the former state to alleviate Tehran's affordable housing crisis. As discussed in the Chapter 2, during the early post-war decades, the State's endeavour focused on the formalisation of spontaneous settlements by constructing of several low-cost housing projects in Tehran's peripheries. In fact, the TMP liberalized the State from pursuing its active program of low-cost housing. In order to realize the privatisation of low-cost housing, the TMP encouraged private housing sectors through state financial support together with the provision of worker accommodation by private industries.³¹⁰ Private developers could benefit from state financial support through tax exemption, long-term and low-interest loans, a decrease in the cost of land and other such advantages.³¹¹ As a result, the TMP shifted the state-led low-cost housing strategy towards unguided private sector housing development. Privatization of housing in Tehran and the subsequent land speculation led to a dramatic surge of house prices, exacerbating the housing crisis in the city.

The TMP's advocated housing policy was tailored to higher income consumption patterns.³¹² Although the financial facilities proposed by the State encouraged private developers to invest in housing for the privileged, public authorities chose to intervene less and less in housing for the disadvantaged.³¹³ In this market-led system of housing, private housing firms profited from the government financial support if they built mass housing, with ten or more stories.³¹⁴ As a result, private housing development shifted towards luxurious high-rise buildings in outer areas. Towers of ASP, Eskan, and Ekbatan are prominent examples which were constructed in the early 1970s [Figure 3.13].

³⁰⁹ Tehran Development Council Secretariat, *An Analysis of the Tehran Comprehensive Plan*, 43.

³¹⁰ Victor Gruen and Abdolaziz Farmanfarmaian, "Kholsae Va Moghadameh [Summary and Introduction]," in *Comprehensive Plan for Tehran (196-1969)*, 102.

³¹¹ Ibid.

³¹² Tehran Development Council Secretariat, *An Analysis of the Tehran Comprehensive Plan*, 43.

³¹³ Madanipour, *Tehran: The Making of a Metropolis*, 125.

³¹⁴ Yasmine Tayab, "L'habitat Collectif a Teheran, Produit De Luxe Ou Logement Social? (Collective Housing in Teheran, Luxury Product or Social Housing?)," in *Le Monde Des Grands Ensembles*, ed. Frédéric Dufaux and Annie Fourcaut (2004).



FIG. 3.13 ASP residential complex in the west of Tehran. / Source: Art and Architecture, number 47-48.

Despite the fact that Tehran suffered from a shortage of affordable housing, these luxurious towers were built for the privileged, giving rise to the isolation and immobility of the urban poor, sequestering them to the increasingly industrial south. The north part of the city was designated as high income and low-density; the city's middle belt as a middle-income zone with a middle to high density, benefitting from the central rapid transit system; and the southern parts of the city, where most of the industry was, were allocated to low-income families. Operating as inflexible boundaries, the linear system of transportation sharply segregated social levels and interrupted north-south flows.

Soon after realization, socio-spatial segregating effects of the TMP provoked criticism of local and foreign experts. Although the TMP's proposal for the development of new city centres never reached the implementation phase, the principle of socially segregated neighbourhoods had repercussion for the physical and social re-organization of the city. The idea of making Tehran an agglomeration of self-contained urban cells greatly influenced the design and construction of a series of residential neighbourhood projects known as Shahrak such as Shahrak Ekbatan, Shahrak Peykan Shahr, Shahrak Farahnaz (later on Omid), Shahrak Lavizan, Shahrak Apadana, Shahrak Gharb, all examples of inward-looking neighbourhoods, rapidly constructed throughout the city in the 1970s.³¹⁵ These gated communities

³¹⁵ Mohamad Sedighi, "Megastructure Reloaded: A New Technocratic Approach to Housing Development in Ekbatan, Tehran," *ARENA Journal of Architectural Research* 3, no. 1 (2018).

were allocated to specific social groups whose members shared almost identical economic and employment backgrounds. For instance, Shahrak Peykan Shahr was designed to accommodate the families of car industry workers, Shahrak Farahnaz was initially planned for army families, and Lavizan was planned for low- to medium-income groups. By concentrating on urban activities and facilities clustered in the centre of these Shahraks, the planners overlooked the significance of neighbourhood boundaries as contact zones and neglected to design transition points between one community and another. These solid boundaries around socially segregated neighbourhoods would limit social interaction. Different social groups were physically confined to their own neighbourhood, denied everyday contact with other social classes. The inner protected heart of socially homogenous communities indeed reinforced cultural identities of each social group but also isolated them from the city as a whole.³¹⁶

In 1975 Moira Moser-Khalili received a grant from the Women Organization of Iran, which was headed by Empress Farah Pahlavi, to carry out a study on the TMP [Figure 3.14]. She was an American architect who worked and lived in Tehran during the 1970s with her Iranian husband, Nader Khalil. As one of the editors of the well-known Iranian magazine *Art and Architecture*, she examined Tehran's urban life with particular attention to the lives of women and the impact of the TMP on their lives and social mobility.³¹⁷ The rapid industrialization in the mid-1970s, and subsequent need for a larger workforce, revolutionized the participation of women in productive social and economic activities. The prime minister at the time, Amir-Abbas Hoveida, stressed the key role that women had in Iran's rapid development. He stated that "our economy must expand quickly, but our big bottleneck is labour shortage...we should tap female labour resources".³¹⁸ Highlighting the 1970s feminist movement in Iran and the increasing numbers of working women, Moser-Khalili criticized the constraints on women's mobility and social interaction imposed by the TMP.³¹⁹ She studied various ways to facilitate the active presence of women in the city that involved optimising mobility for diverse social classes, including both upper-class women who might spend more time in shopping centres and middle- and lower-classes who needed to better integrate in to society in terms of social and economic activities.

³¹⁶ Richard Burdett et al., *Living in the Endless City : The Urban Age Project by the London School of Economics and Deutsche Bank's Alfred Herrhausen Society* (London: Phaidon Press Ltd, 2011), 331.

³¹⁷ Moira Moser-Khalili, "Urban Design and Women's Lives," (Tehran: Plan organization central library, 1975).

³¹⁸ *Ibid.*, 8.

³¹⁹ *Art and Architecture* magazine, no 35-36 (1976).



FIG. 3.14 Moira-Moser Khalili, one of the critics of the TMP. / Source: Art and Architecture, number 36-36, 1976.

Moser-Khalili contended that the TMP's segregation by income would not “allow for choice of lifestyle, which choice itself is one of the most valued amenities accompanying wealth”.³²⁰ She argued that women of middle-income families, the families of white-collar workers, have a great degree of mobility due to their location in the linear centre, adjacent to the rapid transit stops. Women of low-income groups with increasing integration into the urban economy and a growing need for social mobility were isolated by their location next to southern industries, far from the central linear rapid transportation routes. She believed that “the linear circulation arteries conveniently divided the city into three elongated income strata”.³²¹ To ease the mobility of various social groups, Moser-Khalili proposed removing the emerging spatial boundaries at both metropolitan and neighbourhood scales.

³²⁰ Moser-Khalili, “Urban Design and Women’s Lives,” 107.

³²¹ *Ibid.*, 60.

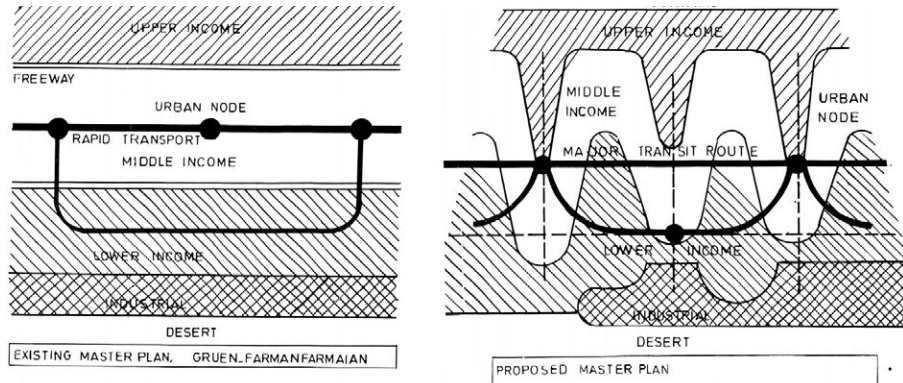


FIG. 3.15 The left image shows how the linear structure proposed by the TMP segregated social levels, and the right image shows the concept of 'Interlocked Fingers' proposed by Moira Moser-Khalili to integrate different social groups. / Source: Moira Moser-Khalili, *Urban Design and Women's Lives*, Tehran: Women's Organization of Iran, 1975.

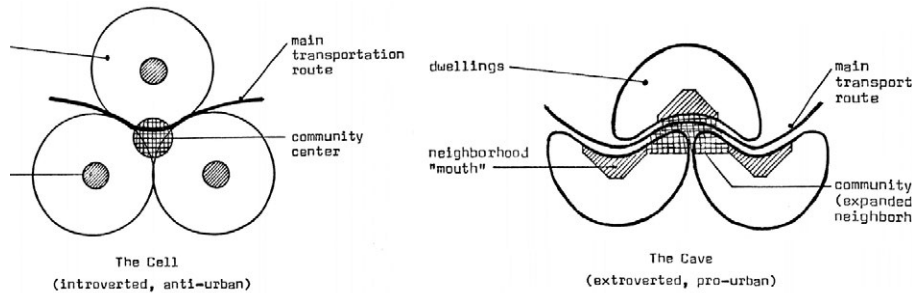


FIG. 3.16 The left diagram shows the segregating effect of inward-focused communities or 'the cells', and the right diagram shows Moira Moser-Khalili's concept of outward-looking communities or 'the caves'. / Source: Moira Moser-Khalili, *Urban Design and Women's Lives*, Tehran: Women's Organization of Iran, 1975.

At the metropolitan level, she proposed the concept of "interlocked fingers", which was an attempt to blur emerging boundaries between social classes by bringing them all closer to the main linear centre of urban activities [Figure 3.15]. The "interlocked fingers" aimed to liberate not only the growing number of low-income women workers living in Tehran, but also upper-income women for whom the remoteness of their neighbourhoods would discourage them from pursuing a career or entering into the life of the city. Moser-Khalili emphasised that the rising mobility of low-income women would lead them to better job opportunities and, in turn, social growth.

At a neighbourhood level, Moser-Khalili sought to locate points at the edges between different economic communities to open the rigid gates between them. In so doing, She suggested outward-focusing neighbourhoods, or as she named them “caves”, with facilities including shopping malls and child-care centres located at the “mouth” [Figure 3.16]. She used this analogy in reference to the historic cave concept of neighbourhood “where interface between families and outside world occurs at the mouth of the cave”.³²² In such neighbourhoods, social interactions and exchange between various communities is not only possible but actively encouraged as neighbourhoods are no longer self-contained, sharing urban amenities with neighbouring communities. Moser-Khalili introduced this model as an alternative to inward-focusing classic neighbourhood cells with facilities clustered in the centre.

*The contemporary urban neighbourhood should focus not on a central nucleus, but on a mouth, an access area where local activities occur at an interface between the larger city and areas of individual dwellings. In terms of the working women, their routes between home and job would preferentially lead through this entry into the neighbourhood dwelling area. It is here that convenience stores, child-care centres, residence for elderlies, and social welfare services would be located. Not only would these facilities be convenient for any parents on the way to or from work, but also those adults staying at home would assuredly be drawn in to contact with the larger urban environment when patronizing facilities so located at the mouth of the cave.*³²³

Moser-Khalili presented her urban model at the International Women’s Year Conference in Mexico City in 1975, and a year after at the International Congress of Women Architects held in Iran. With the support of the Centre for Housing, Building, and Planning at the United Nations to study the needs of developing countries, Moira Moser-Khalili discussed her urban model at Habitat 76 held in Vancouver in 1976, British Columbia, where she introduced her urban model as a prototype applicable to different contexts.³²⁴

According to Tehran’s increasing urban challenges, in collaboration with Harvard Institute for International Development, the Tehran Development Council (TDC) was formed in 1975. Directed by Iranian Architect-planner Cyrus Ocia, the main objective of the council was to evaluate the TMP and supervise its implementation.³²⁵

³²² “Woman’s City Plan for Working Women,” *progressive Architecture* 1975.

³²³ Moser-Khalili, “Urban Design and Women’s Lives,” 60.

³²⁴ “Woman’s City Plan for Working Women.”

³²⁵ Eric Pacejune, “Tehran Projects Face Challenges,” *New York Times*, June 6 1976.

Therefore, an in-depth assessment of the TMP was undertaken in 1976 to determine which parts were still viable and could be carried out with only minor modification.³²⁶ According to the analysis of the TDC, the TMP was found to be weak in the areas of social, economic and administrative programs.³²⁷ In terms of housing strategies, TDC's report highlighted the incorrect prediction of the TMP regarding increased family incomes and decrease in the number of low-income families. Due to these predictions, the major focus of the plan was on high- and middle-income families. The reality was thoroughly different. According to the TDC's statistics the income distribution was dramatically exacerbated between 1965 and 1972. Thus, the TDC suggested the urgent revision of the TMP in order to meet the needs for low-income housing and to improve public services for the poor districts of the capital.³²⁸

3.7 Conclusion

Engaging American and European experts in the long-term procedure of conceptualizing the TMP grew out of a local policy to institutionalize a modern planning regime compatible with global standards, whilst still nurturing local expertise. Through facilitating local-foreign collaborations, policy makers were optimistically hoping to create a vernacular planning regime by learning from foreign professionals. Such cooperation provided Iranians with an opportunity to establish a modern planning system in a country with no long-standing tradition of planning. Discovering the complex nexus between various local and international planning agencies and the transformative role of local planners in conception, formation and realization of the TMP reveal that Victor Gruen served as a figurehead who intervened little in the actual planning process. This chapter recognizes the critical role played by Iranian planners, particularly Fereydoon Ghaffari, in directing an international team and pioneering a modernist and technocratic culture of urban planning in Iran.

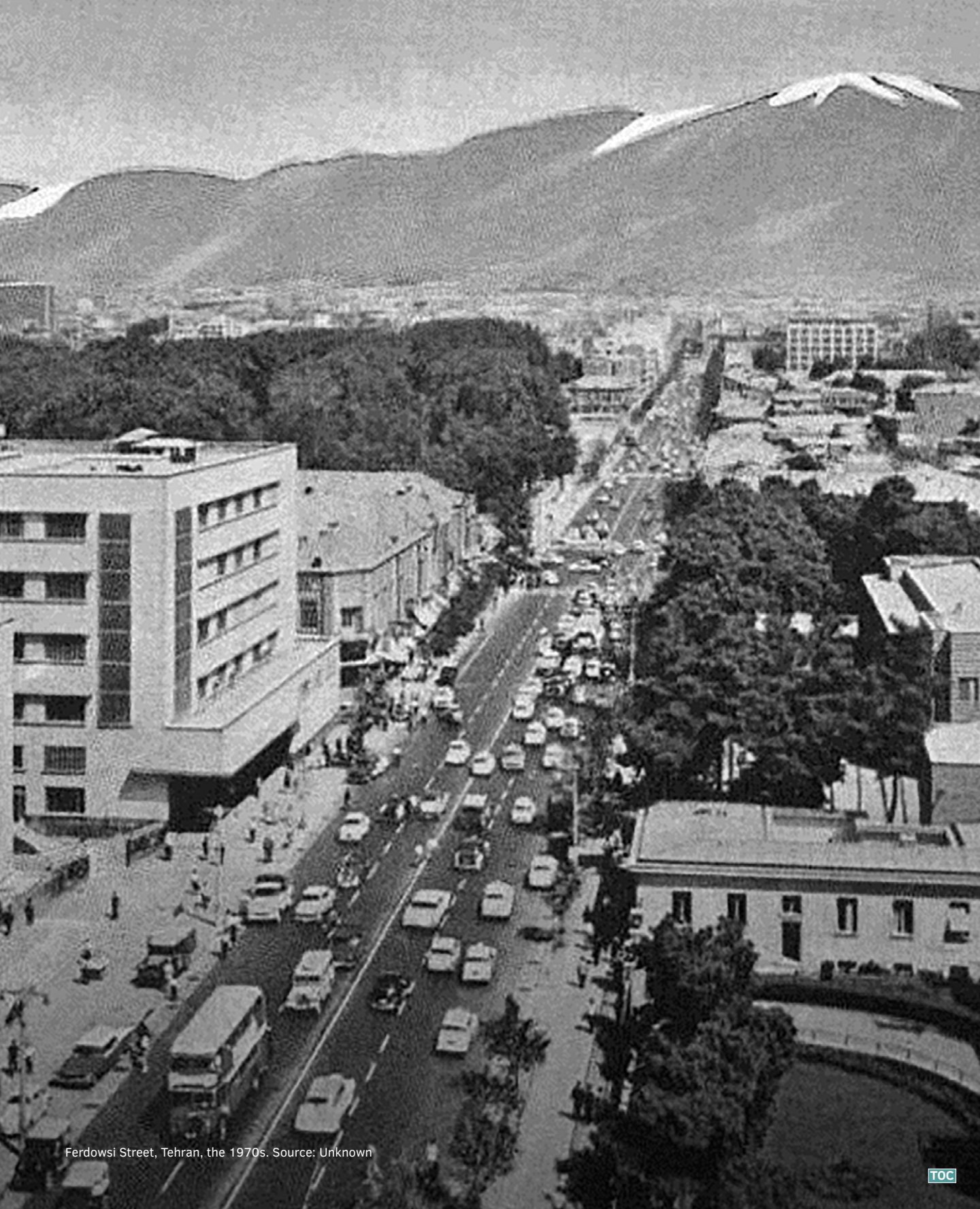
³²⁶ Tehran Development Council Secretariat, *An Analysis of the Tehran Comprehensive Plan*.

³²⁷ Ibid.

³²⁸ Ibid.

They were architects and planners, most of whom graduated from prestigious American and European universities, all bringing different perspectives to the project, having been influenced by the various countries in which they completed their training. They were knowledgeable not only about cutting-edge foreign planning techniques, but also changing local conditions.

Negotiations and conflicts between the planning team and city authorities highlight the significant role of local planners in adjusting Gruen's urban model to fit a particular conceptual, geographical and environmental framework. Acknowledging Gruen's concept of grand multifunctional centres, the planning team altered Gruen's original urban model to accommodate changing local conditions of Tehran. Gruen's Cellular Metropolis of Tomorrow, with ten satellite towns as living cells surrounding a centrally located mega-centre, became the framework for the TMP. However, the socio-political disorder of the old central core of the city, as well as a huge demand for city growth, necessitated the transformation of this model into a linear version which could flexibly host the city's potentially unlimited future growth. This chapter also illustrates how the TMP's development strategies towards the privatization of the housing market resulted in a continual decline in the quality and amount of low-cost housing in the city. The subsequent severe lack of low-cost housing, along with an unpredicted increase in Tehran's population shortly after the approval of the plan, challenged the validity and effectiveness of the TMP. In the early 1970s, the city's inability to meet the housing demands resulted in the formation of squatter settlements. The TMP's inefficiency compelled the Plan Organization to invite other international experts to evaluate and re-think the plan. The next chapter provides an in-depth discussion in to why and how Constantinos Doxiadis was selected by the Plan Organization as an advisor to review and evaluate the TMP.



Ferdowsi Street, Tehran, the 1970s. Source: Unknown

4 Foreign Planners as Advisors

The Rhetoric of Tehran Urban Growth (1970-1973)

The First Tehran Action Plan (TAP)

4.1 Introduction

Shortly after the approval of the TMP by the High Council of Architecture and Urban Planning, the city authorities lost their faith in its efficiency. The planners' inaccurate estimations necessitated the revision of the development objectives of the TMP. Thus, the Plan Organization invited a new foreign planning team to evaluate the viability of the plan, considering the changing context of Tehran. The involvement of foreign planners in Tehran urban projects as advisors and consultants was a new phase in the process of transnationalism. Unpredicted growth in Tehran's population in the early 1970s was one of the most important factors which hindered the realization of the TMP. A sudden demographic shift in Tehran's population led to an alarming increase in squats and informal settlements in and around the city, which intensified the already existing socio-spatial disorder and in turn political-economic tensions within the city.³²⁹ To manage the housing crisis and urban sprawl,

³²⁹ Zahra Homa Mosleh, "Rural-Urban Migration and Urban Poverty: The Case of Tehran, 1962-1978" (California State University, 1983).

in 1972 the Plan Organization commissioned Doxiadis Associates to work on revising the TMP and prepare the first Tehran Action Plan (TAP) in collaboration with local planning agency EMCO consulting engineers. Greek planner Constantinos Doxiadis was an international celebrity with reputation in regard to national housing programs and managing urban sprawl.³³⁰ Advocating his concept of “Dynapolis”, a dynamically expanding city, the planning team proposed a linear urban structure for Tehran which could grow exponentially and activate the local economy while accommodating the rising population. Although the TAP remained bounded to Doxiadis’s urban model in its totality, in some particular details the plan addressed very important local aspects in Tehran urban development and mirrors the changing socio-physical reality of the city in the early 1970s.

This chapter investigates how the TAP negotiated unfettered Tehran’s urban growth not merely as a design principle, but rather as an engine for economic development and for resolving socio-spatial segregation in the capital. It explores the conception of the TAP, its representation, and eventually its rejection by the city authorities. Before diving to the underlying principles of the plan, this chapter first examines how Doxiadis’s collaboration with the Ford Foundation paved the way for his long-term planning activities in Iran. It then explains how Doxiadis’s futurist urban model, influenced by the rhetoric of urban growth, first appealed local authorities. Then, by contextualizing his model in Tehran, this chapter unravels how the TAP was developed based on Doxiadis’s generic model while responding to particular local specificities of Tehran. Although the TAP was envisioned within just three months and was put aside shortly after its provision, what makes it valuable for study is the way the planners approached Tehran’s urban challenges. The TAP was a wake-up call for re-visiting Tehran’s urban problems, not only from a local scale, but more importantly from regional and national perspectives. Through further analysis of the changing conditions in Tehran in the mid-1970s, this chapter discusses how the TAP was perceived by local authorities and politicians and why it was eventually rejected by locals.

³³⁰ Rosemary Wakeman, *Practicing Utopia: An Intellectual History of the New Town Movement* (Chicago: University of Chicago Press, 2016), 12.

4.2 Tehran urban sprawl and rising social tensions

In the early 1970s, the situation in Tehran mirrored the growing social and political tensions caused by the 1963 White Revolution, launched by Mohammad Reza Shah under the direct influence of John F. Kennedy's presidency.³³¹ As discussed in Chapter 3, the White Revolution, known as the Shah's top-down modernization project, embraced far-reaching social and economic reforms. After almost one decade of the implementation of these reforms, the gulf between the State and society widened, and socio-political tensions in the capital reached a breaking point.³³² By targeting ulema (traditional religious leaders) and bazaaris (traditional merchants), the White Revolution's reforms agitated and mobilized the traditional ruling classes against the Shah.³³³ Ulema criticized the Shah's dependency to the United States and equated his top-down socio-economic reforms with cultural imperialism. They developed their own theory that in order to preserve Iranian cultural authenticity, Islam must become the basis for government rule.³³⁴ Aside from ulema, the rising middle-class and social elites wanted democratic reforms, aspiring to free participation in government affairs and freedom of press.³³⁵

As a result of rising tensions, the Shah's ideological fluidity gave way to political radicalism and ruthless dogma.³³⁶ Subsequently, anti-state activists were arrested and in 1971 the number of political prisoners dramatically increased.³³⁷ In spite of the fact that the Shah advocated capitalist ideology, he did not have faith in the Western conception of democracy.³³⁸ He contended that "we do not believe

³³¹ Ervand Abrahamian, *A History of Modern Iran* (Cambridge: Cambridge University Press, 2008), 148.

³³² Ibid.

³³³ See: Ali Mirsepassi, "The Crisis of Secular Politics and the Rise of Political Islam in Iran," *Social Text*, no. 38 (1994). and Kamali Masoud, "Multiple Modernities and Islamism in Iran," *Social Compass* 54, no. 3 (2007).

³³⁴ April R. Summitt, "For a White Revolution: John F. Kennedy and the Shah of Iran," *The Middle East Journal* 58, no. 4 (2004), 570.

³³⁵ Ibid.

³³⁶ Ali M. Ansari, *Modern Iran since 1921: The Pahlavis and After* (London: Pearson Education, 2003), 180-81.

³³⁷ Ibid., 180.

³³⁸ Ibid., 178-79.

democracy means anyone should be free to act against national interests and moral values and traditions. From our standpoint democracy means respecting human rights and individuals”.³³⁹

The socio-political tensions in Tehran were intensified by severe housing shortage resulting from the dramatic demographic growth in the capital. At the beginning of the 1970s, Tehran was transitioning into a cosmopolitan capital that housed many international companies, particularly major oil companies and branches of the United Nations Department.³⁴⁰ The establishment of embassies from around the world, international banks, airline agencies and hotels further increased the global status of Tehran.³⁴¹ The rising importance of the capital as an international cosmopolitan centre, in line with the implementation of the national 1962 land reforms, brought about unprecedented migration to the capital.³⁴² Consequently, Tehran’s population radically surged from 2.8 to 4.2 million from 1966 to 1972 [Figure 4.1].³⁴³

The massive influx of the population and the constant demand for housing construction gave rise to the mushrooming of real estate agencies in Tehran, subsequent land speculation, and in turn, the dramatic increase in land price.³⁴⁴ In 1969, Tehran hosted 2,751 real estate agents echoing the crucial feature of its economic scene.³⁴⁵ The further realization of the TMP was largely hindered by rapid land speculation in Tehran.³⁴⁶ The price of land in Tehran increased 250 percent between 1966 and 1971, with a rise of 40 percent between March and June of 1973 alone.³⁴⁷ As a reaction to the unpredicted growth of the city and inefficiencies of the TMP’s regulations, the Art and Architecture magazine wrote:

³³⁹ Ibid.

³⁴⁰ Bahrambeygui, “Tehran: An Urban Analysis,” 108-16.

³⁴¹ Ibid.

³⁴² Ibid., 114.

³⁴³ Doxiadis Associates International, “Tehran Action Plan,” (Tehran: the Plan Organization 1972).

³⁴⁴ Bernard Hourcade, “Urbanisme Et Crise Urbaine Sous Mohammad-Reza Pahlavi,” in *TéHéRan, Capitale Bicentenaire*, ed. Chahryar Adle and Bernard Hourcade (Paris; Téhéran: Institut français de recherche en Iran ; Diff. Peeters, 1992), 212.

³⁴⁵ Bahrambeygui, “Tehran: An Urban Analysis,” 112.

³⁴⁶ Nader Khalili and Moira Moser Khalili, *Iran, Yesterday, Today, Tomorrow* (American Institute of Architects, 1973).

³⁴⁷ Ibid.

The master plan may be behind in its schedule, but the population growth which the master plan was to serve has not fallen behind. Tehran's problems may be temporarily held in check, but they cannot be solved by restricting the city limits and banning construction beyond those limits. Like trying to cap a geyser, the pressure simply builds up inside.³⁴⁸

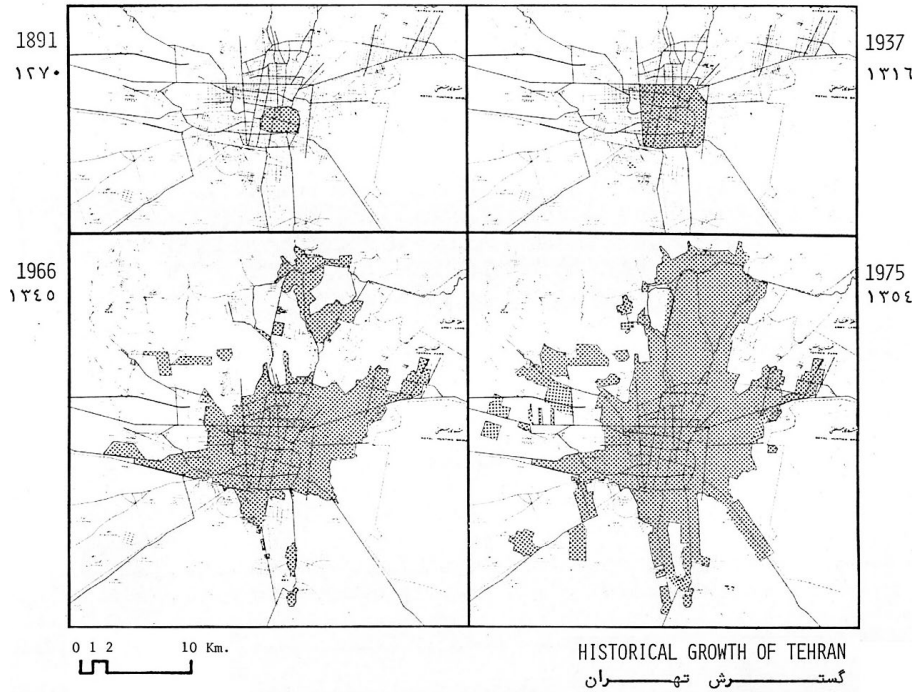


FIG. 4.1 Chronological growth of Tehran. / Source: Abdolaziz Farmanfarmaian and Associates, "The New City of Kan".

³⁴⁸ Ibid.



FIG. 4.2 The size and distribution of squatter settlements in Tehran, according to the research done by the Tehran Social Research Institute in 1972. / Source: Zahra Homa Mosleh. "Rural-Urban Migration and Urban Poverty: The Case of Tehran, 1962-1978." California State University, 1983.

The provision of housing and urban services for the flood of newcomers concerned the local authorities and became the main planning challenge of the early 1970s. The privatization of housing and the lack of state support for low-income housing triggered the fast-paced development of squatter settlements and slum areas as alternatives dealing with housing shortage.³⁴⁹ Shahbaz Jonoubi, Javadieh, Naziabad, and Biseem-e Najafabad are among many informal neighbourhoods that were growing in Tehran in the early 1970s.³⁵⁰ To tackle the housing problem for the first time in 1971, the Ministry of Housing and Development sponsored a symposium on Housing and City Planning in Tehran.³⁵¹ A year later in 1972, Tehran Social Research Institute (TSRI) conducted a survey studying size and distribution of squats in Tehran [Figure 4.2].³⁵²

According to TSRI's studies, the number of squatter residences in Tehran rose 20 percent in 1971.³⁵³ As a result, the Plan Organization stressed the urgency of housing crisis in the capital, and through the Fourth National Development Plan (1968-1972), underlined that "the provision of low-cost housing may serve to propagate social justice and reduce the relative gap between various classes of the society".³⁵⁴ In this regard, the Plan Organization set up a number of studies focusing on the issue of housing shortage at urban and national scales, in which Doxiadis performed a significant role.

In 1972 the Plan Organization invited Doxiadis Associates to study the changing condition of Tehran, its uncontrolled urban sprawl and rising socio-economic tensions within the city. As part of the advisory team of the Ford Foundation, Doxiadis first visited Iran in 1957 to work on a housing program in the oil-rich province of Khuzestan.³⁵⁵ In 1954, by invitation of the Plan Organization, the Ford Foundation began to contribute to "rural improvement programs, vocational training, educational assistance, and statistical surveys" in Iran.³⁵⁶

³⁴⁹ Zahra Homa Mosleh, "Rural-Urban Migration and Urban Poverty: The Case of Tehran, 1962-1978" (California State University, 1983), 49.

³⁵⁰ Asef Bayat, "Tehran:Paradox City," *NEW LEFT REV* 66 (2010).

³⁵¹ "Symposium on Housing and City Planning," *Art and Architecture* 1971.

³⁵² Mosleh, "Rural-Urban Migration and Urban Poverty: The Case of Tehran, 1962-1978," 54.

³⁵³ Ibid.

³⁵⁴ Sima Mahdizadegan Mohammad Ali Abdi, Farzaneh Kordi, *Shesh Dah-E Tarahi Maskan Dar Iran (1327-1387)* [six decades of planning housing in Iran] (Tehran: Building and Housing Research Centre, 2017).; The Plan Organization, *The Fourth National Development Plan (1968-1972)*, 249.

³⁵⁵ Constantinos Apostolou Doxiadis and Alexandros-Andreas Kyrtis, *Constantinos A. Doxiadis : Texts, Design, Drawings, Settlements* (Athens: Ikaros, 2006), 372.

³⁵⁶ Brew Gregory, "Economic Expertise and Rural Improvement in Iran, 1948-1963," (Rockefeller Archive Center, 2017), 5.

The collaboration of the Ford Foundation with the Iranian government paved the way for the early work by Doxiadis in the country. Perhaps, Doxiadis's dual claim to have “ scientific legitimacy and cultural sensitivity” made him reliable to Iranian authorities, and why he was invited to undertake a number of subsequent major planning projects in Iran.³⁵⁷ The study on the touristic development of the Caspian Sea coast in 1967 (in collaboration with his Iranian joint venture, EMCO consulting engineers) and the provision of Abadan Master Plan in 1977 (in collaboration with his Iranian joint venture, DAZ consulting architects) are among Doxiadis's significant interventions in the Iranian planning system.³⁵⁸

Doxiadis's collaborations with the Plan Organization from 1957, along with his international reputation as an expert in national housing programs, resulted in his designation in 1972 to envision the “Iran Five-Year National Development Program for Housing and Related Facilities”; “Low-income Communities in Tehran: Managerial and Administrative Aspects”; “Low-income Communities in Tehran: Physical Planning Aspects”; “The Tehran Action Plan” which was presented with another report entitled “The Need For a Realistic Tehran Action Program”. These projects extended Doxiadis's influence upon national housing policies and regional urban development in Iran. To provide these reports, Doxiadis closely collaborated with the Plan Organization and various local organizations including the High Council of Urban Development, the Tehran Municipality, the Tehran Social Research Institute, the Tehran Statistic Centre, the Ministry of Water and Power and the Ministry of Economy. He also worked with local architects and planners, in particular Iraj Etesam, influential educator, practitioner, and policy-maker in urban planning, and Akbar Khorasanizade, both from EMCO Consulting Engineering.³⁵⁹

³⁵⁷ Panayiota Pyla, “Back to the Future: Doxiadis's Plans for Baghdad,” *Journal of Planning History* 7, no. 1 (2008).

³⁵⁸ “The Caspian Sea Coast: Study on the Touristic Development,” *Art and Architecture* 1970.

³⁵⁹ Ali Madanipour, “The Limits of Scientific Planning: Doxiadis and the Tehran Action Plan,” *Planning Perspectives* 25, no. 4 (2010).

4.3 Doxiadis and his concept of unlimited urban growth

Doxiadis began his professional career with post-war reconstruction and development projects in Greece, and then in other European countries. In 1953, he established his private firm of Doxiadis Associates, which soon became an international planning firm, with the main headquarter in Athens and offices in over twelve countries.³⁶⁰ In the mid-1950s, his successful collaboration with American aid institutions in post-war reconstruction projects in Greece paved the way for his close connection to the Ford Foundation and its academic joint venture, the Harvard Advisory Group.³⁶¹ The Ford Foundation was one of the largest American philanthropic institutions concerned with the urban affairs of developing countries, conducting development programs in various fields ranging from industry to agriculture.³⁶² Between 1951 to 1981 the Ford Foundation extended its activities outside the United States, directing three quarters of its investments to developing countries.³⁶³ To guarantee the success of these projects, the Ford Foundation closely collaborated with prestigious American universities of Harvard and MIT, establishing development programs in the various fields of “industry, agriculture, technical education, and knowledge transfer”.³⁶⁴ Indeed, urban planning became an inevitable part of the Ford Foundation’s programs.³⁶⁵ In the mid-1950s the Foundation funded Greek urban planner Constantinos Doxiadis as an urban expert to undertake urban development research and projects.³⁶⁶ He was intimate with the president of the Ford

³⁶⁰ Deborah Antoinette Middleton, “Growth and Expansion in Post-War Urban Design Strategies: C.A. Doxiadis and the First Strategic Plan for Riyadh Saudi Arabia (1968-1972)” (Georgia Institute of Technology, 2009), 5.

³⁶¹ Lefteris Theodosis, “Victory over Chaos? Constantinos A. Doxiadis and Ekistics 1945-1975” (2015), 4.

³⁶² Tom Avermaete, “The Ford Foundation’s Footprint,” *Canadian Centre for Architecture* (CCA) (2015).

³⁶³ Michelle Provoost, “New Towns on the Cold War Frontier,” in *Crimson* (2007).; Francis X Sutton, “The Ford Foundation’s Urban Programs Overseas: Changes and Continuities,” *Philanthropy and the City: An Historical Overview* (2000).

³⁶⁴ Theodosis, “Victory over Chaos? Constantinos A. Doxiadis and Ekistics 1945-1975,” 104.

³⁶⁵ Sutton, “The Ford Foundation’s Urban Programs Overseas: Changes and Continuities,” 4.

³⁶⁶ Michelle and Keeton Provoost, Rachel, *New Towns for the 21st Century : The Planned Vs. The Unplanned City* (Amsterdam: International New Town Insti

Foundation Paul Hoffman, with the connection going back to Hoffman's leadership of the Marshall Plan which was started in Greece and Turkey in the late-1940s.³⁶⁷

Together, Doxiadis and the Ford Foundation "formed a powerful duo of vision and money".³⁶⁸ His belief in urban change and growth without boundaries through technological innovations and scientific planning, was in line with the development ideologies of the Ford Foundation and American-driven modernization.³⁶⁹ His involvement in American political and intellectual networks made him renowned as one of "the world's leading analysts, designers and promoters of urban development".³⁷⁰ Soon after its establishment, Doxiadis's office flourished as one of the largest architecture and planning consultancies in the world, to the extent that in 1966 *Life* magazine named him "busy remodeler of the world".³⁷¹ It played a remarkable role in national housing programs and new town developments in almost 40 countries, notably in the Middle East and the South Asia, which were both considered as the "hotbeds of Communism".³⁷² In order to elaborate on his urban model for future cities, Doxiadis set up a research educational centre, and founded his reputable journal of *Ekistics* with the editorship of Jaqueline Tyrwhitt.³⁷³ Later on, in 1963, he founded the yearly international symposium of Delos which established a platform for his intimate collaboration with the intellectuals and brightest minds from various fields of knowledge; Kenzo Tange and Richard Llewelyn-Davies (architect), Sigfried Giedion (historian), Walter Christaller (geographer), Buckminster Fuller (technologist), Margaret Mead (anthropologist), Barbara Ward (economist), and Hasan Özbekhan (philosopher).³⁷⁴ There were a total of seven Delos symposiums and their results were published in the seven famous Delos proclamations.³⁷⁵

³⁶⁷ Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (Cambridge University Press, 2005).

³⁶⁸ Provoost, "New Towns on the Cold War Frontier."

³⁶⁹ Ibid.

³⁷⁰ Ray Bromley, "Doxiadis and the Ideal Dynapolis: The Limitations of Planned Axial Urban Growth," *Ekistics* 69, no. 415-417 (2002): 317.

³⁷¹ Diana Lurie, "Busy Remodeler of the World," *life* 7 October 1966.

³⁷² Theodosios, "Victory over Chaos? Constantinos A. Doxiadis and *Ekistics* 1945-1975,"; and Wakeman, *Practicing Utopia: An Intellectual History of the New Town Movement*.

³⁷³ Ellen Shoshkes, "Jaqueline Tyrwhitt: A Founding Mother of Modern Urban Design," *Planning Perspectives* 21, no. 2 (2006): 187.

³⁷⁴ Alexander N Christakis and Kenneth C Bausch, *Colaboratories of Democracy: How People Harness Their Collective Wisdom to Create the Future* (IAP, 2006).; Vera Rezende, "Urban Planning in Guanabara State, Brazil: Doxiadis, from *Ekistics* to the Delos Meetings," *IPHS* (2016): 148.

³⁷⁵ Christakis and Bausch, *Colaboratories of Democracy: How People Harness Their Collective Wisdom to Create the Future*.

In the late 1950s while working on various national housing programs, Doxiadis came up with the concept of Ekistics, the science of human settlements, in order to “systematically develop the cities of the future”.³⁷⁶ He introduced five principles of Ekistics; nature, men, society, shell and network. In the early 1960s, the general understanding of housing shifted from a technical issue and social need to housing development as a motor of economic growth.³⁷⁷ The underlying goal of Ekistics was to create the missing link between housing programs, social policies and economic growth.³⁷⁸ In this regard, Doxiadis advocated national housing programs as a drive to fulfil social needs, improve the national economy, and ease socio-political unrest.³⁷⁹ In order to match the nation-building agendas with American development plans, Ekistics was “a blend of indigenous urban patterns and Western models of progress”.³⁸⁰ In the late 1950s, Doxiadis was commissioned to prepare the National Housing Program for the Iraqi government. It was his first large-scale project outside Greece, and introduced Doxiadis as a housing expert internationally.³⁸¹

As a reaction to the rising urban population and by adhering to the principles of Ekistics, Doxiadis “infused a sense of impermanence and uncertainty within design strategies” and formulated his urban model known as “Dynapolis”.³⁸² He underlined two major steps: first, understanding “the real forces that condition the cities of the future” and second, re-examining “the type of life we want to live in these cities”.³⁸³ Doxiadis introduced the attraction of existing urban centres and major lines of transportation as the main forces superimposing physical forms to growing cities, and the main cause of unbalanced urban development.³⁸⁴ To propel existing cities into the future, he argued that these forces should be counteracted. At the time when many post-war planners and architects were stressing the significance of reinforcing city centres in rapidly sprawling cities, Doxiadis negated (poly)centric urban organizations and stressed the inability of such structures to accommodate

³⁷⁶ Constantinos A Doxiadis, “Ekistics, the Science of Human Settlements,” *Science* 170, no. 3956 (1970): 1.

³⁷⁷ Richard Harris and Godwin Arku, “The Rise of Housing in International Development: The Effects of Economic Discourse,” *Habitat International* 31, no. 1 (2007).

³⁷⁸ Theodosios, “Victory over Chaos? Constantinos A. Doxiadis and Ekistics 1945-1975,” 95.

³⁷⁹ *Ibid.*

³⁸⁰ Wakeman, *Practicing Utopia: An Intellectual History of the New Town Movement*, 136.

³⁸¹ Theodosios, “Containing” Baghdad: Constantinos Doxiadisprogram for a Developing Nation,” 167.

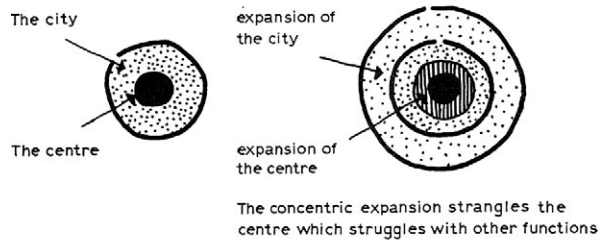
³⁸² Deborah Antoinette Middleton, “Growth and Expansion in Post-War Urban Design Strategies: C.A. Doxiadis and the First Strategic Plan for Riyadh Saudi Arabia (1968-1972)” (Georgia Institute of Technology, 2009), 42.

³⁸³ Constantinos A Doxiadis, “Ecumenopolis: Tomorrow’s City,” *Britannica Book of the year 1968* (1968).

³⁸⁴ *Ibid.*, 14.

long-term urban expansion and future changes.³⁸⁵ He contended that unlike “static” old cities composed of the centre and the periphery, cities now were “dynamic” in nature and their centres would be strangled as there was no room left for their expansion [Figure 4.3].³⁸⁶ He highlighted that in a parabolic way of expansion the old city centre would have a chance to grow with the city as a whole, and could be therefore rescued.³⁸⁷

IN THE PAST: Static city



IN THE FUTURE: Dynapolis

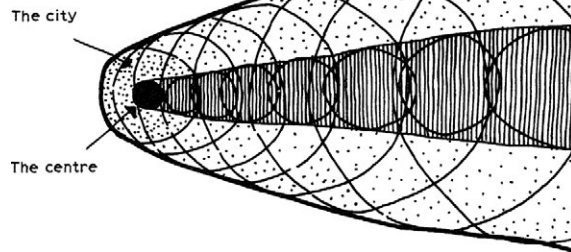


FIG. 4.3 Two versions of static and dynamic cities and their different ways of growth. / Source: Constantinos Doxiadis. *Architecture in Transition*. New York: Oxford University Press, 1963.

³⁸⁵ See: Jaqueline Tyrwhitt, José Luis Sert, and Ernesto N. Rogers, *The Heart of the City: Towards the Humanisation of Urban Life; International Congress for Modern Architecture, Ciam 8* (New York: Pellegrini and Cudahy, 1952).; Middleton, “Growth and Expansion in Post-War Urban Design Strategies: C.A. Doxiadis and the First Strategic Plan for Riyadh Saudi Arabia (1968-1972),” 25.; Doxiadis, “Ecumenopolis: Tomorrow’s City,” 12.

³⁸⁶ Constantinos A Doxiadis, *Architecture in Transition* (New York: Oxford University Press, 1963), 102.

³⁸⁷ Middleton, “Growth and Expansion in Post-War Urban Design Strategies: C.A. Doxiadis and the First Strategic Plan for Riyadh Saudi Arabia (1968-1972),” 73.

Doxiadis envisioned Dynapolis as a self-generative urban system that could reproduce itself from one idealized core along a single directional axis extending into territorial regions.³⁸⁸ This boundary-less urban system could unlimitedly accommodate the booming population in harmonious settlement cells and indeed could guarantee economic growth in and outside metropolitan regions.³⁸⁹ Building upon Walter Christaller's Theory of Central Places, Doxiadis tied the future of cities to their territorial regions, in order to enable increased economic growth and create larger societal transformations.³⁹⁰ Doxiadis considered Dynapolis as a more powerful and universal urban model distinct from that of his contemporaries.³⁹¹

Doxiadis criticized the fate of Garden Cities and explained that "the garden cities, when successful, managed to provide healthier immediate surroundings for small groups of people, but they did not save the big city, nor did they create the city of the future".³⁹² His ideology of unlimited growth was in no way limited to regional and urban scales, as he later on came up with his concept of "Ecumenopolis", a single planet city. Doxiadis argued that growing cities would eventually be interconnected, becoming one universal city: Ecumenopolis.³⁹³ Rather than physically covering the global surface physical, his concept concerns economically and functionally interrelated urban areas worldwide.³⁹⁴

By rising fascination to the concept of unlimited urban growth, optimism towards rapid growth of the city came under increasing attack from the late 1960s onward.³⁹⁵ In 1968 a group of scientists, economists, educators and humanists (well-known as the members of The Club of Rome) gathered in the Accademia dei Lincei in Rome to initiate a remarkably ambitious project on "The Predicament of Mankind".³⁹⁶

³⁸⁸ Farhan Karim, "Between Self and Citizenship: Doxiadis Associates in Postcolonial Pakistan, 1958–1968," *International Journal of Islamic Architecture* 5, no. 1 (2016): 153.

³⁸⁹ Patrick S Vitale, "Anti-Communism, the Growth Machine and the Remaking of Cold-War-Era Pittsburgh," *International Journal of Urban and Regional Research* 39, no. 4 (2015).

³⁹⁰ Middleton, "Growth and Expansion in Post-War Urban Design Strategies: C.A. Doxiadis and the First Strategic Plan for Riyadh Saudi Arabia (1968-1972)."

³⁹¹ Wakeman, *Practicing Utopia: An Intellectual History of the New Town Movement*, 136.

³⁹² Constantinos A Doxiadis, "Ecumenopolis: Tomorrow's City," 11.

³⁹³ Ibid.

³⁹⁴ Robert B Potter and Sally Lloyd-Evans, *The City in the Developing World* (Routledge, 2014).

³⁹⁵ Ray Bromley, "Towards Global Human Settlements: Constantinos Doxiadis as Entrepreneur, Coalition-BUILDER and Visionary," in *Urbanism: Imported or Exported? Native Aspirations and Foreign Plans*, ed. Joe Nasr and Mercedes Volait (London: Wiley Academy, 2003).

³⁹⁶ Donella H Meadows et al., "The Limits to Growth," *New York* 102 (1972): 10.

Their rising concern for present and future conditions of humanity inspired them to challenge the notion of growth as the root of the world's long-term problems. The results of their project were published in the seminal book of *The Limits to Growth* in 1972.³⁹⁷ Uncontrolled urban spread, environmental degradation, economic disruptions, and social problems were at the heart of their discussions. As a reaction to the limits of exponential growth, they raised the question of “what will be needed to sustain world economic and population growth until, and perhaps even beyond, the year 2000?”³⁹⁸ They determined that physical resources such as food, raw materials, and fuel are necessary but not sufficient for unlimited growth, maintaining that even if physical sources are abundant, the actual growth of economy and population would eventually depend on “peace and social stability, education and employment, and steady technological progress”.³⁹⁹ By challenging the concept of global population growth and the depletion of key resources, they called for a great “transition from growth to global equilibrium”.⁴⁰⁰ The 1970s energy crises attracted considerable public attention to their work.⁴⁰¹

4.4 The TAP and negotiating Tehran's urban future

Uncontrolled urban growth, informal developments, and the rise of slums were issues characterizing Tehran in the early 1970s. However, such issues had never been discussed in the TMP. The changing reality of Tehran attracted the attention of city authorities who saw that an urban plan was needed to include such overlooked issues, in addition to the TMP. Due to the urgency of the situation, the TAP was

³⁹⁷ Ibid.

³⁹⁸ Ibid., 45-46.

³⁹⁹ ibid.

⁴⁰⁰ Ibid., 24.

⁴⁰¹ Charles AS Hall and John W Day, “Revisiting the Limits to Growth after Peak Oil: In the 1970s a Rising World Population and the Finite Resources Available to Support It Were Hot Topics. Interest Faded—but It's Time to Take Another Look,” *American scientist* 97, no. 3 (2009).

envisioned in just three months, a result of close collaboration between various local agencies with Doxiadis Associates. They sought to revisit the future development of Tehran considering a sudden shift in the size and social character of the city, which was not in line with the TMP's prediction. The underlying goal of the TAP was to guide the haphazard growth of the city by providing strategic principles and aligning private and public investments in a way to solve Tehran's urban problems.⁴⁰² The TAP's report warned that "Tehran is heading towards a disaster, as huge growth takes place all around the city and no measures are taken to guide it properly".⁴⁰³ Although the TMP was already prepared to control and regulate Tehran's expansion, the city continued to expand without any specific guidance. To avoid disaster, the TAP called for an urgent action. In a close collaboration with Iranian planning agencies, they put together a document summarizing Tehran's main urban problems and the objectives of the TAP.⁴⁰⁴

In order to prepare the TAP, the planning team began by revisiting the TMP. As discussed in Chapter 3, the TMP proposed the decongestion of the old city centre through developing ten new centres, reordering the city and society within finite and limited urban boundaries.⁴⁰⁵ The TMP regarded new city centres, with the foci of the shopping centres, not only as a tool controlling amorphous urban sprawl, but more importantly as "healing forces and economic stimulus".⁴⁰⁶ Despite having some similarities, the TAP emerged as a counterpart of the TMP. As discussed above, Doxiadis believed that the city has a dynamic entity and nothing can curb its growth, but this growth needed to be guided by planning.⁴⁰⁷ He considered the old city centre in particular, and the development of new centres more generally, as the main restrictions for the free expansion of Tehran in the future [Figure 4.4].⁴⁰⁸

⁴⁰² Doxiadis Associates International, *Tehran's Action Plan* (The Plan Organisation, 1972).

⁴⁰³ Ali Madanipour, "The Limits of Scientific Planning: Doxiadis and the Tehran Action Plan," *Planning Perspectives* 25, no. 4 (2010).

⁴⁰⁴ Tehran Development Council Secretariat, *An Analysis of the Tehran Comprehensive Plan*, Technical Report, No. 1 (Tehran: Tehran Development Council. Secretariat., 1976).

⁴⁰⁵ Gruen and Farmanfarmaian, "Tehran Comprehensive Plan."

⁴⁰⁶ See: Gruen, *The Heart of Our Cities: The Urban Crisis: Diagnosis and Cure*; Hardwick, *Mall Maker: Victor Gruen, Architect of an American Dream*, 92.

⁴⁰⁷ Constantinos Doxiadis, *Ekistics: An Introduction to the Science of Human Settlements* (London: Hutchinson, 1968).

⁴⁰⁸ Doxiadis, "Ecumenopolis: Tomorrow's City."

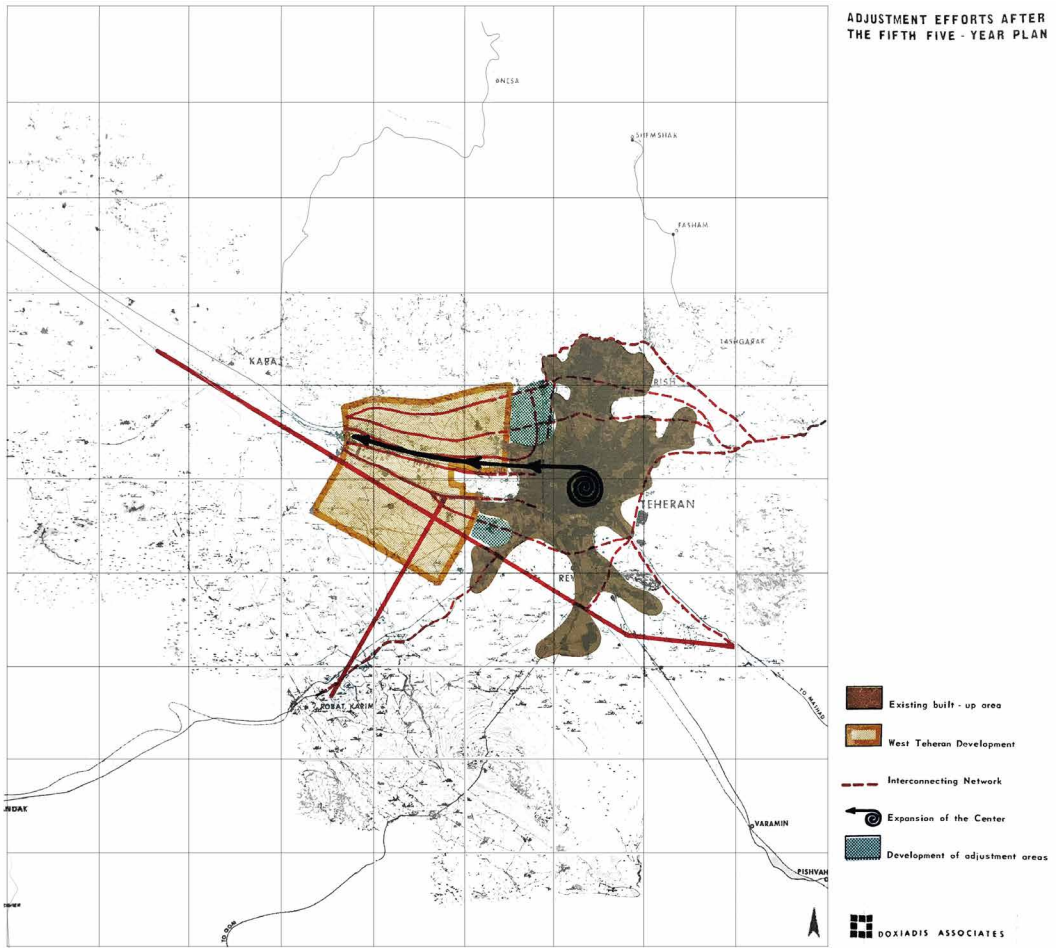


FIG. 4.4 The TAP's proposal to break the congested city centre in line with the linear growth of the city. / Source: Doxiadis Associates, "The Need for a Realistic Tehran Action Program", 1972

Following Doxiadis's concept of Dynapolis, the TAP underlined the formation of a linear city without any central functions which would allow "the congested city centre to break through the massive present city" and to develop freely in vacant lands in the west of Tehran.⁴⁰⁹ Doxiadis's attitude of ceaseless urban growth in a pre-planned system contrasted with the city authorities' principles of confining Tehran's urban boundaries.⁴¹⁰ In spite of the fact that the TAP planners attempted to limit the differences between the two plans, Doxiadis's powerful vision of unlimited city growth truly differentiated the TAP from the TMP. However, throughout the TAP reports, the planners proclaimed that their proposal was very much in line with the TMP:

*TAP goes far beyond the Master Plan, and thus there are no areas of conflict at all. TAP proposes a development by phases which is imperative and does not create any problem of conflict. There is a difference between some physical features of TAP and the Master Plan, but there is no real conflict. With planning work of a few months a full coordination between TAP and Master Plan can be achieved, and thus no work already carried out for the Master Plan will be wasted.*⁴¹¹

The planning team sought to provide both a short-term solution for Tehran's acute housing shortage and a solution for the future development of the Tehran region. Therefore, they strived to advance city-region relations whilst maintaining a low-cost housing agenda. To revisit Tehran's urban future, the planning team proposed three programs: National Program, Urban-Regional Program, and Social Program.⁴¹² They were significant programs that the TMP severely lacked. Re-scaling Tehran urban planning from city scale to regional and national scales made the TAP a pioneering plan for Tehran, where planners critically connected the future of Tehran to broader regional and national development strategies.

⁴⁰⁹ Ibid.

⁴¹⁰ Middleton, "Growth and Expansion in Post-War Urban Design Strategies: C.A. Doxiadis and the First Strategic Plan for Riyadh Saudi Arabia (1968-1972)," 24.

⁴¹¹ Doxiadis Associates International, "The Need for a Realistic Tehran Action Program," (Tehran: Sazman-e Barnameh va Budget 1972).

⁴¹² Doxiadis Associates International, "Tehran Action Plan," 78.

National Program

By referring to the rising political and economic centrality of Tehran, the planners re-visited Tehran's urban problems from the bigger perspective of the whole country. The TAP's report started with the statement: "whatever happens and will happen to Tehran, it is not an issue merely related to its citizens, but it has general connection with the development of the whole country".⁴¹³ The planners underlined that the rising economic, political and cultural centrality of Tehran not only disrupted the balance between housing and urban services in the capital, but also distracted other cities from sufficient economic and social growth. By emphasizing that the municipal effort to curb the population growth in Tehran, and its urban expansion would eventually face failure, they underlined that Tehran should thoughtfully expand to house the surging number of newcomers from all social levels. As water supply was one of the key reasons for the TMP to limit the future population of Tehran to 5.5 million by 1991, the TAP planners criticized the TMP and discussed that "technically no water supply problem exists for Tehran, even if it grows to 10 million inhabitants; with the completion of the Lar River Dam [...] the need of Tehran's water can be covered".⁴¹⁴

On the one hand, the planners acknowledged that controlling Tehran's population was impossible, and would eventually give rise to the proliferation of informal settlements. On the other hand, they stressed the significance of national policies of "decentralization" to distribute facilities at a national scale and improve living conditions in other cities, in order to reverse the migration direction towards Tehran.⁴¹⁵ They believed that Tehran's urban problems would be solved by implementing development strategies at both urban and national scales.⁴¹⁶

⁴¹³ Ibid., 1.

⁴¹⁴ Ibid., 10.

⁴¹⁵ Ibid., 82-83.

⁴¹⁶ Ibid., 83.

Urban-Regional Strategies

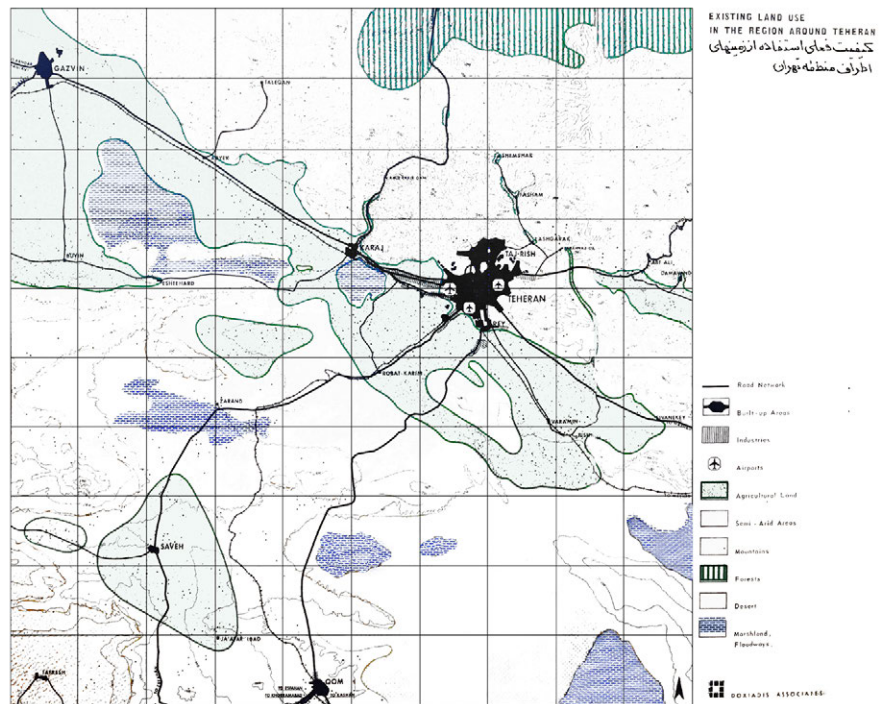


FIG. 4.5 The TAP removed Tehran's municipal boundaries and linked Tehran's future to its regional territories. / Source: Doxiadis Associates, "Tehran Action Plan", 1972.

The TAP placed a new importance on the urbanization of Tehran territory. For Doxiadis, the only way to provide visionary urban strategies for Tehran's future was to explore its territorial region to include potentials and dynamics of the whole area in Tehran's urban development [Figure 4.5]. At the time that Tehran lacked a coherent and consistent regional plan, the TAP linked its urban development to regional economic development and removed the municipal division between the city and its territory.⁴¹⁷ The only solution was to investigate potential areas of growth, and to disperse urban amenities, administrative, commercial and recreational activities throughout a wider region, while the existing city would receive maintenance treatment.⁴¹⁸

⁴¹⁷ See: Richardson, "Regional Planning in Iran.," M. Reza Shirazi, "Sustainable Planning for a Quasi-Urban Region, Necessities and Challenges: The Case of Tehran-Karaj," *Planning Perspectives* 28, no. 3 (2013).

⁴¹⁸ Doxiadis Associates International, "Tehran Action Plan."

The TAP stressed that “action to relieve the city must take place outside it. It must not be far away, so that it can be a continuation of the present city”.⁴¹⁹ In order to show how the city would sustain its spatial continuity over time, the TAP proposed three schematic phase diagrams for Tehran’s outward movement. In this sense, the TAP went far beyond the TMP boundaries and underlined that it is necessary:

*[...] to develop the new areas on relatively virgin land according to our desires; to avoid undesired influences from the existing city; to create the incentives which will allow the existing centre to break through the massive present city and develop freely in the new lands of the west. Thus, the central areas will always have ample space to grow.*⁴²⁰

The TAP proposed the development of “West Tehran” to freely expand and reach to the small towns of Karaj and Qazine [Figure 4.6]. The planners discussed that this development strategy would create a gap between the new and the existing city; but this gap should be considered temporary, as it would be filled later on according to careful planning, when we know exactly every detailed plan of West Tehran. As the interconnecting areas of the old and new Tehran, the TAP underlined that the planning of this adjustment area needed very careful considerations.⁴²¹ Unlike the TMP, the TAP did not consider Tehran’s urban future as several separated and isolated units, but rather a single entity. Doxiadis’s belief was that “the situation is much more complex when we deal with city complexes instead of single city, because rather than growing dynamically they grow into each other”.⁴²² The TAP introduced a proper network of roads and utility corridors as one of the cornerstones for creating West Tehran, and to improve the daily functioning of the present and future urban system. The plan noted that “such a network should have a non-convergent (non-radial) configuration”.⁴²³ By re-directing traffic away from the city centre, the planners intended to alleviate the old city centre from the rising pressure of population and accumulation of activities.

⁴¹⁹ Ibid., 120.

⁴²⁰ Doxiadis Associates International, “The Need for a Realistic Tehran Action Program,” 12.

⁴²¹ Ibid., 14.

⁴²² Doxiadis, “Ecumenopolis: Tomorrow’s City,” 28.

⁴²³ Doxiadis Associates International, “Tehran Action Plan,” 114.

As the city grows...the need for central functions grows, ...this situation leads to disaster. The piling up of functions requires increased communication facilities which are beyond the capacity of any centre. Thus the centre is deemed to slow death because of growing congestion and impossibility of communication. Many American cities are living examples of this phenomenon...This situation is aggravated in Tehran by the haphazard distribution of public administration offices, which leads to a chaotic and immensely uneconomic pattern for the whole system.⁴²⁴

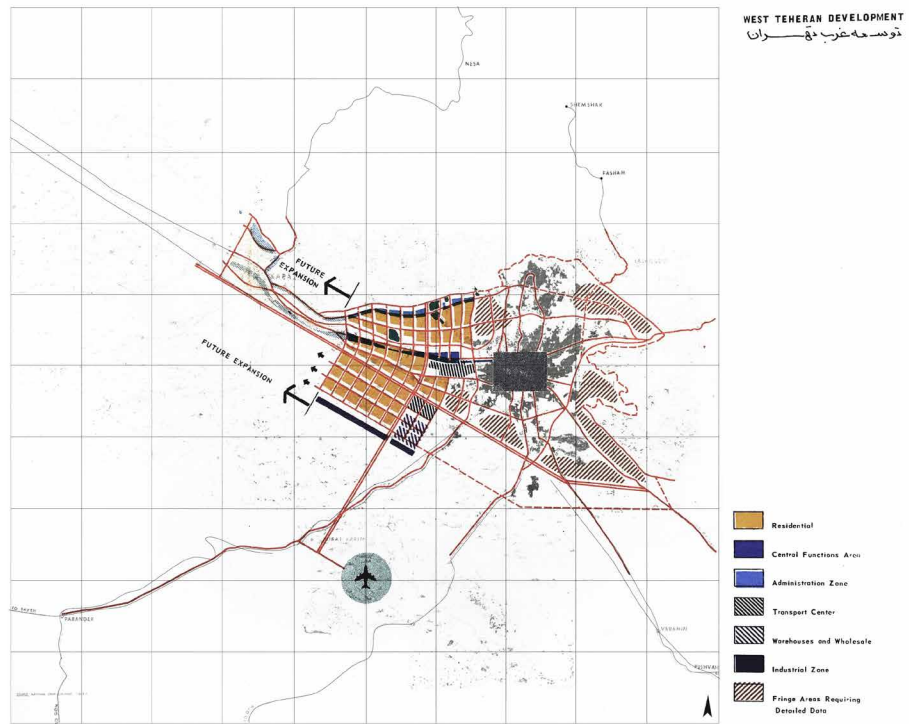


FIG. 4.6 Linear growth of Tehran towards Karaj. / Source: Doxiadis Associates, "Tehran Action Plan", 1972.

⁴²⁴ Ibid., 40.

Tehran Social Program

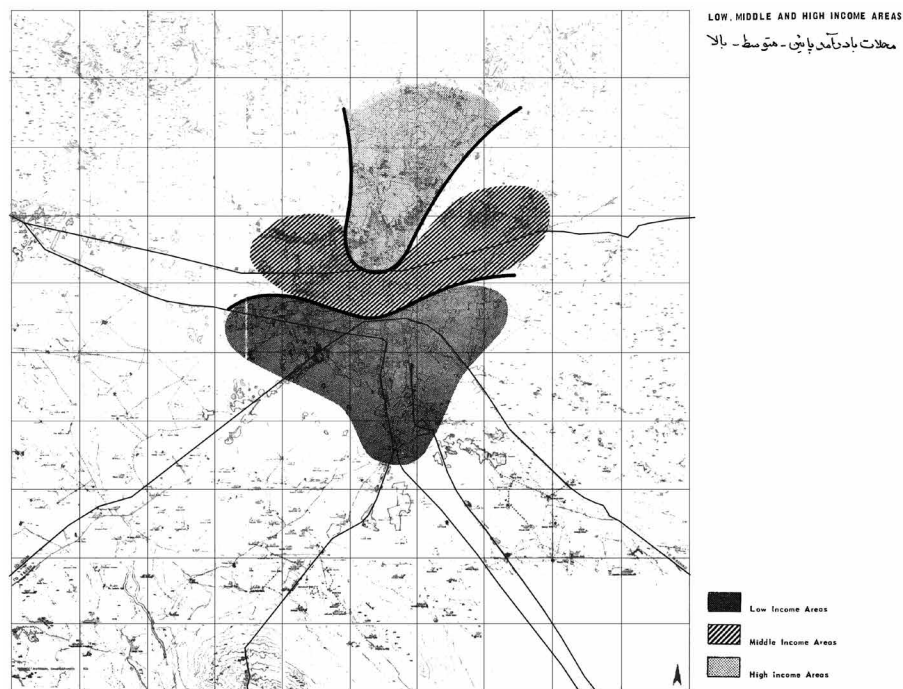


FIG. 4.7 The TAP reaction to the harsh socio-economic segregation in Tehran. / Source: Doxiadis Associates, "Tehran Action Plan", 1972

Socio-spatial segregation of Tehran, a feature which was reinforced by the TMP, was reflected in many analyses and discussions in the TAP reports. Despite the TMP considering socio-spatial segregation a solution to reorganize the society, the TAP sharply criticized the social division of Tehran from north to south [Figure 4.7]. It shifted its focus from housing provision for middle- and higher-income strata towards the growing lower-income population who required urgent attention and support from the State. Their aim was to create the missing link between housing and social instabilities and economic growth in Tehran. Through focussing on providing housing for low-income groups, the TAP attempted to re-order the social structure of the city. Although the TMP considered retail as the most valuable economic engine for the city, the TAP proposed housing construction as the most reliable source of economic growth and way of improving the urban social structure. Behind the linear growth of the city, there was an overarching goal to integrate the currently segregated social groups.

**SITES INVESTIGATED FOR THE LOCATION OF
LOW - INCOME COMMUNITIES**

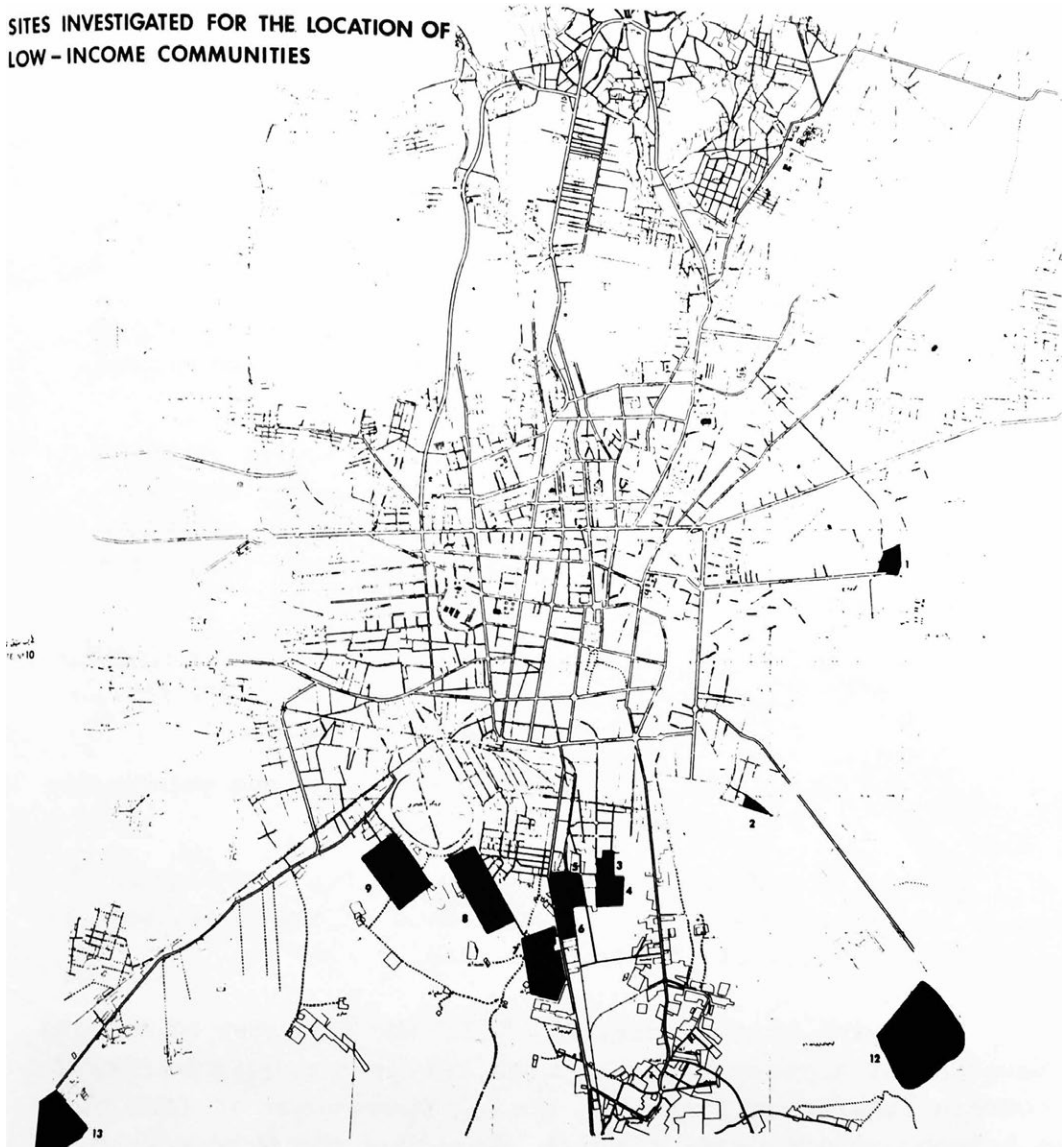


FIG. 4.8 Site investigation for studying low-income neighbourhoods in the south of Tehran. / Source: Source: Doxiadis Associates, "Low-Income Communities in Tehran: Managerial and Administrative Aspects", 1972

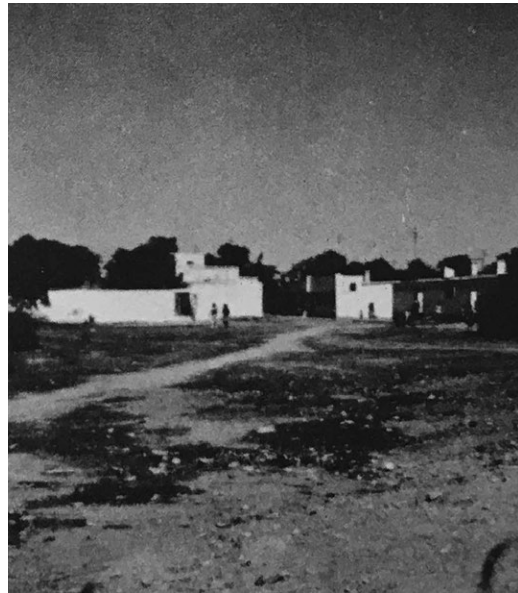
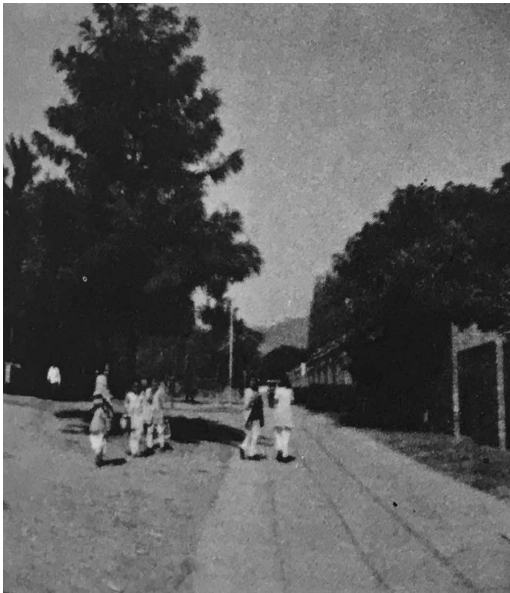
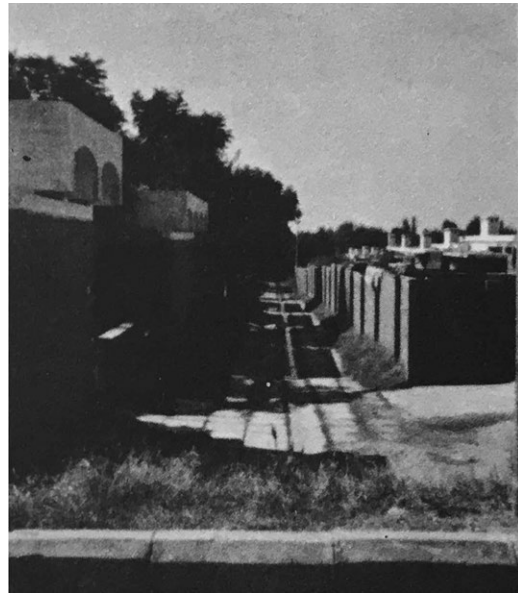


FIG. 4.9 The condition of state-led low-income housing in the south of Tehran. / Source: Doxiadis Associates, "Low-Income Communities in Tehran: Managerial and Administrative Aspects", 1972

With the attempt to break down social hierarchies through mixing social groups, the TAP emerged as a counteraction to the extreme socio-spatial segregation in Tehran.

The planners delineated Tehran social program as resolving the rising social tensions through the provision of housing, and shaping new socially mixed communities.⁴²⁵ In the early 1970s, Tehran encountered acute housing problems due to the rising numbers of employees of governmental agencies, low-income groups, and squatters who were attracted to Tehran in search of employment.⁴²⁶ According to national housing programs, by 1973 Tehran was in need of 700,000 new dwelling units (nearly 400,000 for low-income households).⁴²⁷ By re-ordering society through socio-spatial homogeneity, the TAP re-directed the city authorities' attention towards the overlooked significance of low-income housing and the urgency for its integration with the social fabric of the city. In doing so, the planning team carried out an inquiry studying low-income housing in south of Tehran [Figure 4.8]. This study was presented in two major reports: "Managerial and Administrative Aspects", and "Physical Planning Aspects".⁴²⁸ The major focus of their inquiry was on three state-driven low-income neighbourhoods in Tehran (Javadieh, Naziabad, and Nohom Aban) not as ideal models but as typical examples in the capital [Figure 4.9].⁴²⁹

The planners reacted to socio-spatial polarization in Tehran and stressed the need to fade out the social strata by proposing new "integrated communities". They shifted the city authorities' attention from the TMP's high- and middle-class luxurious housing to isolated low-income neighbourhoods in the south, emphasising the necessity of creating linkages between various social groups to alleviate rising social tensions in the city.

*[...] this general tendency of homogeneity in economic groups cannot be overlooked when dealing with existing communities and cannot be ignored when planning new ones. It is advisable...to try to combine within each community of the neighbourhood level, dwellers of two or three groups and thus avoid absolute economic homogeneity. ...Encouragement of segregation by physical separation should be avoided; instead, the physical layout should be planned so as to help integration.*⁴³⁰

⁴²⁵ Ibid., 116.

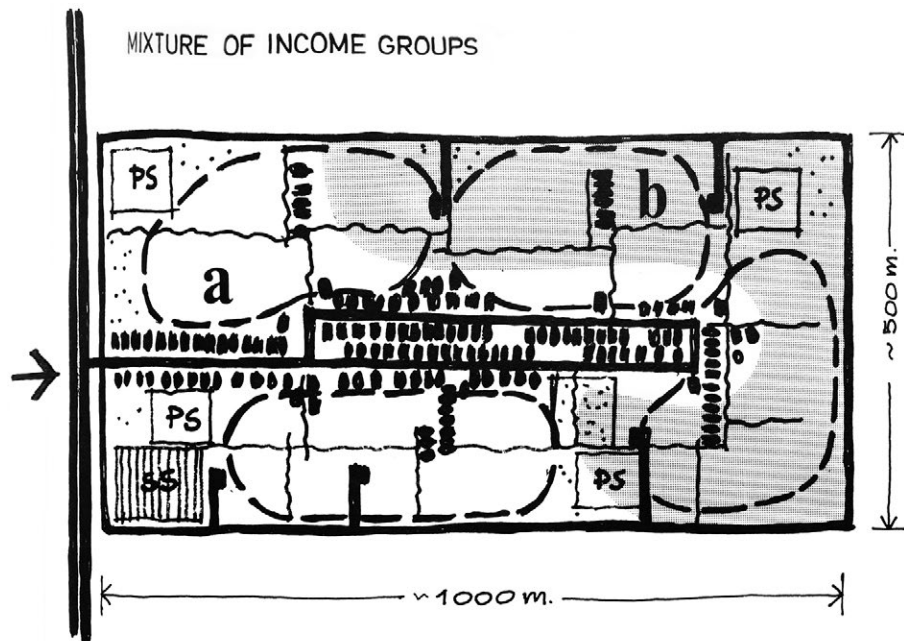
⁴²⁶ Doxiadis Associates International, "Low-Income Communities in Tehran: Managerial and Administrative Aspects," (Tehran: the Plan Organization 1972), 11.

⁴²⁷ Doxiadis Associates International, "Tehran Action Plan," 111.

⁴²⁸ Ibid., 124.

⁴²⁹ Doxiadis Associates International, "Low-Income Communities in Tehran: Managerial and Administrative Aspects," 2.

⁴³⁰ "Ibid., 17-18.



a, b correspond to house types as well as income groups

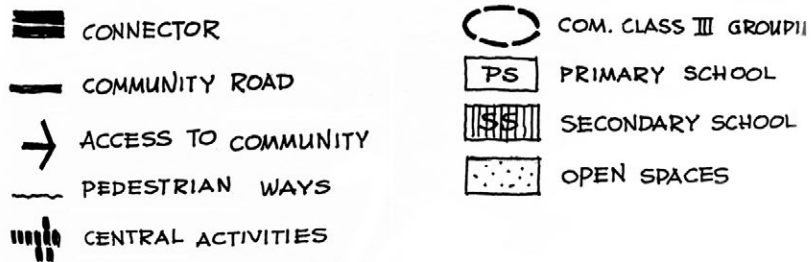


FIG. 4.10 The scheme of a socially mixed community proposed by the TAP. Each community was planned to accommodate a mixture of income groups. / Source: Doxiadis Associates, "Low-Income Communities in Tehran: Managerial and Administrative Aspects", 1972.

The planners saw socially integrated communities not only as promoting social interaction, but also as stimulators of economic growth [Figure 4.10].⁴³¹ The concept of “integrated community” would guarantee that every individual would have free access to resources and education and be able to pursue diverse activities. The planners also respected children and elderly as overlooked groups, emphasizing the need of facilities and programs specifically for them.⁴³² Their aim was to establish a stable economic system by revitalizing local economy in smaller neighbourhood units. In this regard, their focus was on the provision of job opportunities and training in new communities. By taking future uncertainties in to consideration, the planners proposed the concept of “multi-functionality of buildings with fixed and pre-defined functions”, such as re-programming schools in the evening to fulfil some of communities’ needs.⁴³³ They sought to provide a physical structure which could facilitate “flexibility and responsibility for adjustment to changes and evolution in customs and habits, and therefore in needs, of the resident”.⁴³⁴ Although the TAP social program remained at the preliminary stage, it was pioneering in tackling socio-spatial segregation, heralding social equality and inclusion.

4.5 The fate of the TAP and unfettered growth of Tehran

The TAP urban growth strategies were eventually rejected by local authorities as their attempt was principally to curb the growth of the city through top-down strict and limiting policies. The 1973 oil crisis gave rise to Iran’s booming economy, provoked by the quadrupling of oil revenues. The unprecedented economic growth and political strength gave the Iranian government the confidence to limit Tehran’s uncontrolled growth.⁴³⁵ Despite the TAP recommendations, in 1976 the municipality demarcated

⁴³¹ Doxiadis Associates International, “Low-Income Communities in Tehran: Physical Planning Aspects,” (Tehran: The Plan Organization 1972), 58.

⁴³² Doxiadis Associates International, “Low-Income Communities in Tehran: Managerial and Administrative Aspects,” (Tehran: The Plan Organization 1972), 25.

⁴³³ Ibid., 27.

⁴³⁴ Ibid., 21.

⁴³⁵ Madanipour, “Urban Planning and Development,” 437.

Tehran's urban boundaries and regarded limiting zones in the east, west and south parts of the city in which further constructions would not be allowable [Figure 4.11].⁴³⁶

The inefficiencies of Tehran urban plans affected the local authorities' perception concerning scientific master plans as flawless documents which could guide the long-term development of the city. The emerging negativity about the TMP and TAP extended transnational planning practices from engaging well-known foreign planners as designers to involving foreign experts as advisors to assess and evaluate the provisioned plans. This resulted in the establishment of the Tehran Development Council (TDC) in 1975. As discussed in Chapter 3, the TDC was formed by a group of local and foreign experts to implement new changes in Tehran's urban development.⁴³⁷ It was in charge of constant evaluation of Tehran urban plans to ensure that all decisions remained relevant, and, if necessary, to adjust them according to local changes. By involving multiple foreign experts, the TDC was a transnational organization with the power to criticize and resist the planning decisions. The criticism of the TDC experts of the TMP and the TAP greatly affected the translation of those plans into planning policies.

The responsibility of the TDC was to prepare planning guidelines for Tehran's rapid expansion by examining and evaluating the existing urban projects, particularly the TMP. Funded by the World Bank, Harvard Institute for International Development established a close collaboration with the TDC, and Theodore Liebman (the former chief of Architecture for the New York State Urban Development Corporation) was appointed to guide a team of economists, sociologist, planners, and urban designers studying Tehran's urban development.⁴³⁸ Based on this collaboration, the TDC published a number of important reports on Tehran development including: "An Analysis of the Tehran Comprehensive Plan", "Land Use, Urban Structure and Spatial Development in Tehran", "Major Planning and Development Issues Affecting Tehran's Future", "A Report on the Strategic Development of the Greater Tehran Region", and "The Housing Cluster Prototype". In these reports the TDC criticized the proposed linear growth of Tehran and stressed the issue with the development of a heavily populated strip between Karaj and Tehran as a consequence of linear expansion of the city.⁴³⁹

⁴³⁶ Hooshang Amirahmadi and Ali Kiafar, "The Transformation of Tehran from a Garrison Town to a Primate City: A Tale of Rapid Growth and Uneven Development," in *Urban Development in the Muslim World*, ed. Hooshang Amirahmadi and Salah S.El Shakhs (New Brunswick,NJ: Rutgers University Press, 1993).

⁴³⁷ Majid Ghamami, *Mojmo-E Shahri-E Tehran: Gozideh Motaleat-E Tarh-E Rahbordi-E Tose-E Kalbadi* [Tehran Urban Agglomeration] (Tehran: Markaz-e Motaleat va Tehqiqat-e Shahr-sazi va Memari Iran, 2004), 19.

⁴³⁸ "New Reports: UDC Architect to Go to Tehran," *Progressive architecture* (August 1975): 26.

⁴³⁹ Tehran Development Council Secretariat, *An Analysis of the Tehran Comprehensive Plan*, 27.



FIG. 4.11 The overlay of the 1976 Tehran municipal map upon the TAP shows the local authorities' attempt to control the westward expansion of the city. / Source: Re-drawn by the author.

In the late 1970s the lack of housing was coupled with economic recession and inflation, which caused more social and political instabilities in the capital.⁴⁴⁰ By 1977, housing production increased to 38,000 units, but even this could not keep up with demand.⁴⁴¹ Housing policies were too concerned with the quantity rather than quality of new constructions. The TDC report on “The Housing Cluster Prototype” warned that the “increased supplies of the wrong kind of housing accommodation will not reduce housing crisis, but will transform it into a social crisis, with far-reaching consequences”.⁴⁴² According to the TDC studies a large proportion of housing construction was dedicated to upper-middle income and luxurious apartments and there were fewer investments for the lower-middle and lower income groups.

⁴⁴⁰ Shima Mohajeri, “The Shahestan Blueprint: The Vestigial Site of Modernity in Iran,” in *The Historiography of Persian Architecture*, ed. Mohammad Gharipour (Hoboken, United States: Routledge, 2015).

⁴⁴¹ Tehran Development Council Secretariat, “The Housing Cluster Prototypes,” (1977): 2.

⁴⁴² *ibid.*

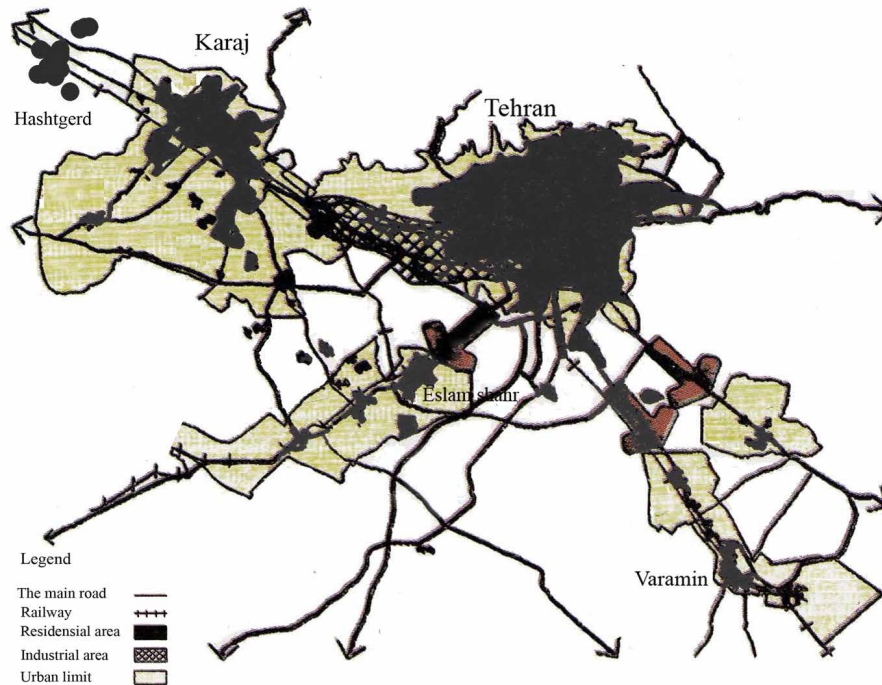


FIG. 4.12 The unfettered growth of Tehran in all directions, in 1996. / Source: Majid Ghamami, *Mojmo-E Shahri-E Tehran: Gozideh Motaleat-E Tarh-E Rahbordi-E Tose-E Kalbadi* [Tehran Urban Agglomeration] (Tehran: Markaz-e Motaleat va Tehqiqat-e Shahrsazi va Memari Iran, 2004).

To encourage low-cost housing in 1974 a new Construction Bank was established, which invested money in factory-built housing units in West Tehran.⁴⁴³ In spite of all governmental attempts, Tehran's housing problems intensified as there was no proper coordination between the municipalities and the Ministry of Housing and Town Planning with large public and private housing developers.⁴⁴⁴

In spite of the fact that the municipality demarcated strict boundaries, Tehran's urban growth continued [Figure 4.12]. Tehran remained Iran's main migrant destination and the population growth was exacerbated after the 1979 Islamic Revolution and the Iran-Iraq war (1980-1988). As the TAP planners predicted, the Tehran urban region started to grow radially and became the main area to

⁴⁴³ Vincent Francis Costello, "Tehran," in *Problems and Planning in Third World Cities*, ed. Michael Pacione (London: Croom Helm, 1981).

⁴⁴⁴ *Ibid.*, 179.

haphazardly house newcomers. From the late 1970s, the regional territories of Tehran transformed into a place for expansion of industries and mushrooming informal settlements. By 1996 there was a population of almost 2 million illegally residing in surrounding informal settlements.⁴⁴⁵ Many towns in the Tehran urban region today (such as Eslamshahr, Qods, Qarchak, Malard, Pakdasht, Hasanabad, and Akbarabad) first emerged as informal residences.⁴⁴⁶

These types of illegal settlements “grew from 5% in 1975 to 11% in 1985 and to 19% by 1995”.⁴⁴⁷ Since then, Tehran urban region grew dramatically, but without any specific plan to deal with resulting serious environmental and socio-spatial problems.

4.6 Conclusion

Unlike the TMP, which had extensive public representation and influence as the most ambitious long-term urban plan for the future of Tehran, the TAP was neither publicly represented nor published in any Architectural magazines. There could be two main reasons for this. Firstly, the urgency for re-evaluating the TMP could have affected the enthusiasm towards promoted Tehran's bright future. Secondly, the TAP offered a new urban agenda for Tehran which was contradictory to the plan of the State. Although the TAP was never approved by local authorities and was soon forgotten, it is still resonant in ongoing debates on Tehran urban development. This chapter shows that the TAP was not just a direct transplantation of Doxiadis's linear urban model, and therefore was not oblivious to local particularities. This happened mainly due to the increased awareness about the interaction of local context with exogenous urban ideas. In one of his presentations in an international seminar, “The New Metropolis in the Arab World”, held in Cairo in 1960, Doxiadis discussed that the cities of the day were becoming a mixture of local and international elements;

⁴⁴⁵ M. Reza Shirazi, "Sustainable Planning for a Quasi-Urban Region, Necessities and Challenges: The Case of Tehran-Karaj," *Planning Perspectives* 28, no. 3 (2013), 446.

⁴⁴⁶ Ghamami, *Mojmo-E Shahri-E Tehran: Gozideh Motaleat-E Tarh-E Rahbordi-E Tose-E Kalbadi* [Tehran Urban Agglomeration], 16.

⁴⁴⁷ Shirazi, "Sustainable Planning for a Quasi-Urban Region, Necessities and Challenges: The Case of Tehran-Karaj," 446.

therefore, “architecture and planning should express both, instead of re-producing only Western standards”.⁴⁴⁸ Despite having some shortages, the TAP was a reaction to the great social and physical inequalities in Tehran. The planners regarded the unlimited growth of the city a design principle which could stimulate an evolutionary and peaceful transition, from a very segregated society to an integrated one, in which every individual, regardless of their socio-economic status, would have a certain level of autonomy and socio-economic freedom.

The planners connected the physical growth of the city to economic and social dynamics in order to achieve healthy urban growth. Removing Tehran’s boundaries was the planners’ effort to unlock the socio-economic system in the capital and emancipate every individual to experience choice, and to be an actor in their own economic fate. From this vantage point, the TAP was a pioneering attempt to re-link the lack of housing with the future transformation of Tehran into wider socio-economic reformations. Furthermore, the TAP expanded the field of planning in Tehran by underlining the significance of city-region relation and placing housing provision for the marginalized groups at the top of planning agenda. Two years after the provision of the TAP, in 1974, Doxiadis visited Iran for the last time before his sudden death in 1975. He was invited to attend the second international conference “Towards a Quality of Life: the Role of Industrialization in the Architecture and Urban Planning of Development Countries”, held in Shiraz in 1974. In his speech, Doxiadis stated that “the so-called developed countries made the gravest mistakes” and that developing countries like Iran have a great chance to “learn from the greatest mistakes”.⁴⁴⁹ In spite of all the criticism of the TAP and the local authorities’ attempt to curb the city’s expansion, Tehran’s unfettered growth continued to operate by market forces and free competition. The un-planned growth of the city signifies a fundamental paradox in Tehran’s planning practices: a constant conflict between the top-down limitation of Tehran’s unbridled growth, and the strong appetite for bottom-up and spontaneous growth, as the reality of market-driven economy, speculative development, and monetary profitability.

⁴⁴⁸ Theodosios, “Victory over Chaos? Constantinos A. Doxiadis and Ekistics 1945-1975,” 151.

⁴⁴⁹ The second international conference-1975



Sahyad Tower, Tehran, the mid-1970s. Source: shahrefarang.com

5 Foreign Planners as Advertising Medium

A Setting for Making Tehran Global (1975-1980)

Tehran's Central Business District (CBD) / Shahestan Pahlavi

5.1 Introduction

Political and economic decline resulting from the 1973 oil crisis, along with the growing force of globalisation, triggered a shift in the transnational planning of Tehran. The global economic recession exposed the dependency of many of the world's most powerful countries on imported oil. This brought about economic boom in oil-rich Middle Eastern countries. The resulting prosperity in Iran empowered the Pahlavi regime to search a new world position, which greatly increased the opportunity of foreign-local collaborations. Mohammad Reza Shah and his regime found themselves engaged in “not only struggle for the future of Iran, but in a global struggle between communism and capitalism”.⁴⁵⁰

⁴⁵⁰ Roham Alvandi, *The Age of Aryamehr : Late Pahlavi Iran and Its Global Entanglements*, Gingko-St Andrews Series (London: Gingko Library, 2018).

The aim was to make Tehran a global capital to bridge the global north and south, West and East, and developed and developing countries.⁴⁵¹ The thriving economy created by oil money made Tehran an international city that attracted foreign experts fleeing countries with newly depressed economic situations.⁴⁵² Globalization forces gave rise to the conception of a Central Business District (CBD) for Tehran, known as Shahestan Pahlavi. By grouping together most political, economic and cultural activities in a huge empty stretch of land located in the heart of Tehran, the project aimed to re-position Tehran as a new international player in global political and economic networks.⁴⁵³ The project site was three times larger than Central Park in New York, and over two times the size of the old city of London.⁴⁵⁴ The fact the site was still empty was a great rarity for the rapid development of the project; there was no need for demolition or resident relocation. The lure of petrodollars attracted foreign planners and shaped a complex constellation of local and foreign actors including; British planner Richard Llewelyn-Davies, American planner Jaquelin Robertson, and American institutional actors such as the deputy directors of New York and Manhattan projects. Although the realization of such an ambitious project did require foreign expertise, the engagement of these big-name actors was arguably principally to advertise Tehran as a major world capital.

By focusing on the conception and formation of the CBD in a very international context, this chapter investigates how this ambitious project overshadowed the further realization of the TMP and how the actual being of the city was transformed to host this grand project in its heart. The first section places the project at the intersection of global forces and local interests to explore the evolution of its conception from a humble city centre into a global political and economic hub. The second section scrutinizes how the 1970s global economic uncertainties challenged the international planners to come up with new design principles in order to make the project resistant to economic upheaval. By focusing on the political, economic, and social underpinnings of the Shahestan Pahlavi project, the third section investigates how local and foreign planners negotiated the concept of this new city centre and how they anticipated its wider impact on the social and economic dynamics of Tehran urban region. The next section examines how this centralized development

⁴⁵¹ Ibid.

⁴⁵² Mina Marefat, "Fractured Globalization: A Case Study of Tehran," in *New Global History and the City*, ed. Elliott R. Morss (New Global History Press, 2004), 12.

⁴⁵³ Vincent Francis Costello, "Tehran," in *Problems and Planning in Third World Cities*, ed. Michael Pacione (London: Croom Helm, 1981), 172.

⁴⁵⁴ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran* (London : Llewelyn-Davies International, 1979), 36.

scheme contradicted with the national policy of decentralization of administrations from Tehran to decrease the development pressure upon the capital whilst triggering the growth of underdeveloped cities. The last section explores how the late 1970s economic recession in Iran challenged the realization of the Shahestan Pahlavi project as well as other large-scale urban projects in Tehran. It discusses how the cessation of these projects brought about pessimism towards the effectiveness of modern planning regime in Iran, and particularly its transnationalism.

5.2 The evolving concept of a new city centre for Tehran

In 1971, the Shah assigned the Tehran Municipality to make a proposal for the development of the site of Abbasabad, an almost empty huge tract of land, nearly 564 hectares, three kilometres north of the old central areas [Figure 5.1].⁴⁵⁵ As discussed in Chapter 3, the TMP divided the city in to 10 satellite towns each with its own dominant central area. As one of these towns, Abbasabad had a highly strategic location at the intersection of the two north-south and east-west axes running perpendicular to connect all of the others. This very central area of Tehran was originally planned to accommodate military families, and therefore eventually, most of the area was acquired by the army.⁴⁵⁶ Accordingly, the acquisition of Abbasabad was the first task for the Tehran Municipality. In this regard, the municipality established a new development corporation, called Sherkate Sahami Nosazi Abbasabad, to negotiate with the army regarding the abandonment of their lands in the site.⁴⁵⁷

⁴⁵⁵ Costello, "Tehran," 171.

⁴⁵⁶ Ibid.

⁴⁵⁷ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*, 39.

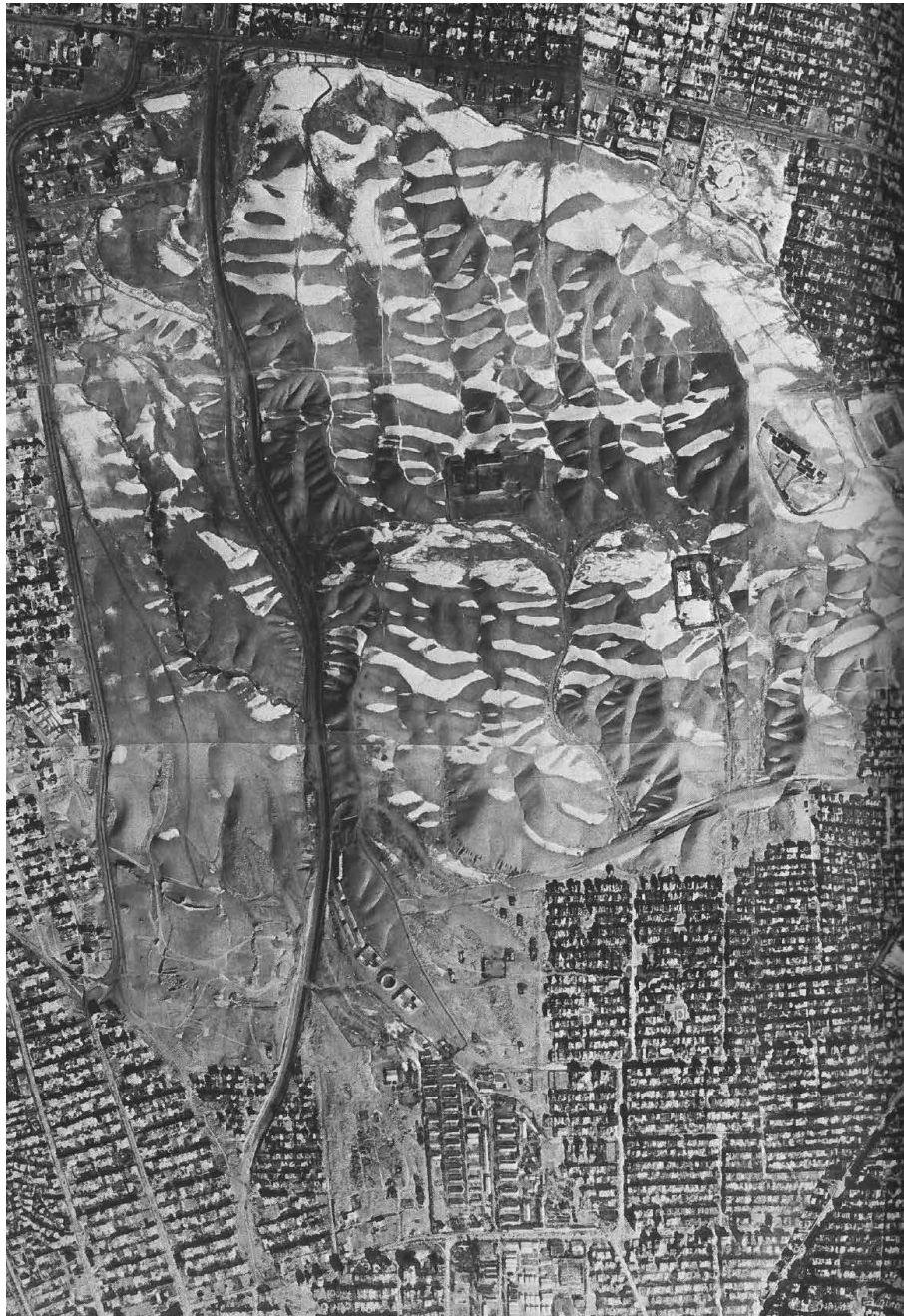


FIG. 5.1 The hilly vacant site of Abbasabad in the heart of Tehran. / Source: Llewelyn-Davies International. Book I: The Master Plan: Shahestan Pahlavi : A New City Centre for Tehran. London, 1979.

To develop the project, the municipality first collaborated with a large-scale American real estate developer, Kilroy Industries of California.⁴⁵⁸ Their proposal was not successful and was soon rejected by the municipality.⁴⁵⁹ The municipality was in search of a more strategic design for this site, “rather than simply filling it with mere housing projects”.⁴⁶⁰ In 1973, *Art and Architecture* magazine wrote:

*With the million square meters of undisturbed, rolling hills in the midst of the metropolis, Abbasabad has provided Tehran with a unique opportunity for a New Town-In Town project. It is perhaps the largest single parcel of undeveloped land in a major city in the world and it could provide Iran with a showcase development project.*⁴⁶¹

After rejecting Kilroy Industries’ proposal for Abbasabad, the mayor of Tehran, Gholam Reza Nikpay, sought assistance to develop new ones which would create a political and administrative centre for the capital, not a merely another residential district.⁴⁶² By 1974, a number of alternative planning schemes and development concepts were envisioned by major international consultants.⁴⁶³ In October 1973, the Shah and Queen invited two prominent architects of the time, Louis Kahn and Kenzo Tange, to collaboratively prepare a proposal for Abbasabad as a new centre for Tehran.⁴⁶⁴ They met the Queen at the first International Congress of “The Interaction of Tradition and Technology”, held in Iran in 1970. Among the practising architects at that time, Kahn was what the Iranian state was looking for.⁴⁶⁵ His project of the National Parliament House in Dhaka in Bangladesh (1961-1982) was a “successful manifestation of a national identity in the form of architectural monuments”.⁴⁶⁶ During the course of the collaboration on the Abbasabad project, Kahn advocated for a contextualized modernism, while Tange incorporated high-tech construction.⁴⁶⁷

⁴⁵⁸ Farshid Emami, “Civic Visions, National Politics, and International Designs: Three Proposals for a New Urban Center in Tehran (1966-1976)” (Massachusetts Institute of Technology, 2011)

⁴⁵⁹ “Iran: Yesterday, Today, Tomorrow,” *Art and Architecture* No 18-19 (1973): 96.

⁴⁶⁰ Hamed Khosravi, “Politics of Demonst(E)Ration,” *San Rocco* 6 (2013).

⁴⁶¹ *Art and Architecture* 18 (1973).

⁴⁶² Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*, 39.

⁴⁶³ Weeks Forestier-Walker Bor Llewelyn-Davies, Nathaniel, Lichfield Partners, Sherkat Sahami Nozazi Shahestan Pahlavi, *Demand Report: The Feasibility of Private-Sector Development in Shahestan Pahlavi* (London: Llewelyn-Davies Weeks Forestier-Walker and Bor, 1976), 17.

⁴⁶⁴ Farshid Emami, “Urbanism of Grandiosity: Planning a New Urban Centre for Tehran (1973–76),” *International Journal of Islamic Architecture* 3, no. 1 (2014).

⁴⁶⁵ Khosravi, “Politics of Demonst(E)Ration.”

⁴⁶⁶ *Ibid.*

⁴⁶⁷ Reza M Shirazi and Somaiyeh Falahat, “The Making of Tehran: The Incremental Encroachment of Modernity,” in *Routledge Handbook on Middle East Cities*, ed. Mansour Nasasra Haim Yacobi (2019), 36.

Despite their contradictory approaches, their collaboration was possible through the involvement of a well-known Iranian architect Nader Ardalan.⁴⁶⁸

The collaboration of Kahn and Tange on Abbasabad coincided with the 1973 global oil crisis that gave rise to the economic boom in Iran and its new international political position. Following the oil embargo by the Organization of Arab Petroleum Exporting Countries (OAPEC) to the United States, the demand for Iran's oil dramatically increased.⁴⁶⁹ In just a few months Iran's oil income was quadrupled, as Iran became one of the main oil suppliers from the Middle East region to the US and its ally Israel.⁴⁷⁰ The Shah's instrumental role in engineering the quadrupling the oil price in December 1973 "thrust him into the forefront of the international limelight", with *Time* magazine referring to him as "The Emperor of Oil".⁴⁷¹ Iran's new political position empowered the Shah to criticize the world division between "the Communist East and the Capitalist West", between "the rich post-industrial post-imperial North and the poor industrializing post-colonial South".⁴⁷² The Shah believed that Iran fit in neither camp, and he sought to project a new image of the country as an autonomous actor which could provide "an alternative to both capitalism and communism for the Third World".⁴⁷³

By taking full advantage of Iran's oil boom, the Shah inaugurated his concept of "Great Civilization" with ambitions of transforming Iran into a glorious country with high standards of living surpassing that of the world powerful countries within a generation.⁴⁷⁴ Moreover, the unprecedented position in the world power system afforded the Shah to harshly criticize global powers. In 1974 *New York Times* wrote:

⁴⁶⁸ Emami, "Civic Visions, National Politics, and International Designs: Three Proposals for a New Urban Center in Tehran (1966-1976)," 56.

⁴⁶⁹ Abul Kalam Azad, "Iran-U.S. (United States) Relations since 1945" (University of Dhaka, 2018).

⁴⁷⁰ Ibid.

⁴⁷¹ "Ansari, *Modern Iran since 1921: The Pahlavis and After*, 182.; "The Emperor of Oil, Shah of Iran," *Time* 4 November 1974.

⁴⁷² Alvandi, *The Age of Aryamehr: Late Pahlavi Iran and Its Global Entanglements*.

⁴⁷³ Ibid.

⁴⁷⁴ Abrahamian, *A History of Modern Iran*, 131.

[The Shah] spares nobody the rough, public edge of his tongue, lecturing America on its failure to control the oil companies, calling attention to Russia's subversive aims, reproving Britain for its strikes and lack of discipline, accusing Germans of getting foreigners to do their hard work for them, dismissing communism, capitalism and socialism as all old hat and telling the Western world-M general that it had better start pulling up its socks because cheap oil has only financed permissiveness, decadence and all the follies of so-called liberal democracy.⁴⁷⁵

The changing political condition in Iran in the late 1973 had a dramatic impact on the design program of Abbasabad. The Shah's new political agenda and his increasing desire to make Tehran global encouraged local politicians and authorities to define a new identity for the capital. They argued that Iran's new significance as a nation of vast natural resources with growing industries would require "a capital city of distinction".⁴⁷⁶ They believed that the development of Abbasabad could "transform Tehran's image to one of the world's major capital cities" and could "make it memorable or recognized throughout the world as a great city".⁴⁷⁷ Nikpay, the mayor, had a direct control over the Abbasabad project and played a crucial role in vetoing the modest proposals envisaged by Khan and Tange. Moreover, the sudden death of Khan in 1974 paved the way to terminate their short-term contribution to this project.⁴⁷⁸ Nikpay was in search of a more ambitious plan for Abbasabad, enthusiastically heralding to the world "the rebirth of Iran as a modern global power".⁴⁷⁹ By modifying the program, the project's dimensions changed dramatically from being one of Tehran's 10 city centres into a magnificent national centre, and an important global hub in the Middle East. It was projected to be equivalent of "the Persepolis of the Achaemenian kings of ancient Iran, or Isfahan of the Safavids".⁴⁸⁰

⁴⁷⁵ David Holden, "A Napoleonic Vision of Iran as a New Japan: Shah of Shahs, Shah of Dreams," *New York Times* 26 (1974).

⁴⁷⁶ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*, 3.

⁴⁷⁷ *Ibid.*, 47.

⁴⁷⁸ Farshid Emami, "Urbanism of Grandiosity: Planning a New Urban Centre for Tehran (1973–76)," *International Journal of Islamic Architecture* 3, no. 1 (2014).

⁴⁷⁹ Alvandi, *The Age of Aryamehr : Late Pahlavi Iran and Its Global Entanglements*.

⁴⁸⁰ Costello, "Tehran," 172.



FIG. 5.2 Presentation of the preliminary plan of Shahestan Pahlavi to the Shah and the Royal Family by the Mayor of Tehran and Jaquelin T Robertson. / Source: Llewelyn-Davies International. Book I: The Master Plan: Shahestan Pahlavi : A New City Centre for Tehran. London, 1979.

Claiming to create the largest city centre in the world, Iranian officials changed not only the underlying objectives of the project, but also the international planners working on it. The project even adopted a new name, Shahestan Pahlavi, which means “the City of the Pahlavi Shah”.⁴⁸¹ The new official title of the project signalled “the augmented significance that the project had acquired in the propagandist agenda of the State”.⁴⁸²

⁴⁸¹ Shima Mohajeri, *Architectures of Transversality: Paul Klee, Louis Kahn and the Persian Imagination* (Routledge, 2018).

⁴⁸² Emami, “Civic Visions, National Politics, and International Designs: Three Proposals for a New Urban Center in Tehran (1966-1976),” 73.

For the development of the Shahestan Pahlavi project, Nikpay invited the British firm of Llewelyn-Davies International (LDI).⁴⁸³ He had strong ties with British professionals having obtained his PhD from London School of Economics in 1956. Richard Llewelyn-Davies was one of the most reputable architects in Britain and was pioneer in New Town movement at the time.⁴⁸⁴ He was one of the principle planners of Milton Keynes, a new town located north of London planned in the late 1960s to accommodate a population of 250,000 by 2000.⁴⁸⁵ Following the Nikpay's invitation in 1974, Llewelyn-Davies presented a preliminary concept to the Shah and won his enthusiastic support [Figure 5.2].⁴⁸⁶ From the outset Llewelyn-Davies was aware that the Shahestan Pahlavi project would result in a distinctive version of new town, playing a transformative role on Tehran urban region. He asserted:

*Since Iran is in a period of national resurgence, it is only natural that the capital should become such a monumental expression of national pride, a similar spirit of ascendancy as in the time of Napoleon III in France provided the impetus for the rebuilding of Paris into the most glamorous capital of modern time.*⁴⁸⁷

The national significance and complexity of the project promoted Iranian officials to involve a constellation of American and British architects and planners as well as local professionals.⁴⁸⁸ Local officials believed that “the only people who could deal with the superheated financial climate of Tehran were a group of experts working with the mayor of New York City John Lindsay from 1966 to 1973”.⁴⁸⁹ 14 urban designers, planners and architects from Lindsay's office came to Tehran to work on the Shahestan Pahlavi project.⁴⁹⁰ At that time, Llewelyn-Davies also had strong professional ties with American architects and planners and was “a key figure in the close American-British partnership on new town planning”.⁴⁹¹ Llewelyn-Davies selected Jaquelin Taylor Robertson as the management director to direct this new planning team.⁴⁹²

⁴⁸³ Ibid., 65.

⁴⁸⁴ Rosemary Wakeman, *Practicing Utopia: An Intellectual History of the New Town Movement*, 209.

⁴⁸⁵ Ibid., 151.

⁴⁸⁶ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*.

⁴⁸⁷ Deyan Sudjic, *The Edifice Complex: How the Rich and Powerful—and Their Architects—Shape the World* (Penguin, 2006). 161.

⁴⁸⁸ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*, 39.

⁴⁸⁹ Donna Urschel, “The Style of Tehran: Architectural History Mirrors Life in Iranian Capital” (paper presented at the Library of Congress, 2004).

⁴⁹⁰ Ibid.

⁴⁹¹ Wakeman, *Practicing Utopia: An Intellectual History of the New Town Movement*, 209.

⁴⁹² Sudjic, *The Edifice Complex: How the Rich and Powerful—and Their Architects—Shape the World*, 149.

Robertson was an American planner who was working with Lindsay on planning effort for New York. In 1975, Robertson moved to Tehran and spend three years directing the plan for “Tehran’s projected \$3 billion city centre”.⁴⁹³ Later on, in the 1980s, Robertson became one of the main figures of New Urbanism movement in the United States. The work of the international planning team was aided by various local departments including the Tehran Municipality, Sherkate Sahami Nosazi Shahestan, the High Council of Architecture and Urban Planning, the Plan Organization, the Ministry of Fine Arts and Culture, the Ministry of Energy, the Ministry of Housing and Urban Development, the Tehran Regional Water Board, and Iran Central Bank.⁴⁹⁴

The underlying goal of the Shahestan Pahlavi project was to re-position Tehran as an international node in global political and economic networks through grouping political, economic and cultural activities together in the heart of Tehran. In the mid-1970s when many large-scale urban projects were halted worldwide as a result of the oil crisis and its economic downturn, the city authorities claimed that the Shahestan Pahlavi project would be “the biggest complex of tertiary activities and offices in the world”.⁴⁹⁵ It was seen as a self-reliant and prosperous town for living, working, and leisure which could function separately from the whole city to re-position Tehran as an international node in global political and economic networks. The prime goal of this grand scale project was to bridge Iran to the world by transforming Tehran’s image and identity as one of the world’s major capital cities.⁴⁹⁶ Shahestan was planned to symbolize Iran’s rapid progress and to herald the world the re-birth of Iran as a model global power.⁴⁹⁷ The magnitude of the project, the particular economic conditions of the time, and the involvement of a professional team of international planners and local actors made the Shahestan Pahlavi project a seminal international project in planning and urban design.⁴⁹⁸

⁴⁹³ James Barron, “American Architects in Iran Saw Gigantic Projects Fade Away,” *New York Times* Sept. 9, 1979.

⁴⁹⁴ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*, 14.

⁴⁹⁵ Ibid.

⁴⁹⁶ Llewelyn-Davies International, *Book II The Urban Design : Shahestan Pahlavi : A New City Centre for Tehran* (London: Llewelyn-Davies International, 1979), 10.

⁴⁹⁷ Jaquelin T Robertson, “Shahestan Pahlavi: Steps toward a New Iranian Centre,” *Toward an Architecture in the Spirit of Islam* (1978): 47.

⁴⁹⁸ Llewelyn-Davies International, “Shahestan Pahlavi, Iran,” <https://www.ldavies.com/home-slider/shahestan-pahlavi-iran/>.

5.3 The conception and formation of the Shahestan Pahlavi project

Apart from being destined as a magnificent national centre linking Iran to the world power system, the Shahestan project also gained a new economic significance in order to activate Tehran's economic system. In the 1970s with the rising global economic uncertainties, it was also conceived as a touristic attraction hub to avoid total economic dependency on oil revenues, and guarantee economic sustainability of the capital in the post-oil era.⁴⁹⁹ Local authorities argued that "tourism will be enormously important for the country in the long run", and the government aimed to "insure sources of revenue for the years when its oil exports wane".⁵⁰⁰ Moreover, Tehran had always been criticized for the lack of 'beauty'. In this regard *New York Times* wrote: "beauty is a sore point in Tehran, a city of over four million that is one of the more unattractive of the Islamic capitals...the city has grown uglier as the oil boom has brought higgledy-piggledy change and armies of cars".⁵⁰¹ Strengthening the world image of Tehran as the finest city of the Middle East, improving tourist facilities, and emphasizing Tehran as a world capital became the underlying goals of the Shahestan Pahlavi project.⁵⁰² The Mayor predicted that Shahestan Pahlavi would give the capital "a splendour it conspicuously lacks" and would make it "one of the most attractive and popular tourist cities in the world".⁵⁰³

To plan Shahestan as "the nation's window on the world", with the assistance of local advisors, the international team of planners immersed themselves in the history, culture and climate of the country.⁵⁰⁴ In the mid-1970s, returning to the urban forms of the past was a tool to re-energize the socio-spatial aspects of modern cities.⁵⁰⁵ In this regard, Shahestan Pahlavi provided a fertile ground to practice post-modernism in urban planning in Iran, a country with a short history of modern planning practices.

⁴⁹⁹ Llewelyn-Davies International, *Demand Report: The Feasibility of Private-Sector Development in Shahestan Pahlavi* (London: Llewelyn-Davies Weeks Forestier-Walker and Bor, 1976).

⁵⁰⁰ Eric Pace, "Tehran Planning One of the World's Largest Plazas," Sept. 1, 1975.

⁵⁰¹ Eric Pacejune, "Tehran Projects Face Challenges," *New York Times*, June 6 1976.

⁵⁰² Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran. ; Book II The Urban Design : Shahestan Pahlavi : A New City Centre for Tehran*.

⁵⁰³ Pace, "Teheran Planning One of the World's Largest Plazas."

⁵⁰⁴ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*, 42.

⁵⁰⁵ Eric Mumford, *Designing the Modern City: Urbanism since 1850* (Yale University Press, 2018), 310.

Shahestan Pahlavi planners argued that “a future without a past would be very bleak indeed”.⁵⁰⁶ They believed that Shahestan Pahlavi could reflect the highest aspirations of Iranian culture, resisting the destruction of traditional values by avoiding global homogenization and the blind mimicry of international design solutions.⁵⁰⁷ In order to do this, a number of Iranian historians, architects and urban planners, such as Seyyed Hossein Nasr, Mohammad Karim Pirnia, Nader Ardalan, Hushang Seyhoun, and Hossein Amanat, closely collaborated with the international team to align their proposal with the Iranian context and the building tradition in Iran.⁵⁰⁸

*Persian architecture and city building has a continuous history of over six thousand years. During this time span, the country has produced a range of notable urban developments from simple tea-houses and exquisite gardens to some of the grandest and most beautiful buildings and spaces to be found anywhere in the world, of which the most famous are Persepolis and Isfahan... Shahestan Pahlavi must be a part of this continuing tradition.*⁵⁰⁹

In line with the political and economic ambitions of the project, the planning team emphasized that Shahestan should incorporate not only the characteristics of traditional Iranian cities, but also those of world capitals, namely London, New York, and Paris.⁵¹⁰ In order to prepare the program for this vast vacant site in the middle of the capital, they studied successful urban development worldwide, such as Buckingham Palace and surrounding parks in London, and La Défens in central Paris. Consequently, Shahestan Pahlavi was planned as a mixed-use complex urban centre with an extensive building program including government buildings, ministries, banks and insurance companies, a city hall, commercial offices, retail, hotels, a microwave antennae with revolving restaurants for visitors, cultural and recreational facilities, and a modern bazaar, all to be located in the north-south spine and surrounded by large parklands.⁵¹¹ The focal point of the project was a vast square named “the Shah and Nation Square”, which was larger than Red Square in Moscow.⁵¹²

⁵⁰⁶ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*, 45.

⁵⁰⁷ Nigel Westbrook, “The Regionalist Debate in the Context of the 1970s International Architecture Forums in Iran,” *Society of Architectural Historians, Australia and New Zealand* 13 (2014)

⁵⁰⁸ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*, 14.

⁵⁰⁹ Robertson, “Shahestan Pahlavi: Steps toward a New Iranian Centre,” 48.

⁵¹⁰ Llewelyn-Davies International, *Book II: The Urban Design : Shahestan Pahlavi : A New City Centre for Tehran*, 10.

⁵¹¹ Ibid.

⁵¹² “Tehran Planning One of the World’s Largest Plazas,” *The New York Times Magazine*, September 1 1975.

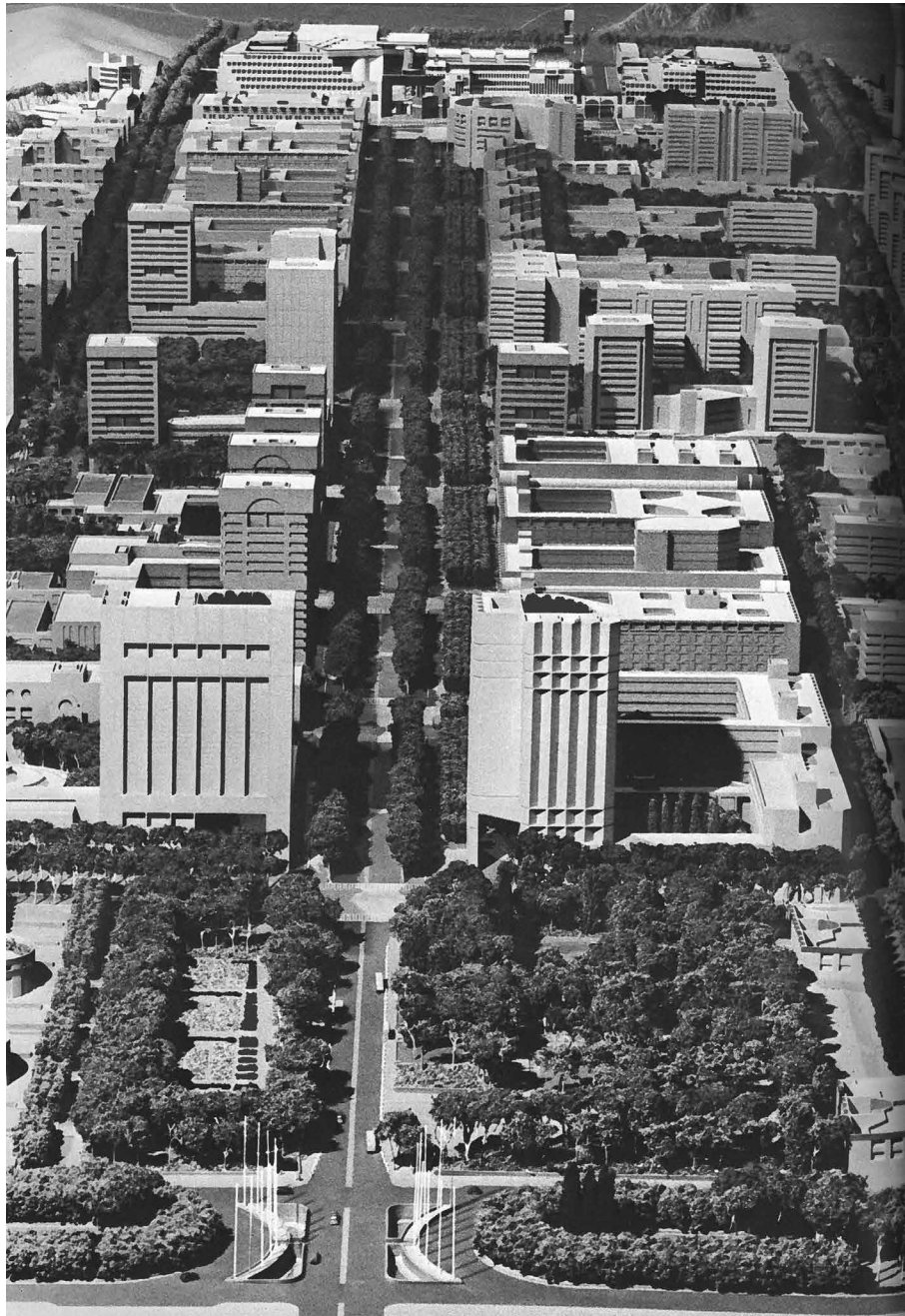


FIG. 5.3 The central spine of the Shahestan Pahlavi project. / Source: Llewelyn-Davies International. Book II: The Urban Design: Shahestan Pahlavi: A New City Centre for Tehran. London, 1979.

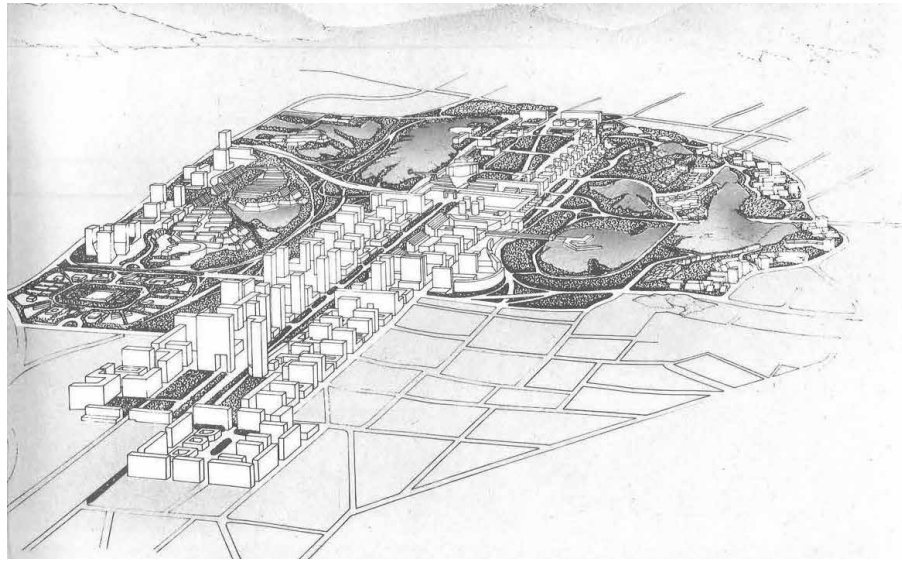


FIG. 5.4 The sketch of the Shahestan project underlines the magnitude of the project. / Source: Llewelyn-Davies International. "Landscape Report : A Report of the Master Plan for Shahestan Pahlavi.", 1976.

Moreover, six residential neighbourhoods were located between the parklands and the site boundary to connect the new centre with the surrounding areas.⁵¹³ The final design of the project became a "hybrid of New York formalism and Iranian contextualism" [Figure 5.3].⁵¹⁴

The scale of the Shahestan project was remarkable and by housing 50,000 residents and 200,000 employees Tehran's new centre was projected to become one of the largest urban complexes in the world, at a time when many large-scale urban projects were halted in America and Europe [Figure 5.4].⁵¹⁵ The 1973 oil crisis and its subsequent economic recession killed off many large-scale urban development and urban renewal. It was at this time that Douglass Lee published his famous article "Requiem for large scale Model" in the journal of *American Planners*.⁵¹⁶

⁵¹³ Llewelyn-Davies International, *Shahestan Pahlavi : A New City Centre for Tehran*, 13.

⁵¹⁴ Muriel Emanuel, *Contemporary Architects* (Springer, 2016), 677.

⁵¹⁵ Weeks Llewelyn-Davies, Forestier-Walker and Bor.; Brian Clouston and Partners, *Landscape Report : A Report of the Master Plan for Shahestan Pahlavi* (Tehran: Sherkat Sahami Nosazi Shahestan Pahlavi, 1976).

⁵¹⁶ Rosemary Wakeman, *Practicing Utopia : An Intellectual History of the New Town Movement*.

In his article, Lee accused planning large-scale urban models as being too complex and extensive.⁵¹⁷ In fact, the 1973 oil crisis triggered the temporary “end of massive state spending on capitals and infrastructure-intensive mega-projects”.⁵¹⁸ Economic decline was something for which planning had few remedies.⁵¹⁹ The complete dependence of planning system on economic growth exposed a principle weakness of modern urban planning in the 1970s.⁵²⁰ Inevitably, the 1960s optimism of modern planning was substituted by disillusionment and pessimism in the 1970s.⁵²¹ Apart from a major change in the world economic circumstance after the 1973 oil shock, the rising criticism of modern urban planning also had a significant impact on the pace and scale of urban development.⁵²² This made planning vulnerable, but in practice planning could not be abandoned as states were in need of plans to ensure their future.⁵²³

When the modern planning approach was under critical attack in the United States and Europe, Shahestan Pahlavi was regarded a testing ground for future ways of planning which could resist economic instability. In the midst of global economic decline, the planners of Shahestan Pahlavi began to look for a new planning approach to prevent the failure of this mega-scale project in a developing country. The scale of the project was indeed beyond the capacity of the Iranian construction industry, where there were only 5 or 6 national construction companies at the time, all having been established within the last decade.⁵²⁴ As large-scale urban development in Iran was still in its infancy, the involvement of international companies was necessary, which made the Shahestan Pahlavi project vulnerable to sudden shifts in national and international economic changes. The planning team asserted that “Shahestan Pahlavi could be imperilled by the problems of cash flow that are threatening the viability of both publicly and privately financed new towns the world over”.⁵²⁵ Another fundamental uncertainty about Shahestan Pahlavi was whether sufficient workers and materials would be available at the necessary time. The construction boom in Tehran since 1973 had created a competitive situation where basic building materials such

⁵¹⁷ Douglass B. Lee, “Requiem for Large-Scale Models,” *Journal of the American Institute of Planners* 39, no. 3 (1973).

⁵¹⁸ Wakeman, *Practicing Utopia : An Intellectual History of the New Town Movement*, 299.

⁵¹⁹ Tim Brindley, Yvonne Rydin, and Gerry Stoker, *Remaking Planning: The Politics of Urban Change* (Routledge, 2005).

⁵²⁰ Ibid.

⁵²¹ Peter Duignan and Alvin Rabushka, “United States in the 1980s,” (1980).

⁵²² Brindley, Rydin, and Stoker, *Remaking Planning: The Politics of Urban Change*.

⁵²³ Ibid.

⁵²⁴ Llewelyn-Davies International, *Demand Report*, 23.

⁵²⁵ Ibid., 7.

as cement, tile, and brick, came into short supply.⁵²⁶ As a result, the price of basic building material dramatically inflated in just a few months. To control the situation, the Tehran municipality had to stop issuing construction permits for half a year.⁵²⁷

The planning team argued that Shahestan Pahlavi would need “a strategic planning framework, capable of flexible interpretation over time”,⁵²⁸ rather than “a rigid physical pattern” and “a fixed development timetable” for such a long-term project. In line with the global pessimism towards scientific master planning, the planning team criticized the rigidity of common master plans and their incapability of change over time. They asserted that “experience in town planning has shown that if a plan and its layout are flexible enough to accept changes, they will, in the end, prove far more useful than a rigid blueprint which quickly grows obsolete”.⁵²⁹ They contended that a flexible plan for Shahestan would “allow for both changing fashions in design ideas and for adaptability to new technology in the future”.⁵³⁰ Envisioning a plan capable of adaptation necessitated a deeper understanding of the forces behind possible changes of a project with a national significance. The planners underlined that many of these changes were political and economic in character. To deal with political and economic uncertainties in a rapidly changing country like Iran, the planners anticipated three possible scenarios which would affect the long-term development of the Shahestan Pahlavi. These scenarios were created using a high estimate, a low estimate, and a best estimate, which fell between the two. The best estimate was if Iran’s economy kept growing, while the low estimate was in case of economic decline and lack of interest from private developers. Alternatively, the high estimate was for extraordinary circumstances affecting economy, such as the selection of Tehran to hold the 1984 World Olympic Games. It was underlined that a flexible plan for Shahestan must allow for all of these eventualities.

New concepts such as “adaptability and flexibility of the plan” as well as “a resilient structure” are notable concepts in the planning reports of the Shahestan Pahlavi project.⁵³¹ This raises the question of how the project became a fertile ground for testing new planning concepts and how the mid-1970s planners delineated those concepts and applied them to distinguish this project from master plans of the

⁵²⁶ “Iran: Yesterday, Today, Tomorrow,” 55.

⁵²⁷ Ibid.

⁵²⁸ Llewelyn-Davies International, *The Urban Design : Shahestan Pahlavi : A New City Centre for Tehran*, 7.

⁵²⁹ Ibid.

⁵³⁰ Ibid.

⁵³¹ Ibid.

time. The magnitude of the project made the detailed programming, to an extent, impossible. In fact, the lack of reliable data and the uncertainties of local, national and international forces affected the forecasting of the long-term requirements.⁵³² The Shahestan Pahlavi project was, therefore, to be constructed in three phases: phase 1 (1976-1980), phase 2 (1980-1985), and phase 3 (1985+). The planners estimated floor space requirements for the first 10 years, but the complexity of calculation beyond 10 years encouraged them to designate “reserve sites” for the future needs and possible economic changes.⁵³³ They underlined that:

*Long-term economic forecasting is uncertain in any economy, but particularly so in Iran where recent economic growth has been unprecedentedly rapid. Its full effects are not yet apparent, and the past performance of the economy is a poor guide to the future. The uncertainty of the situation has been accompanied by the unavailability or unreliability of some key forecasting data.*⁵³⁴

The concept of ‘flexibility’ was a new jargon in the 1970s planning projects, similar to the notion of ‘sustainability’ in the 2000s and ‘circularity’ today. In order for the Shahestan Pahlavi plan to be flexible and adaptable to future needs, particularly to economic changes, the planners considered “reserve sites” in different locations which could be suitable for different usage patterns.⁵³⁵ These areas were reserved to house a high- and best estimate demands which would take place in a growing economy. In the case of a low estimate scenario, resulting from economic decline, these sites could be used for something else. The short-term use of the reserve sites, such as for tree nurseries, car parks, sport fields, outdoor markets or display areas, was regarded as both profit-making and public-serving. Therefore, the functionality of these reserve sites was left unspecified in order to make the plan “responsive to future planning needs and market demand”.⁵³⁶ Although the number and size of these reserve sites were not enough to make the Shahestan plan truly flexible, the emergence of the concept of flexibility and the planners’ reaction to economic uncertainties was a paradigm shift in master planning.

⁵³² Llewelyn-Davies International, *Demand Report*, 28.

⁵³³ *Ibid.*, 1.

⁵³⁴ *Ibid.*, 6.

⁵³⁵ *Ibid.*

⁵³⁶ Llewelyn-Davies International, *The Urban Design : Shahestan Pahlavi : A New City Centre for Tehran*, 74.

5.4 The impact of Shahestan Pahlavi on Tehran and its region

In addition to acting as a ceremonial national centre, the Shahestan project was planned as an urban catalyst to improve the structure of the whole city and solve its growing urban problems. The international team of urban planners believed that the development of this new city centre would give form to the disordered organization of the city.⁵³⁷ It was claimed that it could fulfil major roles at a city wide scale: a model community to meet growing needs in north Tehran, maintaining a vibrant downtown area, and as a transportation hub in Tehran urban region.⁵³⁸ The planners maintained that the new city centre could complement the old city centre and the Tehran bazaar. They asserted that “this is in fact, what happened in many cities around the world, where the old and new centres took on different roles which were mutually reinforcing”.⁵³⁹ First priority was, therefore, given to a good public transport, in particular a new metro line, which linked old and new centres together. In 1976, the French consulting firm of SOFRETU signed a contract with the municipality of Tehran for the construction of the first lines of Tehran metro. By exemplifying global cities with two closely linked centres such as London and New York [Figure 5.5], the planners argued that Shahestan Pahlavi would transform the old city centre into a more manageable district by greatly reducing development pressure on the downtown:

⁵³⁷ Llewelyn-Davies International, *Demand Report*, 18.

⁵³⁸ Llewelyn-Davies International, *The Urban Design : Shahestan Pahlavi : A New City Centre for Tehran*, 45.

⁵³⁹ Ibid.

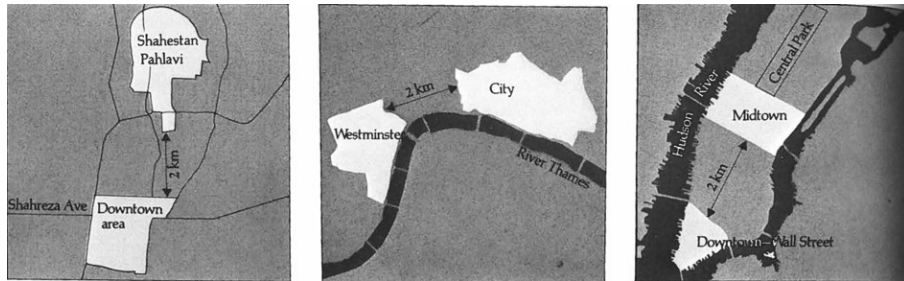


FIG. 5.5 The plan was to provide Tehran with two closely linked centres like London and New York. / Source: Llewelyn-Davies International. Book I: The Master Plan: Shahestan Pahlavi : A New City Centre for Tehran. London, 1979.

It is not unusual however for cities that count their population in the millions to divide their key activities between two centres. London, for example, has concentrated its financial activities for centuries in the Old City while keeping the seat of government separate almost one kilometre down the Thames at Westminster. An even more dramatic example of a city with two main centres is New York, where both Manhattan's downtown (the financial district around Wall Street) and midtown (the city's more modern centre of business) have lofty skylines clearly separated by 3.6 kilometres of relatively low buildings.⁵⁴⁰

Critics soon raised concerns that the new city centre would result in the gradual decline of the old city centre and the Tehran bazaar [Figure 5.6].⁵⁴¹ The major fear was the drain of the economic lifeblood from the old city centre by enticing retailers and employers towards Shahestan Pahlavi.⁵⁴² In reaction to rising criticism, the planning team referred to the high level of growth prediction in the coming years and maintained that Tehran economic growth would allow both centres to prosper equally. To ensure that the new city centre would not compete unfairly with the downtown, the planners argued that they allocated “only 50% of the future demand for any privately built land use to the project”.⁵⁴³ They asserted that the old city centre would sustain as a thriving commercial and tourist centre by accommodating the “unallocated growth”.⁵⁴⁴

⁵⁴⁰ Ibid., 38.

⁵⁴¹ Costello, “Tehran,” 173.

⁵⁴² Llewelyn-Davies International, *Demand Report*.

⁵⁴³ Ibid.

⁵⁴⁴ Ibid.

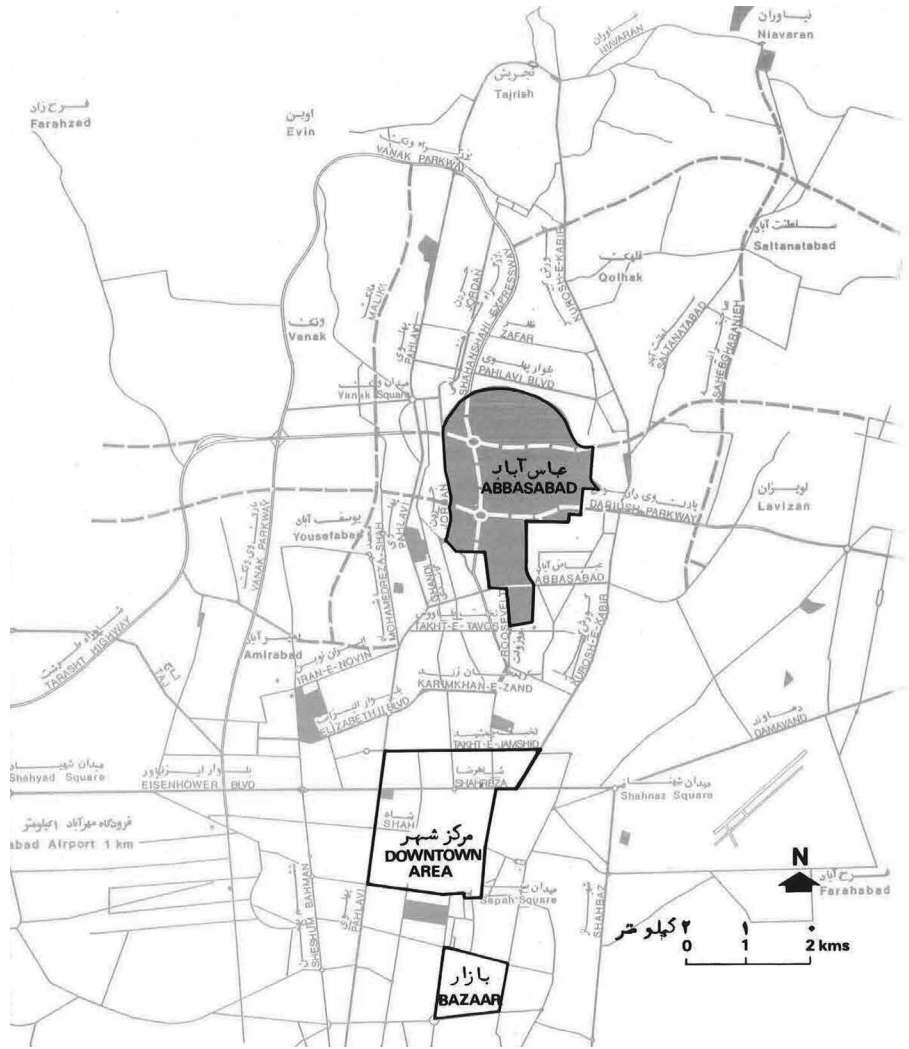


FIG. 5.6 The location of the new city centre in relation to the old centre and the bazaar. / Source: Llewelyn-Davies International. "Demand Report: The Feasibility of Private-Sector Development in Shahestan Pahlavi. London, 1976.

Moreover, the significance of the downtown gentrification and the improvement of its old urban fabric was stressed in order to guarantee its future prosperity.

As “the nerve centre of Tehran and the nation”, Shahestan Pahlavi required a very good system of transportation at local, regional and national scales.⁵⁴⁵ Transportation policies for Shahestan Pahlavi were considered in close relation to transportation plans for the whole city. According to predictions, over a third of a million people would commute to the new city centre every day. Facilitating the easy movement of such population necessitated the development of an advanced and varied transportation system [Figure 5.7]. The significance of its accessibility made the new city centre a major transportation hub in the capital. In addition to motorways and metro lines connecting Shahestan Pahlavi to other areas of Tehran, a train line was projected to directly link it to the new international airport located in the south of Tehran [Figure 5.8]. By the projection of an airport train terminal in Shahestan Pahlavi, the new city centre was planned to “become the gateway to Iran for visiting businessmen and tourists”.⁵⁴⁶

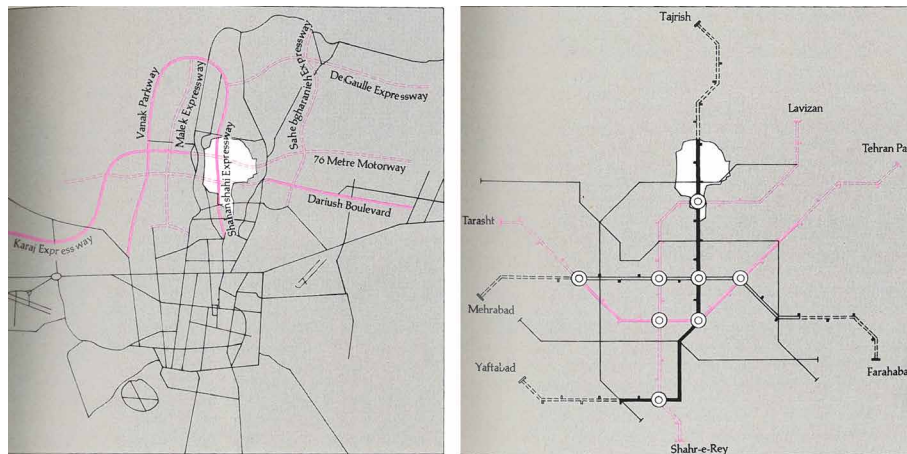


FIG. 5.7 Different modes of transportation linking Shahestan Pahlavi to various parts of the city. / Source: Llewelyn-Davies International. Book I: The Master Plan: Shahestan Pahlavi : A New City Centre for Tehran. London, 1979.

⁵⁴⁵ Llewelyn-Davies International, *The Urban Design : Shahestan Pahlavi : A New City Centre for Tehran*, 85.

⁵⁴⁶ *Ibid.*, 34.

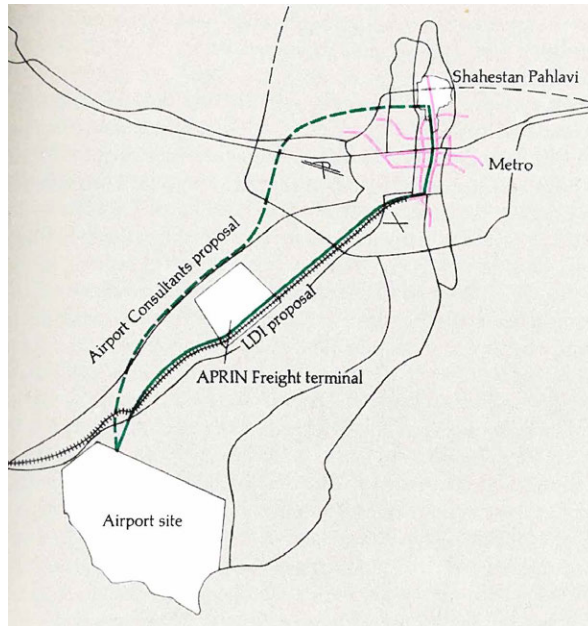


FIG. 5.8 Linking the new city centre to the new international airport in the south of Tehran. / Source: Llewelyn-Davies International. Book I: The Master Plan: Shahestan Pahlavi : A New City Centre for Tehran. London, 1979.

The biggest concern was that Shahestan Pahlavi would lead to an acceleration of Tehran's growth, in turn exacerbating inequality with the rest of the country.⁵⁴⁷ To examine the wider impacts of the new centre on Tehran's urban development, the project became the subject of a comprehensive study carried out by the Tehran Development Council (TDC).⁵⁴⁸ As discussed in Chapter 3 and 4, the TDC was formed in 1974 and its international staff including a groups of advisors from Harvard University undertook analytical and planning activities regarding Tehran urban region.⁵⁴⁹ The TDC's main objective was to minimize conflict between contradictory development projects in Tehran, through strategic planning and enacting urban policies:

Current goals and policies affecting Tehran have not been developed in a comprehensive manner. Some are national government policies from the Five-Year National Development Plan or from independent ministries. Some are from the municipality. And some are remnants from the first Tehran Master Plan. All too often

⁵⁴⁷ Costello, "Tehran," 173.

⁵⁴⁸ Tehran Development Council, *Major Planning and Development Issues Affecting Tehran's Future : An Interim Report to the Tehran Development Council* (Tehran: The Secretariat, 1976), 22.

⁵⁴⁹ *Ibid.*, 2.

a unilateral action or decision which may be effective for a particular purpose, may in fact conflict with other goals and objectives which treat the issues facing Tehran comprehensively.⁵⁵⁰

According to the TDC study, the consolidation of national government functions in the new centre was contradictory to the national policy of “decentralization” of government administrations away from the capital, and in turn controlling Tehran’s unbridled growth.⁵⁵¹ The concern was that the new city centre would stimulate further centrality of Tehran, widening the gap between the capital and underdeveloped cities in Iran.⁵⁵² In 1976, Tehran greatly contributed to the national economic development, with a 40 percent share of GNP.⁵⁵³ Tehran’s centrality in the national economic system and the superiority of its urban development not only reflected the disproportionate concentration of capital in Tehran, but also revealed the way in which Tehran’s development and its internationalization hindered the growth of disadvantaged regions.⁵⁵⁴ In the mid-1970s, the rising adverse socio-economic consequences of Tehran’s centrality on both city and national scales became a main subject of concern for government authorities. However, by addressing the rising aspiration to make Tehran an international city, the planners accentuated the necessity and logic of urban growth in Tehran.⁵⁵⁵

The planners argued that the national policy of decentralization “should not block attempts to solve the problems of today’s city, nor to stand in the way of fulfilling its international role”.⁵⁵⁶ They warned the local authorities about the refusal of many desirable international firms to come to Iran, in case they would not be permitted to settle in Tehran.⁵⁵⁷ It is worth mentioning that Llewelyn-Davies had a close connection with Constantinos Doxiadis. As discussed in Chapter 4, Doxiadis viewed human settlement as a constantly changing organism.⁵⁵⁸ His belief was that cities were not static, and planning, therefore, should accommodate their dynamic

⁵⁵⁰ Ibid., 2.

⁵⁵¹ Llewelyn-Davies International, *Demand Report*.

⁵⁵² Ibid., 18.

⁵⁵³ Tehran Development Council. Secretariat., *Land Use, Urban Structure and Spatial Development in Tehran : A Preliminary Analysis*, (1976), 10.

⁵⁵⁴ Ibid.

⁵⁵⁵ Costello, “Tehran,” 173.

⁵⁵⁶ Llewelyn-Davies International, *Demand Report*.

⁵⁵⁷ Ibid.

⁵⁵⁸ Wakeman, *Practicing Utopia: An Intellectual History of the New Town Movement*, 135.

growth.⁵⁵⁹ For Doxiadis, urban growth was not a mere design tool, but rather an engine for economic development and solving urban problems. By acknowledging Doxiadis's notion of urban growth, Llewelyn-Davies discussed the management of urban growth as the most important challenge facing planning in the mid-twentieth century.⁵⁶⁰ In his 1967 paper "Some Further Thought on Linear Cities", Llewelyn-Davies maintained that in order to manage urban growth two of the more extreme concepts need to be avoided, "generalized dispersal on the one hand or the concentrated super-city on the other".⁵⁶¹ He stressed that "we should try to manage metropolitan areas into a poly-nuclear pattern".⁵⁶²

Despite Doxiadis's influence, Llewelyn-Davies had faith in a poly-nuclear pattern of Tehran's growth. However, the magnitude of the Shahestan Pahlavi project was contrary to the multi-centred scheme projected by the TMP. As discussed in Chapter 3, the TMP was based on a satellite town strategy and each satellite town was planned to have a centre of employment and commercial concentration.⁵⁶³ The Shahestan Pahlavi planners believed that with top-down policies on land price and tax rate, the negative impact of the new city centre on the other proposed towns could be controlled to a considerable extent. Yet despite their claim, this ceremonial national centre had conflicting objectives with the TMP development strategies, and would not reinforce the urban growth pattern they recommended.⁵⁶⁴ The share of Shahestan Pahlavi for future demand for office and commercial space would make the promotion of new employment and commercial centres in other satellite towns exceedingly difficult.⁵⁶⁵ The successful implementation of the Shahestan Pahlavi project, as a symbolic focal point of Tehran and Iran, required preferential treatment compared to other projects in terms of public investment, labour, and construction materials.⁵⁶⁶

⁵⁵⁹ Constantinos Doxiadis, *Architecture in Transition* (London : Hutchinson, 1968).

⁵⁶⁰ Richard Llewelyn-Davies, "Some Further Thoughts on Linear Cities," *The Town Planning Review* 38, no. 3 (1967).

⁵⁶¹ Ibid.

⁵⁶² Ibid., 203.

⁵⁶³ Tehran Development Council Secretariat., *Land Use, Urban Structure and Spatial Development in Tehran : A Preliminary Analysis*, 6.

⁵⁶⁴ Gruen and Farmanfarmaian, "Tehran Comprehensive Plan."

⁵⁶⁵ Tehran Development Council Secretariat, *Major Planning and Development Issues Affecting Tehran's Future : An Interim Report to the Tehran Development Council*, 31.

⁵⁶⁶ Ibid., 30.

The TDC experts stressed that the Shahestan Pahlavi project would make the realization of the TMP virtually impossible.⁵⁶⁷ In order to converge the objectives of the project and that of the TMP, the TDC urged the Shahestan Pahlavi planners to re-consider some aspects of the project in the long implementation period. The most prominent aspect was seen as the government and commercial office space requirements. In the TDC reports, the re-evaluation of the Shahestan Pahlavi program was underlined with a major focus on decreasing the commercial office and governmental spaces, while increasing residential and recreational components, creating more of a cultural and recreational centre than a governmental one. Moreover, the TDC stated that “the development schedule for Shahestan should be slowed to a pace more consistent with market forces, available government funds, and the construction capability in the Tehran region”.⁵⁶⁸

By placing Shahestan Pahlavi at the centre of the development, the TDC highlighted the necessity of planning strategic growth of Tehran [Figure 5.9].⁵⁶⁹ The issue of accommodating this expansion contradicted the city authorities’ policy to curb urban growth in Tehran. By overlooking the wider influence of the Shahestan project, in 1977 the municipality of Tehran demarcated boundaries to strictly limit Tehran’s urban expansion. However, a few months later the pressure of the rising population in Tehran led to the abandon of the physical limits set by the municipality.⁵⁷⁰ In this regard, the TDC experts argued that strategic planning of Tehran’s growth would not be a fixed and final set of policies, but would be responsive to unforeseen development changes: “planning should be a continuous process with new evaluations made when new options are identified and better data has been collected”.⁵⁷¹ The TDC stated that planning “must undergo a continuous process of improvement with results tested against professional experience and common sense”.⁵⁷²

⁵⁶⁷ Ibid.

⁵⁶⁸ Ibid.

⁵⁶⁹ Tehran Development Council Secretariat., *A Report on the Strategic Development of the Greater Tehran Region, 2536-2546 : Guidelines for a Comprehensive Planning Process* (Tehran:: Tehran Development Council Secretariat., 1977).

⁵⁷⁰ Bernard Hourcade, “Urbanisme Et Crise Urbaine Sous Mohammad-Reza Pahlavi,” in *Téhéran: Capitale Bicentenaire*, ed. Chahryar Adle, and Bernard Hourcade, eds. (Institut français de recherche en Iran: 1992), 213.

⁵⁷¹ Tehran Development Council Secretariat, *A Report on the Strategic Development of the Greater Tehran Region, 2536-2546 : Guidelines for a Comprehensive Planning Process*.

⁵⁷² Ibid.

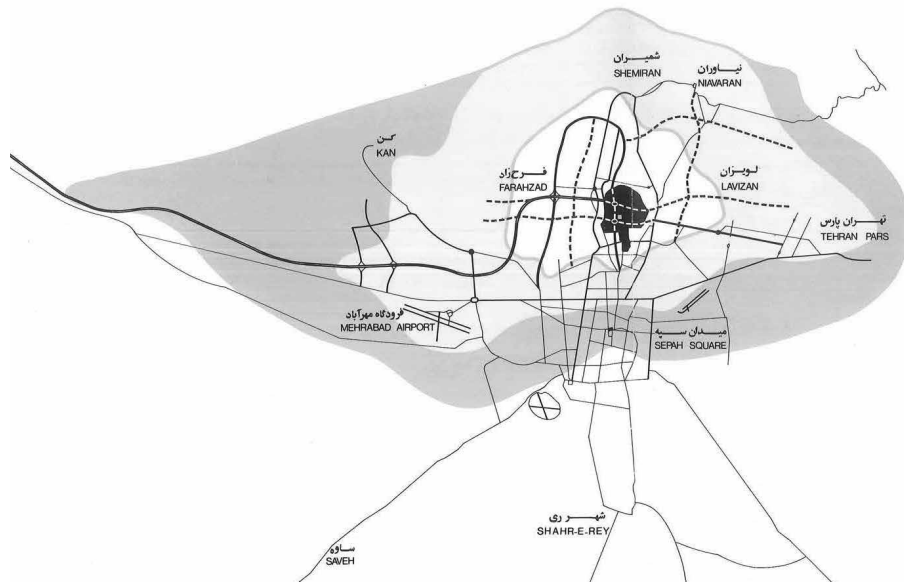


FIG. 5.9 The centrality and accessibility of the new city centre from the whole city. / Source: Llewelyn-Davies International. "Demand Report: The Feasibility of Private-Sector Development in Shahestan Pahlavi. London, 1976.

In spite of dividing the city into a number of functional zones, the TDC divided Tehran's development into four successive zones [Figure 5.10]. First, the Central Business District which included both old and new centres, and was expected to develop as a major area of employment concentration in Tehran urban region. Second, the "25-Year Sub-Region" which was already defined by the TMP as the strongest legal development boundary for the capital. The Third zone was the "Inner-Ring Sub-Region", which encompassed the area between the 25-year boundary and a 50-kilometer radius circle. It was regarded as the main region for suburban development. By easing construction restrictions in this region, the TDC policy was to draw some activities out of the central zones. But despite the TDC policies to decentralize population from the central region, the poor accessibility to all parts of the third zone was regarded as a big challenge. The fourth zone was the "Outer Ring Sub-Region" which enclosed the most peripheral areas of the region, including the new international airport and other development poles.⁵⁷³

⁵⁷³ Ibid.

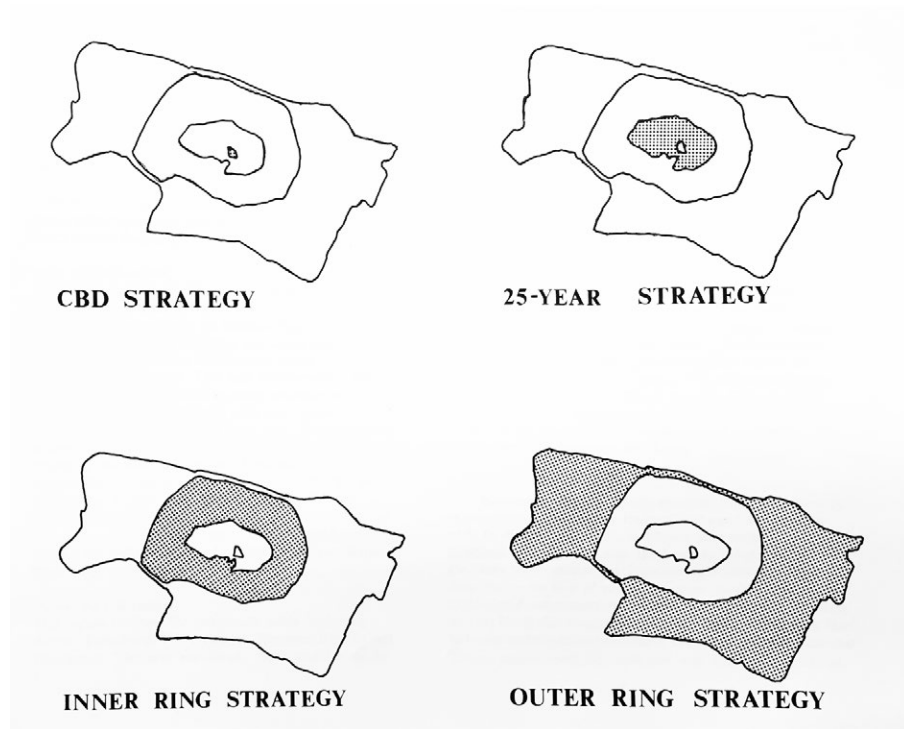


FIG. 5.10 The strategic development of Tehran from its Central Business District to its regional territories. / Source: Tehran Development Council Secretariat. "A Report on the Strategic Development of the Greater Tehran Region, 2536-2546 : Guidelines for a Comprehensive Planning Process", 1977.

The concept of Tehran's mega-centre not only dominated the strategic development of the whole city [Figure 5.11], but also overshadowed the mobility flows in 25-year Tehran development boundary [Figure 5.12]. The TDC proposed a hierarchical ordering of mobility systems in the overall transportation network of the city. In their proposal, the CBD was regarded as a parking-restriction zone for 12 hours from 8.00am to 8:00pm.⁵⁷⁴ In order to further encourage the increased use of public transportation, major parking zones were located along the periphery of the CBD within walking distance from metro and bus stations.⁵⁷⁵ This strategy was to decrease the traffic flow to the central area, but could also put extra pressure on the CBD peripheries.

⁵⁷⁴ Tehran Development Council Secretariat., *Tehran's Built Form Guidelines for a Coordinated Urban Design Policy*, (1978), 59.

⁵⁷⁵ *Ibid.*, 61.

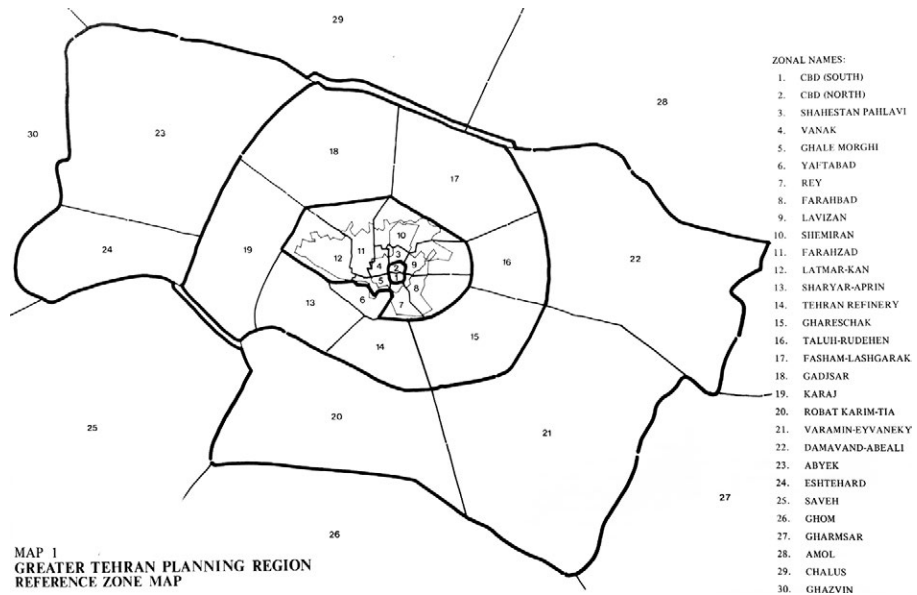


FIG. 5.11 The zoning of Tehran urban region / Source: Tehran Development Council Secretariat. "A Report on the Strategic Development of the Greater Tehran Region, 2536-2546 : Guidelines for a Comprehensive Planning Process". 1977.

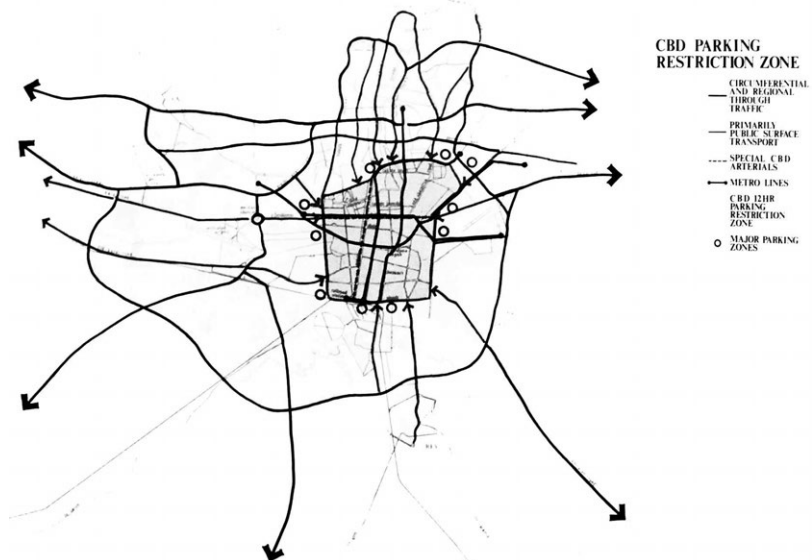


FIG. 5.12 The impact of the new city centre on transportation policies of the whole city. / Source: Tehran Development Council Secretariat. "Tehran's Built Form Guidelines for a Coordinated Urban Design Policy." 1978.

5.5 The fate of Shahestan Pahlavi

In the late 1970s, large-scale urban projects in Tehran competed for financial resources and left significant physical, economic and social impacts on the capital.⁵⁷⁶ The new city centre, the new international airport, the two satellite towns of Kan and Lavizan in west and east Tehran, the metro lines and the high-cost system of highways magnetically attracted developers and competed for space, construction labour, and customers, and therefore left significant physical, economic and social impacts on Tehran [Figure 5.13].⁵⁷⁷ As manufacturing grew to be the most important industrial sector in the capital, the general wage index of construction workers increased threefold.⁵⁷⁸ Moreover, the global economic recession following the 1973 oil crisis reached Iran in the late 1970s.⁵⁷⁹ Although Iran's oil income was at its peak, managing oil revenues became a major challenge for the government.⁵⁸⁰ Despite directing a considerable proportion of oil income towards manufacturing, Iran's economy began to slow and faced with severe stagnation by 1978.⁵⁸¹ The late 1970s bought with it an economic downturn which challenged the realization of the ongoing large-scale urban projects in Tehran.⁵⁸²

⁵⁷⁶ Tehran Development Council Secretariat., *Major Planning and Development Issues Affecting Tehran's Future : An Interim Report to the Tehran Development Council*, 25.

⁵⁷⁷ Ibid.

⁵⁷⁸ Homa Katouzian, *The Political Economy of Modern Iran : Despotism and Pseudo-Modernism, 1926-1979* (London : Macmillan, 1981), 277.

⁵⁷⁹ Kamran Matin, *Recasting Iranian Modernity: International Relations and Social Change*, Iranian Studies (London: Routledge, 2013).

⁵⁸⁰ Hadi Salehi Esfahani and M Hashem Pesaran, "The Iranian Economy in the Twentieth Century: A Global Perspective," *Iranian Studies* 42, no. 2 (2009).

⁵⁸¹ Robert E Looney and PC Frederiksen, "The Iranian Economy in the 1970s: Examination of the Nugent Thesis," *Middle Eastern Studies* 24, no. 4 (1988).

⁵⁸² Shima Mohajeri, "Louis Kahn's Silent Space of Critique in Tehran, 1973-74," *Journal of the Society of Architectural Historians*. 74, no. 4 (2015).



FIG. 5.13 Major large-scale urban projects in Tehran in the late 1970s. / Source: Tehran Development Council. "Major Planning and Development Issues Affecting Tehran's Future: An Interim Report to the Tehran Development Council.", 1976.

The termination of the Shahestan Pahlavi project and other large-scale urban projects in Tehran gave rise to an unprecedented pessimism about the role of modern urban planning, particularly with regard to transnational planning practices. In the late 1970s, Tehran was littered with unfinished urban projects. To the eyes of critics, transnational planning in Tehran failed to achieve the wholesale modernization and development of the city that it had promised since the approval of the TMP in 1969. At the same time there was a growing concern about unjust spatial development, both in Tehran, and nationally. In this regard, the *New York Times* wrote:

*With Iran's oil boom slowing, planners and intellectuals in Tehran are voicing scepticism about the wisdom of further splurging on such urban embellishments as skyscrapers, a subway system and sewers. . . In both public and private, more and more complaints are being heard here about what is described as unlimited and ill-planned growth. These objections contrast with the planning rhetoric heard near the start of the boom in 1973, and they are paralleled by complaints elsewhere in the Persian Gulf region.*⁵⁸³

⁵⁸³ Pacejune, "Tehran Projects Face Challenges."

The rising scepticism towards the role of planning in Iran was extensively reflected upon in, *Art and Architecture* magazine. Whereas in 1973 this magazine was published entirely in English for the first time, and heralded the great success of the modern planning regime in Iran's modernization. Emanated from the 1973 oil boom, Iranian nationalism movement had its primary repercussion on the first international edition of *Art and Architecture* magazine. In this first all-English international edition of the magazine, Iranian architects and planners attempted to portray modern Iran and its rapidly developing capital to the world.⁵⁸⁴ In order to give international readers a comprehensive picture of the country, this issue looked at "Iran Yesterday, Today and Tomorrow".⁵⁸⁵ "Iran Yesterday" was not a historical summary, but presented "a compendium of visual inspiration from the past" which could affect present and future design development; "Iran Today" gave a picture of a country that had intentionally plunged itself into the tumult of growth; "Iran Tomorrow" stressed that national development plans would push Iran into "the matrix of open-ended growth where constantly changing parameters would result in new priorities and new directions".

The late 1970s articles in *Art and Architecture* were in stark contrast with the early 1970s optimism towards planning, and conversely signalled a great scepticism about the future of modern planning and its transnationalism in Iran. In 1977, it published a very critical article entitled "Is There any Future for Town Planning in Iran?" [Figure 5.14]. The author Azar Faridi, a British-trained Iranian architect and planner, maintained that "town planning in Iran if continued in the present fashion may not achieve significant success in the future".⁵⁸⁶ She highlighted the need to reassess plan making methodology in conjunction with the planning implementation in Iran. More specifically, she criticized the institutionalization of transnational planning in Iran and asserted that in spite of the fact that "Iran could take advantage of the lesson learned by European and American governments in changing and reorganizing their administrative and planning procedures", their planning philosophy and system needed to be contextualized.⁵⁸⁷ Faridi stressed that the employment of foreign planners "would prove of little benefit to the nation" as their cultural and language differences would hinder a thorough collaboration with local actors. Moreover, by reflecting on the government policy of the decentralization of the capital, she considered regional plans to be the vital missing links in Iran's planning process.⁵⁸⁸

⁵⁸⁴ "Iran: Yesterday, Today, Tomorrow."

⁵⁸⁵ Ibid.

⁵⁸⁶ Azar Faridi, "Is There Any Future for Town Planning in Iran?," in *Art and Architecture* no 41-42 (1973).

⁵⁸⁷ Ibid.

⁵⁸⁸ Ibid.

Is there any future for town planning in IRAN?

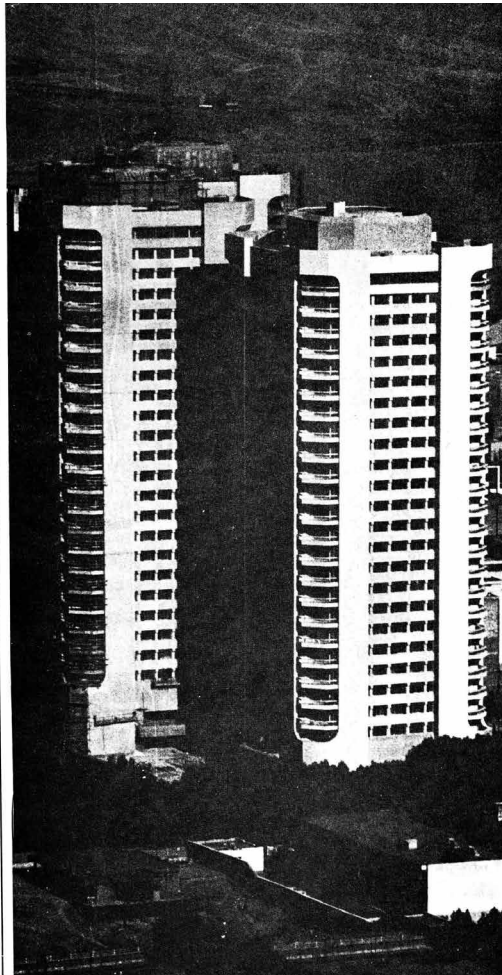


FIG. 5.14 Rising pessimism towards the future of urban planning in Iran. / Source: Azar Faridi. "Is There Any Future for Town Planning in Iran?". *Art and Architecture* No 41-42, 1973.

In the late 1970s, the effectiveness of modern planning as well as the whole planning system in Iran was being challenged by local critics. Modern planning, particularly modern schemes for Tehran, were left vulnerable and exposed to political opposition after the 1979 Islamic Revolution and the sudden change of the Pahlavi regime. Planning, therefore, became a subject for considerable change, though, the 8-year Iran-Iraq War and the economic conditions of the 1980s made this very difficult to achieve. Planning in Tehran could not be abandoned, particularly by the massive influx of migrants involved in the war from Iranian border cities towards Tehran. Thus, unlike growing criticism of modern urban plans envisioned during the Pahlavi regime, those plans remained as the main planning documents for Tehran but indeed with a deviation from its original regulatory framework.

5.6 Conclusion

The 1970s marked a highpoint in Iran's global connectivity. Never before had global political and economic forces affected so intimately the country and society.⁵⁸⁹ In the face of Iran's sudden international changes, transnational planning of Tehran entered into a new phase. A group of international experts and planners including Richard Llewelyn-Davies, Jaquelin Robertson and deputy directors of New York and Manhattan projects, were all invited to work on a new urban space for Tehran which was projected to serve locals and, more significantly, to accommodate international companies and foreign tourists. Making Shahestan Pahlavi an international project could be interpreted as a national policy to internationally advertise the project years before its construction. Considering the size and function of the project, its success was highly dependent on the investments of foreign construction companies, as at that time Iran did not have the capacity to undertake the work. By focusing on the 1970s economic upheavals and the 1973 oil boom, this chapter shows how international forces and the Pahlavi regime aspiration of making Tehran global triggered a radical urban transformation in the capital. More specifically, it explicates how the clash of international forces and local interests affected the emerging concept of a new modern city centre for Tehran, the selection of its international team of planners, the evolution of the project's underpinnings, and its wider impact on Tehran urban region.

By centralizing economic and administrative activities in the heart of the capital, the new city centre was meant to solidify Iran's position in global economic and political networks. Also, by centralizing the main cultural and commercial activities, Shahestan Pahlavi allowed for the mobilization of social and economic dynamics in the capital. It was projected to become one of the main international tourist hubs, therefore shifting Tehran's economy from dependency on oil to tourism, in order to guarantee economic sustainability of the capital in post-oil era. The desire of the State to make Tehran a global capital contradicted the national policy of Tehran's decentralization. The ambitious program of the new city centre made it a generator of urban growth; however, the national plans insisted upon limiting Tehran's physical boundaries, by decentralizing the agglomerated administrative, economic and cultural functions and indeed population from the capital, as the rising investment in Tehran further hindered the development of other cities. Soon, two divergent

⁵⁸⁹ Brindley, Rydin, and Stoker, *Remaking Planning: The Politics of Urban Change.*; Alvandi, *The Age of Aryamehr : Late Pahlavi Iran and Its Global Entanglements.*

planning approaches manifested in Tehran, each pushing the city in different directions. The constant contradiction between planning for or against Tehran's urban growth led to an unplanned and fragmented expansion of the city. The late 1970s economic recession in Iran challenged the realization of the Shahestan Pahlavi project as well as other large-scale urban projects in Tehran. This chapter explains how the halt of these projects and social resistance against them gave rise to pessimism towards the effectiveness of Tehran urban projects and in turn public disillusionment with transnational planning of Tehran which was reinforced after the 1979 Islamic Revolution.



View of a middle-class area in Tehran, the 1980s. Source: [dailymail.co.uk](https://www.dailymail.co.uk)

6 Forcible Ejection of Foreign Planners

Rising City-Region Disparities (1980-2010)

The First Tehran Strategic Spatial Plan (TSSP)

6.1 Introduction

The 1979 Islamic Revolution and the overthrow of the Pahlavi regime resulted in a radical shift in the role and value of urban planning, and growing criticism of transnational planning in Tehran. The rise of scepticism towards the efficiency of master planning and its transnationalism was coupled with the political and economic turmoil that the Islamic Revolution bought with it. It not only left Tehran urban projects vulnerable to political opposition of the revolutionaries, but also marginalized many foreign-trained Iranian planners who had mediated the collaborations with internationals. As the Islamic government was established, many local planners lost their professional prospects and thus left the country. The new government tried to liberate planning practices from American and European influences by establishing a new planning ideology based on Islamic principles. However, this new local-based planning system was hindered by the 8-year Iran-Iraq war (1980-1988), when Tehran had to house an unprecedented influx of population arriving from war-stricken regions in the south of Iran. This disrupted the utopian image of Tehran that the TMP had envisioned a decade ago. The speed of demographic change in Tehran in the 1980s, and the urgency of immediate

action negated the possibility of long-term planning. Tehran was confronted with the accelerated growth of informal settlements, a severe housing shortage, mass unemployment, a lack of urban amenities, the escalation of environmental pollution, and above all the lack of a reliable and efficient urban plan to deal with these major problems.⁵⁹⁰

Envisioning a new urban plan to efficiently deal with growing Tehran's urban challenges necessitated an alternative form of urban planning. This was not easy to achieve in Iran, a country struggling with revolution, war, and subsequent radical political and economic changes. It took almost two decades for the first Tehran Strategic Spatial Plan (TSSP) to be envisioned by local planners, and was only approved in 2005 by local authorities. This raises the question of how local planners conceptualized a new direction in urban planning, after decades of transnational planning, and to what extent this new approach could mitigate Tehran's urban problems. This chapter argues that the cessation of transnational planning could not bring a positive change that the Islamic government desired. It investigates a turn in transnational planning practices and explores the negotiation and conflicts behind changes in planning roles and values.

The first section revisits the 1979 Islamic Revolution and how the advocacy of anti-planning was first raised by revolutionaries in the 1980s. The second section unravels the emerging discussion of re-making planning in the 1990s which ended up to the revision of the TMP to be in accordance with Islamic values. By reflecting on the rising demand in substituting master planning with strategic planning, the third section addresses the conceptualization of the first TSSP and how it prioritized sustainable urban development. For a better understanding of how new planning strategies worked in practice, and of the socio-economic and environmental challenges it gave rise to, the last section examines the rapid development of District 22 (located in the west of Tehran) and its goal of exemplifying a sustainable urban model in Tehran.

⁵⁹⁰ Gholam Hossein Karbaschi, "The Role of Decision Making Processes in Urban Management Systems (Case Study of Tehran)" (Newcastle University, 2013), 148.

6.2 The 1979 Islamic Revolution and anti-planning policies

The Islamic Republic of Iran, which was established in 1979 during the turmoil of the revolution, aimed at reducing Iran's economic dependency on foreign countries in order to develop a new economic model.⁵⁹¹ This was a reaction to the economic system of the Pahlavi regime, which the revolutionaries criticized as heavily dependent upon foreign trade, the import of raw materials and more importantly advanced technologies of the United States and European countries.⁵⁹² The Pahlavi regime was increasingly criticized for promoting a consumerist economy, being overly reliant on oil export revenues, excessive investment in assembly plants to hasten industrialization, and paying too little attention to agricultural sectors.⁵⁹³ As a reaction to radical modernization during the Pahlavi regime, the revolutionary government promoted self-efficiency, reducing reliance on oil money and revitalizing agricultural sectors.⁵⁹⁴

To develop an Islamic economic model, securing socio-economic justice and equity in society became the main purpose of the revolutionary government.⁵⁹⁵ Deterioration of the socio-economic condition of rural communities greatly concerned the revolutionary regime. The national authorities saw that improving the condition of rural areas would curb rural-urban migration and control unbridled urban growth, in particular in Tehran.⁵⁹⁶ The government, therefore, aimed at decreasing rural-urban disparities which had widened as a result of the Pahlavi regime modernization policies. Consequently, rural reforms became one of the government's most important priorities. The former government also invested in the industrialization of agriculture and mechanization of large-scale farmlands, but they failed to deliver rural prosperity and to eradicate rural poverty.⁵⁹⁷ Thus, the significance of agriculture and peasants to sustain local economy and to control the accelerated rural-urban migration was emphasized in the first post-revolutionary

⁵⁹¹ Jahangir Amuzegar, "The Iranian Economy before and after the Revolution," *Middle East Journal* 46, no. 3 (1992): 415

⁵⁹² Ibid.

⁵⁹³ Ibid.

⁵⁹⁴ Madanipour, *Tehran: The Making of a Metropolis*, 51.

⁵⁹⁵ Hiromasa Kano, "Urbanization in Post-Revolution Iran," *The Developing Economies* 34, no. 4 (1996).

⁵⁹⁶ Ali Shakoori, *State and Rural Development in the Post-Revolutionary Iran* (Springer, 2001).

⁵⁹⁷ Ibid.

Development Plan (1983-1987).⁵⁹⁸ However, the 8-year Iran-Iraq war disrupted the implementation of the plan, and its ambition was left unfulfilled.⁵⁹⁹ By shifting the focus from urban development to rural improvement, the government's investment in urban development of Tehran decreased, with almost all State's programs now concentrated on rural regions.⁶⁰⁰

In the 1980s, the TMP also came under attack, as it was proved incompetent in securing socio-economic equity and justice in the capital.⁶⁰¹ The TMP was blamed for the rising inequality in the city by exacerbating socio-spatial segregation and the housing shortage. The revolutionaries criticized the TMP for prioritizing high- and middle-class strata, while excluding the disadvantaged from their planning agenda. It was seen as a "luxurious Western urban model" which increased social inequality in Tehran.⁶⁰² As discussed in Chapter 3, in order to realize the TMP, in the late 1970s the Tehran municipality decided to demolish residential areas that did not conform with the plan's criteria. This included the eradication of many squatter settlements located around the city, which led to conflict between the people residing there and the Pahlavi military. Since there was no plan to relocate those who had lost their homes, the demolition provoked demonstrations and riots against the municipality and the Pahlavi regime, which essentially spurred the first sparks of the revolution.⁶⁰³ By relating the TMP to the former regime, the implementation of the TMP was put to a stop in the 1980s, with many large-scale urban projects in Tehran left unfinished.

Politicians and grassroots opposition against urban planners and planning led to the rise of an "anti-planning" and "anti-urban" attitude which advocated economic development in favour of the unprivileged in deprived urban and rural areas.⁶⁰⁴ A decade after the revolution, planning was dismantled in general and the TMP was put aside in particular. As a result, in the 1980s Tehran lacked a reliable plan for growth and development, resulting in the haphazard growth of the city and its regions.

⁵⁹⁸ Farhad Kazemi and Lisa Reynolds Wolfe, "Urbanization, Migration, and Politics of Protest in Iran," in *Population, Poverty, and Politics in Middle East Cities*, ed. Michael E Bonine (University Press of Florida, 1997).

⁵⁹⁹ Ibid.

⁶⁰⁰ Mohsen Habibi, *Az Shar Ta Shahr* (Tehran: University of Tehran, 2003).

⁶⁰¹ Ali Madanipour, "Urban Planning and Development in Tehran," *Cities* 23, no. 6 (2006).

⁶⁰² Habibi, *Az Shar Ta Shahr*, 220.

⁶⁰³ Ibid.

⁶⁰⁴ Azadeh Mashayekhi, "The Politics of Building in Post-Revolution Tehran," in *Routledge Handbook on Middle East Cities*, ed. Haim Yacobi and Mansour Nasasra (Routledge, 2019).

Having secured social justice, Ayatollah Khomeini, the supreme leader of the Islamic government, established a housing foundation in 1979 and ordered the “right of housing” in the Islamic constitution that declared that “each Iranian individual and family has the right to a decent house”.⁶⁰⁵ Moreover, Khomeini announced that by the end of the 1980s, all the Tehran residents would have their own home. This was a rush decision emanating from the passion of the revolution.⁶⁰⁶ Contrary to the aim of curbing rural-urban migration, such claims soon provoked an influx of population from small towns and far villages towards the capital.⁶⁰⁷ Surprisingly, in only one year, between 1978 and 1979, the total number of migrants in Tehran surged from half a million to one million.⁶⁰⁸ The situation became even worse when the 8-year Iran-Iraq war started in September 1980, stimulating another wave of migration and relocation of the population. As well as migration from Iranian war-stricken regions, refugees also came to Tehran from Afghanistan.⁶⁰⁹ The Soviet occupation of Afghanistan in the late 1970s and the subsequent domestic turmoil in the country forced Afghans to move to neighbouring countries in which Iran became their main destination.⁶¹⁰ By the mid-1980s the number of Afghans in Tehran soared to 120,000.⁶¹¹ Together, the promise of free or low-cost housing and the Iran-Iraq war increased Tehran’s population to 6 million by 1986.⁶¹² The radical change in the pattern of population growth brought about yet another severe housing crisis.

Local policy-makers and planners were enthusiastically in search of a new planning approach which favoured the poor over the rich, by increasing their access to affordable housing. In 1979 *Art and Architecture* reacted to the change of regime, considering the revolution as a way to re-think Tehran’s urban problems. For the first time, after ten years of publication, the magazine’s editor Nader Khalili wrote an article to expose the poor living condition in different parts of the city [Figure 6.1].⁶¹³

⁶⁰⁵ Azam Khatam, “Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism” (York University, 2015).

⁶⁰⁶ Habibi, *Az Shar Ta Shahr*, 220.

⁶⁰⁷ Ibid.

⁶⁰⁸ Kazemi and Wolfe, “Urbanization, Migration, and Politics of Protest in Iran.”

⁶⁰⁹ Zohreh Fanni, “Cities and Urbanization in Iran after the Islamic Revolution,” *Cities* (2006).

⁶¹⁰ Kazemi and Wolfe, “Urbanization, Migration, and Politics of Protest in Iran.”

⁶¹¹ Ibid.

⁶¹² Madanipour, “Urban Planning and Development.”

⁶¹³ Nader Khalili, “For Housing Construction, People Should Participate.” [Bara-e Sakhtan Maskan Bayad az Mardom Bazo Gereft.] *Art and Architecture* 47-48 (1079).

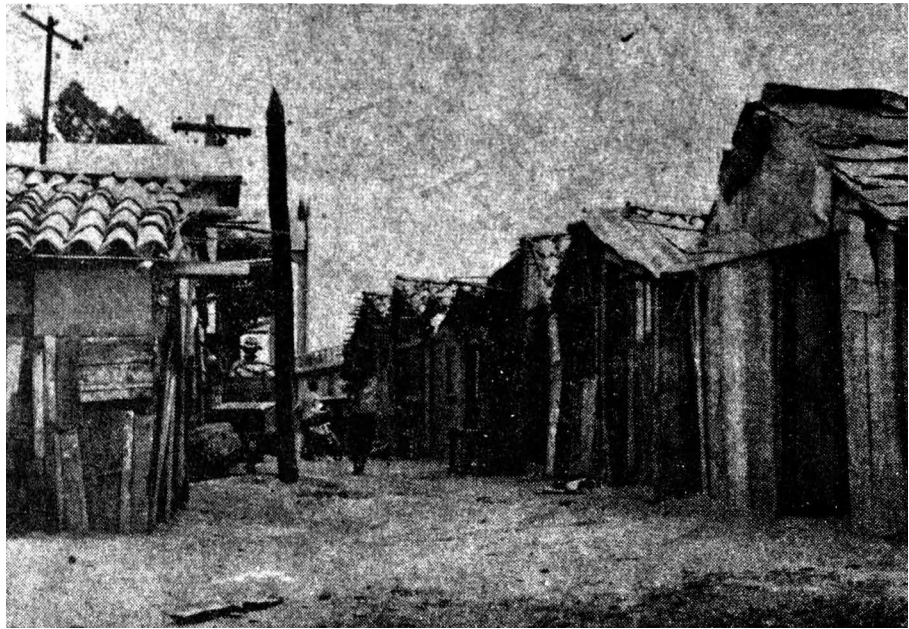


FIG. 6.1 Expanding slums in Tehran in the late 1970s. / Source: Art and Architecture, number 47-48

He maintained that top-down planning during the Pahlavi regime was inadequate to solve housing problems in Tehran. He continued that the provision of low-income housing would not be successful without the collaboration of local people and their participation in planning decisions. Depicting the blight of Tehran, and calling for attention to re-think low-cost housing, was very contradictory to the former approach of the magazine which had always attempted to represent a perfect image of Tehran and its modernization to the rest of world.

In line with the new government's promise of the "right of housing", a radical land reform act was approved by the Revolutionary Council in 1979.⁶¹⁴ To deal with urban poverty, the underlying objective of the act was to provide housing for the urban poor and disadvantaged by "abolishing the ownership of large tracts of land".⁶¹⁵ In fact, the provision of affordable land in Tehran urban region became the state solution to tackle the severe housing crisis in the city.⁶¹⁶ This time, unlike in the years before the revolution, the importance of the capital was limited to the provision of housing for unprivileged.⁶¹⁷ Until then, approximately 85 percent of land within Tehran's urban boundary was the property of royal families and big land owners.⁶¹⁸ The Revolutionary Council passed the law of public land privatization "in the name of the distributive justice".⁶¹⁹ The 1979 Urban Land Act legitimized the state to legally acquire undeveloped lands in Tehran without any need to give compensation.⁶²⁰ The State's public lands were given over to private construction companies, and soon Tehran faced land speculation and disorderly urban expansion in its peripheries.⁶²¹

As a result of land distribution policies and subsequent land speculation, Tehran grew in an unplanned manner. The population movement towards Tehran was irrepressible and, in 1991, Tehran's population had risen to 6.5 million, with the population of Tehran urban region surging to 9.1 million.⁶²² A sudden rise in the

⁶¹⁴ Kazemi and Wolfe, "Urbanization, Migration, and Politics of Protest in Iran."

⁶¹⁵ Mashayekhi, "The Politics of Building in Post-Revolution Tehran."

⁶¹⁶ Esfandiari Zebardast, "Marginalization of the Urban Poor and the Expansion of the Spontaneous Settlements on the Tehran Metropolitan Fringe," *Cities* 23, no. 6 (2006).

⁶¹⁷ Habibi, *Az Shar Ta Shahr*.

⁶¹⁸ Mashayekhi, "The Politics of Building in Post-Revolution Tehran."

⁶¹⁹ Kaveh Ehsani, "Survival through Dispossession: Privatization of Public Goods in the Islamic Republic," *Middle East Report*, no. 250 (2009).

⁶²⁰ Khatam, "Tehran Urban Reforms."

⁶²¹ Ehsani, "Survival through Dispossession: Privatization of Public Goods in the Islamic Republic."

⁶²² Esfandiari Zebardast, "Marginalization of the Urban Poor and the Expansion of the Spontaneous Settlements on the Tehran Metropolitan Fringe," *Cities* 23, no. 6 (2006).

population of Tehran's peripheries reflected a rapid process of suburbanization in which poor urban dwellers, who could not afford housing inside the city, were forced to move out to either new developed areas or informal settlements in Tehran's fringe.⁶²³ Since the focus of construction in Tehran was principally on housing provision for unprivileged, the existing infrastructure and urban facilities needed to serve the ever growing population.⁶²⁴ As a result, new extensions to Tehran suffered from inadequate urban facilities, even very basic services such as electricity and drinking water.⁶²⁵ Therefore, in a decade after the Islamic Revolution, "Tehran was losing its standards of living both as the capital and as the largest and the most important residential, industrial, and economic centre of the country".⁶²⁶ The government's fantasy of social justice and equity ultimately turned into a socio-spatial crisis "characterized by rapid population growth, lack of basic infrastructure and services, and unemployment".⁶²⁷

Accelerated population growth and poor urban management in Tehran resulted in irreparable environmental degradation, including air pollution, severe water shortages, and the destruction of farmland and green areas.⁶²⁸ The residents of new settlements in Tehran's peripheries still depended on the city centre to meet their daily needs and to find service jobs. The daily commute of high numbers of this population exacerbated Tehran's traffic condition and consequently air pollution. Moreover, the overuse of Tehran's rivers and groundwater basins eventually caused water shortages and water pollution. Green areas and gardens across the city drastically deteriorated, so Tehran also suffered from the extreme lack of green spaces.⁶²⁹

Tehran's urban management encountered serious problems due to the absence of a development plan and the absence of rules and regulations to coordinate different organizations.⁶³⁰ In the late 1980s, the municipality of Tehran was almost bankrupt and had limited autonomy to control the haphazard urban growth.⁶³¹ In that time, managing Tehran's urban growth turned to a major problem for the entire country,

⁶²³ Ibid.

⁶²⁴ Karbaschi, "The Role of Decision Making Processes," 117.

⁶²⁵ Ibid.

⁶²⁶ Ibid.

⁶²⁷ Mashayekhi, "The Politics of Building in Post-Revolution Tehran."

⁶²⁸ Farhad Atash, "The Deterioration of Urban Environments in Developing Countries: Mitigating the Air Pollution Crisis in Tehran, Iran," *Cities* 24, no. 6 (2007).

⁶²⁹ Karbaschi, "The Role of Decision Making Processes."

⁶³⁰ Ibid.

⁶³¹ Mashayekhi, "The Politics of Building in Post-Revolution Tehran."

to the extent that Iranian authorities and experts proposed relocating the capital to elsewhere.⁶³² In order to evaluate this proposal, Tehran's mayor, Gholamhossein Karbaschi, and a group of government technocrats travelled to Brasilia, the new capital of Brazil, which had been founded in 1960s as a new national capital. They concluded that it would be very expensive, and ultimately infeasible to relocate Iran's capital in the near future.

By rejecting of the proposal to relocate the Iranian capital, policy-makers and city authorities discussed re-visiting the existing plans. Despite the revolutionaries' advocacy of anti-planning policies, it was clear that Tehran was in an urgent need of an efficient urban plan to address the economic, social and environmental obstacles and sustaining the life of the city's 9 million inhabitants.

6.3 Re-making planning and planning system

The end of the 8-year devastating war with Iraq in 1988 and Khomeini's death a year later marked the end of the revolutionary period in Iran and signified the beginning of an era of reform and reconstruction.⁶³³ In 1989, when the country was nearly bankrupt and most of the population became impoverished, Ali Akbar Hashemi Rafsanjani was elected president.⁶³⁴ To tackle the high level of inflation and recession, the principle concern of his government was to establish free-trade zones and re-establish joint ventures with foreign countries, promoting Iran's oil and petrochemical industry as well as non-oil exports to foreign investors.⁶³⁵ To bring Iran back from the brink of collapse, Rafsanjani restructured the revolutionary government, established a neoliberal regime, and promoted a shift from a state-oriented development strategy to a market-oriented and competitive one.⁶³⁶ His neoliberal government aimed to create new sources of income by ascendance of

⁶³² Karbaschi, "The Role of Decision Making Processes," 148.

⁶³³ Ali Madanipour, "Civic Associations and Urban Governance in Tehran," Middle East Institute,

⁶³⁴ Ehsani, "Survival through Dispossession: Privatization of Public Goods in the Islamic Republic."

⁶³⁵ Jahangir Amuzegar, "The Iranian Economy before and after the Revolution," *Middle East Journal* 46, no. 3 (1992).

⁶³⁶ Tore Sager, "Neo-Liberal Urban Planning Policies: A Literature Survey 1990–2010," *Progress in planning* 76, no. 4 (2011).

market liberalization.⁶³⁷ These reformations did not signal the removal of the State in market regulations, it was rather a political-economic procedure to re-regulate the system towards competition and free-market policies. Therefore, neoliberal reforms in Iran did not limit the State's impact on urban developments. Private sectors were empowered to operate semi-independently whilst still sharing the State's interests. Such sectors cannot be simply defined as public or private sectors, as they are "religious-political groups", with strong ties with the government body.⁶³⁸

In the 1990s, neoliberalism became a hegemonic economic model in many countries, and Iran was not an exception.⁶³⁹ Neoliberalism was a particular economic doctrine conceived in the late 1980s in several epicentres including China, Britain and the United States. Neoliberalism advocates claimed that free market and free trade within an institutional framework can advance human well-being and do social good.⁶⁴⁰ They argued that the role of State should be limited to the creation of institutional frameworks directing economic practices. In 1978, Deng Xiaoping, leader of the People's Republic of China, was impressed by the economic growth of countries like Japan and South Korea. He aimed to transform China from "a closed backwater to an open centre of capitalist dynamism" by mobilizing market socialism in the country.⁶⁴¹ He liberated the Chinese communist-ruled economy to advance the economic system of the country. Margaret Thatcher, elected prime minister of Britain in 1979, and Ronald Reagan, elected president of the United States in 1980, both aimed at revitalizing economy by "deregulating industry, agriculture and resource extraction" and by "liberating the powers of finance both internally and on the world stage".⁶⁴² In short, they sought to bring "all human actions into the domain of the market".⁶⁴³ The revolutionary impulses of a neoliberal economy soon disseminated worldwide, gradually shaping a new global economic configuration, often now referred to as "globalization".

⁶³⁷ Ibid.

⁶³⁸ Mashayekhi, "Regimes of Urban Transformation in Tehran: The Politics of Planning Urban Development in 20th Century Iran."

⁶³⁹ David Harvey, *A Brief History of Neoliberalism* (Oxford University Press, USA, 2007).

⁶⁴⁰ Ibid.

⁶⁴¹ Ibid.

⁶⁴² Ibid.

⁶⁴³ Ibid.



FIG. 6.2 Rapid expansion of highway networks in Tehran based on the TMP. / Source: Diego Delso.

By embracing neoliberalism, Rafsanjani redefined the economic objectives of the government and facilitated the re-connection of Iran's economy to the global economic system.⁶⁴⁴ Adopting neoliberalism and finding a path back to the world market signified a reversal of revolutionary trends, in which strict rejection of market capitalism was one of its essential features.⁶⁴⁵ In a country with undue reliance on oil money, neoliberalism and returning to the world market were inevitable.⁶⁴⁶ As part of the neoliberal project, the economic growth of industrial poles and free trade zones was put forward.⁶⁴⁷ By prioritizing the economic development in Tehran, the government promoted the resumption of the TMP, including unfinished large-scale urban projects and immediately investing in ambitious infrastructural projects such as the construction of the new international airport in south Tehran, the Tehran metro system and the highway networks [Figure 6.2].⁶⁴⁸

⁶⁴⁴ Khatam, "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism."

⁶⁴⁵ Madanipour, *Tehran: The Making of a Metropolis*, 51.

⁶⁴⁶ Ibid.

⁶⁴⁷ Arang Keshavarzian Azam Khatam, "Decentralization and Ambiguities of Local Politics in Tehran," (2016).

⁶⁴⁸ Ibid.

By adopting the liberalization of economic system in Iran, the Five-Year Development Plan (1990-1994) was envisioned based on the goal of economic reconstruction. The Development Plan therefore provided the driving force to shift the economic strategy and development agenda of the government.⁶⁴⁹ Besides underlining a new economic direction, the plan also raised concerns regarding the rampant urbanization of the 1980s and the rising rate of urban population.⁶⁵⁰ The plan thus called for managing the rapid and disorderly growth of large cities, particularly Tehran, by limiting the size of their population.⁶⁵¹ To keep the uncontrolled expansion of the city in check, the new development plan took measures at national and urban levels. At the national scale, the plan underlined a decentralization policy to nurture smaller cities by transferring population and services from Tehran to other cities with the capability of absorbing the surplus population. At the local scale, the plan prohibited the development of urban services outside the city's boundaries.⁶⁵² In the case of Tehran, the Five-Year Development Plan also emphasized the necessity of the government's intervention in the provision of housing which had become a pressing urban problem.⁶⁵³ In the 1990s, Tehran's population grew by almost 100,000 people every year.⁶⁵⁴ This required the annual provision of at least 20,000 new dwellings in the capital.⁶⁵⁵

The 1990s economic reforms in Iran coincided with reforms in urban governance and planning, which adopted administrative devolution as an engine for national development.⁶⁵⁶ During the Pahlavi regime, the municipalities were positioned at the lowest level of the government's bureaucratic hierarchy.⁶⁵⁷ However, in the 1990s, there was a significant move to transfer planning responsibilities from the central planning organization to the municipalities. To deal with Tehran acute urban problems, the municipality of Tehran was empowered to supervise and guide urban projects in the city. The transformation from a totally dependent organization to a self-reliant one, turned the municipality into an autonomous organization with

⁶⁴⁹ Amuzegar, "The Iranian Economy before and after the Revolution."

⁶⁵⁰ Kano, "Urbanization in Post-Revolution Iran."

⁶⁵¹ Ibid., 424.; K Ziari and MAHDI Gharakhlou, "A Study of Iranian New Towns During Pre- and Post Revolution," *International Journal of Environmental Research* 3, no. 1 (2009): 147.

⁶⁵² Hiromasa Kano, "Urbanization in Post-Revolution Iran," *The Developing Economies* 34, no. 4 (1996).

⁶⁵³ Madanipour, *Tehran: The Making of a Metropolis*, 143.

⁶⁵⁴ Kaveh Ehsani, "Municipal Matters: The Urbanization of Consciousness and Political Change in Tehran.," *Middle East Report*, no. 212 (1999).

⁶⁵⁵ Ibid.

⁶⁵⁶ Azam Khatam, "Decentralization and Ambiguities of Local Politics in Tehran."

⁶⁵⁷ Ibid.

an unparalleled planning role.⁶⁵⁸ It was at this time that Gholamhossein Karbaschi was elected the mayor with real power who acted as “an executive manager of the city”.⁶⁵⁹ Karbaschi started working when the municipality of Tehran was almost bankrupt, at which time the Municipal Fiscal Self-Rule Act was approved. With the objective of saving national revenues for social welfare, this act cut the national budget for municipalities of large cities.⁶⁶⁰ This policy then turned the Tehran municipality into a financially self-sufficient planning organization, which had to provide its revenue by selling and renting out urban services.⁶⁶¹

Urban planning, which was abandoned in the first decade of the revolution, was resumed in the 1990s. Before Karbaschi was elected as mayor, the concern of unbridled growth of Tehran had reached its peak. City authorities and local experts believed that the majority of Tehran’s urban problems were due to insufficient studies, and in turn the lack of an updated urban plan.⁶⁶² Thus, the revitalization of planning was discussed. At the time when Tehran was in an urgent need of an efficient urban plan, the TMP, which was envisioned for a 25-year horizon with 5.5 million population would come to an end in 1991. Moreover, the preparation of a new master plan was regarded as too time-consuming, as immediate action was needed.⁶⁶³ The first TMP was the only available planning document for the city, but clearly it needed to be updated.⁶⁶⁴ In 1987, the Ministry of Urban Development and Housing appointed ATEC, an Iranian urban planning firm, to upgrade the TMP for another ten years.⁶⁶⁵ ATEC was a young planning firm which was founded after the Islamic Revolution, starting its activity in the fields of architecture and urban planning. It took almost four years for ATEC to study the changing condition of Tehran and to update the TMP. The High Council of Urban Development approved the revised version of the TMP in 1991.⁶⁶⁶

⁶⁵⁸ Karbaschi, “The Role of Decision Making Processes in Urban Management Systems (Case Study of Tehran),” 137.

⁶⁵⁹ Ali Madanipour, “Sustainable Development, Urban Form, and Megacity Governance and Planning in Tehran,” in *Megacities: Urban Form, Governance, and Sustainability*, ed. J. Okata (Eds.) A. Sorensen (Springer, 2011), 74.

⁶⁶⁰ Azam Khatam, “Decentralization and Ambiguities of Local Politics in Tehran.”

⁶⁶¹ Khatam, “Tehran Urban Reforms.”

⁶⁶² Karbaschi, “The Role of Decision Making Processes in Urban Management Systems (Case Study of Tehran),”

⁶⁶³ Ibid.

⁶⁶⁴ Ibid.

⁶⁶⁵ ATEC, “Tarh-E Samandehi-E Tehran,” (Ministry of Housing and Urbanism, 1992).

⁶⁶⁶ Ibid.

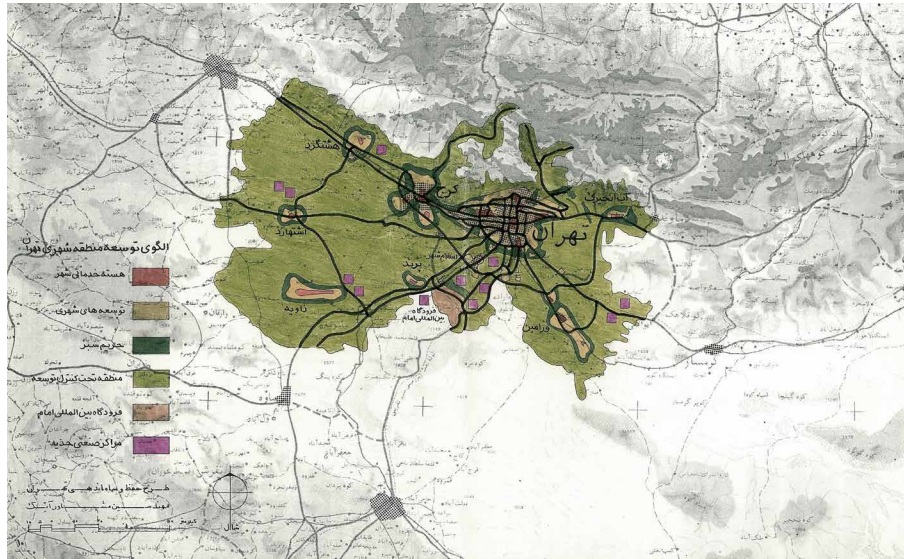


FIG. 6.3 Development of Tehran urban region. / Source: ATEC, Tarh-E Samandehi-E Tehran, 1992.

Unlike the first TMP which paid little attention to Tehran urban region, the planning team of ATEC placed Tehran in a larger territorial region and argued that the city's urban future is largely linked to its broader region [Figure 6.3]. Moreover, instead of predicting the future population of Tehran, the planners studied the maximum capacity of the city, announcing that it could accommodate a population of no more than 7.5 million. This number was determined based on Tehran's limited natural resources - mainly water - changing environmental conditions, and the socio-economic vulnerability of the city.⁶⁶⁷ ATEC planners proposed the construction of five new satellite towns, Hashtgerd, Eshtehard, Parand, Pardis and Zavieh, in Tehran urban region.⁶⁶⁸ The aim was to absorb the population overflow, house low-income groups, redistribute the growing industries, and protect farmland around Tehran.⁶⁶⁹ The planners highlighted the necessity of bringing employment to the new satellite towns, proposing an industrial character for Hashtgerd and Eshtehard, located in the west of Tehran, research and education for Pardis in the east, and introduced Parand and Zavieh as trade and transportation centres, located in the south-west of Tehran.⁶⁷⁰

⁶⁶⁷ Ibid.

⁶⁶⁸ Ibid.

⁶⁶⁹ Keramatollah Ziari, "The Planning and Functioning of New Towns in Iran," *Cities* 23, no. 6 (2006).

⁶⁷⁰ ATEC, "Tarh-E Samandehi-E Tehran."

However, it was never made clear how these new satellite towns would work together, and to what extent the life of these towns would be dependent on Tehran. By putting too much emphasis on the self-sufficiency of the new towns around Tehran, the planners neglected to discuss the issue of their integration and interdependence.⁶⁷¹

Concerning the city itself, the planners divided Tehran into 22 districts within five larger areas, each with its own urban centre serving both the area and the entire city. Unlike the TMP, which had included a new east-west axis to Tehran's urban structure and highlighted a linear urban growth, the ATEC planners accentuated the significance of the historical north-south axis. To re-strengthen the north-south axis, they eliminated the five of the new service centres that had been proposed by the TMP. In contrast to the TMP, the remaining five centres did not have a dominant commercial character, instead each was to have a specific urban feature: the north centre was regarded as a political and administrative centre, the south one as a religious centre, the one in the east as an industrial centre, and the west centre as a sport and recreational centre, while the old city centre would be the historical centre of commerce and culture.⁶⁷² However, the plan did not identify the way that these centres would inter-connected with one another to serve the city as a whole. In fact, in line with a new worldwide planning direction, and the rising criticism of physical urban planning, the planners argued that Tehran's urban development pattern needed pragmatic strategies rather than a physical form of development.⁶⁷³ The planners therefore put forward strategies such as: prioritizing the rapid development of two new districts, 21 and 22, in the west of Tehran; the allocation of military lands, which had considerably expanded during the war with Iraq, for the development of urban services; and strict construction limitations on Tehran's active earthquake faults which threatened the future of the city.⁶⁷⁴

The mayor disagreed with some of the assessments and recommendations of ATEC planners, since his main priority was the immediate provision of financial resources for the newly independent municipality. As a result, the municipality largely relied on the first TMP as the main development guidance for the city, but, in the neoliberal atmosphere of the 1990s, market criteria overshadowed the implementation of the plan. The newly empowered municipality of Tehran became the main facilitator of market-oriented development of the city, with the goal of mobilizing the urban economy.

⁶⁷¹ Bahador Zamani and Mahyar Arefi, "Iranian New Towns and Their Urban Management Issues: A Critical Review of Influential Actors and Factors," *Cities* 30 (2013).

⁶⁷² ATEC, "Tarh-E Samandehi-E Tehran."

⁶⁷³ Zohreh Davoudpour, *Taadol Bakhshi Shahree Tehran* [Balancing the city of Tehran] (Tehran: Vezarate Maskan va Shahrsazi, 2009).

⁶⁷⁴ ATEC, "Tarh-E Samandehi-E Tehran."



FIG. 6.4 Excessive high-rise construction in the north of Tehran. / Source: Ninara from Helsinki, Finland

The relaxation and deviation from the regulatory framework of the TMP provided the municipality with a flexible plan to establish development strategies. The rationale for this decision was introduced as re-activating the urban economy and generating finance for urban projects as well as income for the municipality.⁶⁷⁵ In so doing, the municipality collected tax and fees from developers in exchange for exemption from density and zoning rules.⁶⁷⁶ In this way, commercialization and selling pieces of the city became the municipality's solution to fund Tehran's urban projects.⁶⁷⁷ The relaxation of planning regulations and laws gave rise to speculative real estate

⁶⁷⁵ Karbaschi, "The Role of Decision Making Processes in Urban Management Systems (Case Study of Tehran)," 152.

⁶⁷⁶ Khatam, "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism," 179.

⁶⁷⁷ Bahram Farivar Sadri, *Tahavolat-E Tarhizi Shahri Iran Dar Dorane Moaser* [Contemporary Urban Planning Changes in Iran] (Tehran: Iranian Society of Consulting Engineers, 2014).

activities and market-oriented economic growth of the city.⁶⁷⁸ The rising reliance of the municipality on this unsustainable income placed the mayor in an unstable situation.⁶⁷⁹ Due to the large amount of money generated, Karbaschi was accused for corruption and he was jailed for a while. However, he was quickly pardoned, and the sale of the city has remained the municipal's major principal budget source to this day.⁶⁸⁰ This eventually all resulted in the tremendous physical transformation of Tehran's skyline and cityscape, and adverse impacts on the socio-economic condition of the capital.

Tehran's vertical growth and explosive densification was a sudden reaction to both the de-regulated and market-oriented development and a sharp population growth and rising demand for housing.⁶⁸¹ As a result, in the 1990s Tehran witnessed a proliferation of luxurious high-rises, particularly in the north of Tehran, as well as increase in apartment blocks of five to six levels across the city [Figure 6.4].⁶⁸² Neoliberal reforms and favourable economic growth attracted both foreign and local investors to high-rise constructions in the capital.⁶⁸³ Thus, large-scale urban development, which had been abandoned since the late-1970s, once again characterized Tehran's urban image. Apart from 13 percent used as office and commercial space, the high-rise constructions were allocated as residential apartments.⁶⁸⁴

This significantly differentiated Tehran's cityscape from other cities, such as those in America, where high-rise buildings have mostly administrative and commercial functions.⁶⁸⁵ The high-rise boom and densification in Tehran met the urgent need of housing to a certain extent, but left disastrous effects on urban quality of the capital and caused irreversible problems.⁶⁸⁶ Disregarding safety codes or negative impacts on urban infrastructure and neighbouring blocks, tall buildings were constructed in narrow winding streets.⁶⁸⁷ There was no plan to provide parking spaces or other

⁶⁷⁸ Khatam, "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism."

⁶⁷⁹ Ali Akbar Gholizadeh and Mahdi Aminirad, "Determining the Optimal Structure of Tehran Municipality Income Basis Based on Risk and Returns," *Journal of Urban Economics and Management* 6, no. 23 (2018).

⁶⁸⁰ Karbaschi, "The Role of Decision Making Processes in Urban Management Systems (Case Study of Tehran)."

⁶⁸¹ Ibid.

⁶⁸² Ehsani, "Survival through Dispossession: Privatization of Public Goods in the Islamic Republic."

⁶⁸³ Madanipour, *Tehran: The Making of a Metropolis*, 168.

⁶⁸⁴ Khatam, "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism," 191.

⁶⁸⁵ Ibid.

⁶⁸⁶ Madanipour, "Civic Associations and Urban Governance in Tehran".

⁶⁸⁷ Madanipour, "Sustainable Development, Urban Form, and Megacity Governance and Planning in Tehran."

urban services for the influx of inhabitants to new high-rises. The subsequent urban problems propelled the municipality to restrict high-rise constructions only to the locations that had been proposed by the TMP.⁶⁸⁸

As well as the densification and vertical growth of Tehran, de-regulated and market-oriented development also bought the horizontal expansion of the city into another phase [Figure 6.5]. Soon, the development of new satellite towns, which was part of the growth management strategy proposed by ATEC, began. The underlying goal of these satellite towns were to absorb the overflow of the population from Tehran and provide low-income groups with affordable housing.⁶⁸⁹ However, the shortage of infrastructural facilities and urban amenities made the new town residents largely dependent on Tehran. As a result, the distance of these towns from Tehran, coupled with insufficient urban infrastructures, made the five new satellite towns less attractive, and ultimately they were unable to absorb the target population that had been planned for. On the other hand, the rapid construction of a new transportation network in Tehran urban region led to the emergence of informal settlements alongside new roads and adjacent to the growing industries.⁶⁹⁰ Despite the development of new towns, people continued to settle in informal settlements due the cheap land price.⁶⁹¹ These growing settlements had profound impact on the structure of Tehran and its peripheries. Despite the rising problems of Tehran urban region, there were no strategies to deal with the growing informal settlements and the population overflow.

In the mid-1990s, the fast-paced expansion of informal settlements in Tehran peripheries and the concentration of low-income and impoverished groups in neighbourhoods with a poor quality of life gave rise to severe social problems, high criminality and violence in Tehran's peripheries. In 10 years between 1986-1996, Tehran urban region attracted more than 2.4 million migrants. Until the mid-1990s, all five new satellite towns had in total population of around 30,000 people, while more than 2 million people lived in growing informal settlements in Tehran urban regions.⁶⁹²

⁶⁸⁸ Karbaschi, "The Role of Decision Making Processes," 157.

⁶⁸⁹ Ziari and Gharakhlou, "A Study of Iranian New Towns During Pre- and Post Revolution."

⁶⁹⁰ Mohsen Habibi and Javad Salimi, *Ostokhan Bandiyeh Shahr-E Tehran* [Tehran's physical structure], vol. 2 (Tehran: Moavenat fanni va omrani shahr-e Tehran, 1996).

⁶⁹¹ Shirazi, "Sustainable Planning for a Quasi-Urban Region, Necessities and Challenges: The Case of Tehran-Karaj."

⁶⁹² Ghamami, *Mojmo-E Shahri-E Tehran: Gozideh Motaleat-E Tarh-E Rahbordi-E Tose-E Kalbadi*.

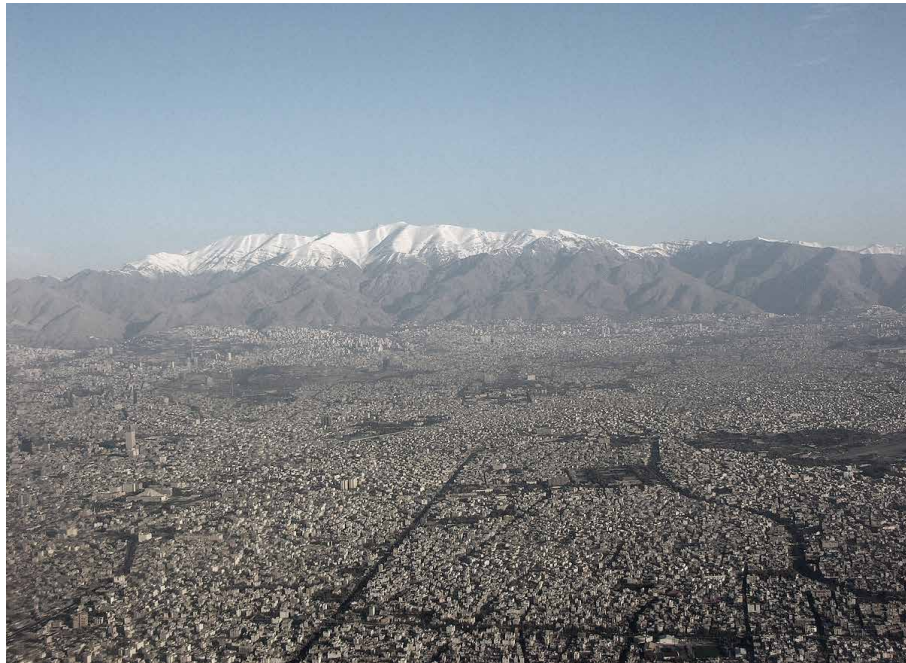


FIG. 6.5 Excessive expansion of Tehran in the 1990s. / Source: Hansueli Krapf.

These settlements were mainly in what had been agricultural land that was illegally divided and allocated to the construction of residential buildings.⁶⁹³ Akbarabad, Malard, Pakdasht, and Hasanabad were the main centres of informal settlement accommodating more than 230,000 inhabitants.⁶⁹⁴ Such settlements were created by workers and low-income groups with different ethnic backgrounds who moved to Tehran in search of work in industrial and service sectors. The high population of several of these informal settlements transformed them into cities, and so the municipality of Tehran needed to provide them with urban infrastructures. In this way, the number of cities and towns in Tehran urban region increased from 15 in 1976 to 25 in 1996, which led to the emergence of an urban agglomeration with Tehran at its centre.⁶⁹⁵ [Figure 6.6]

⁶⁹³ M. Reza Shirazi, "Sustainable Planning for a Quasi-Urban Region, Necessities and Challenges: The Case of Tehran-Karaj," *Planning Perspectives* 28, no. 3 (2013).

⁶⁹⁴ Ibid.

⁶⁹⁵ Ibid.

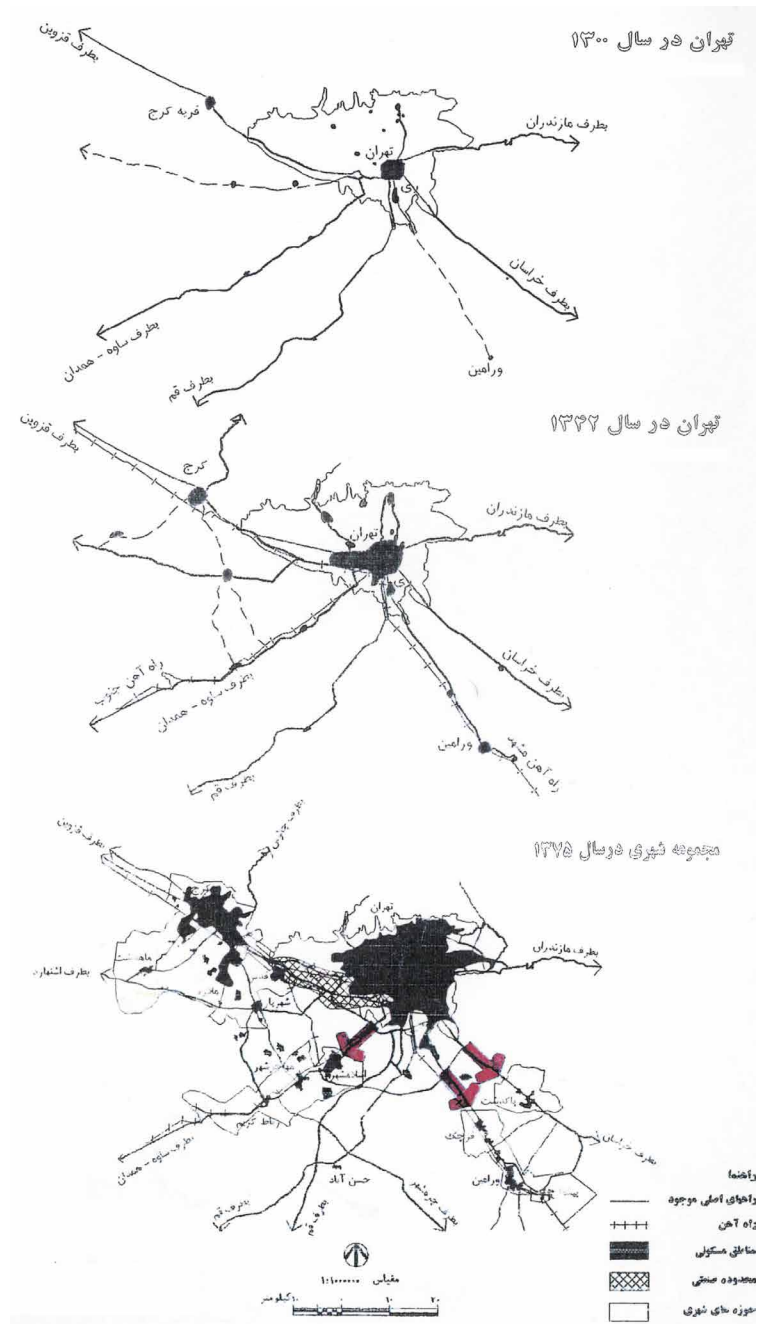


FIG. 6.6 The growth of Tehran urban region in 1996. / Source: The Urban Planning and Architecture Research Centre of Iran, Tehran Urban Agglomeration, 2000.

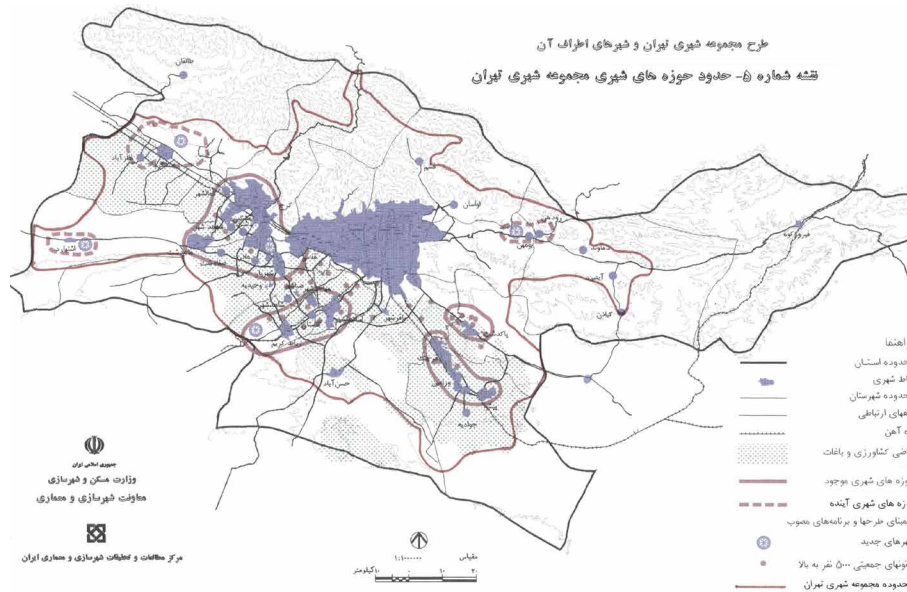


FIG. 6.7 Potential places for the development of new towns in Tehran urban region. / Source: The Urban Planning and Architecture Research Centre of Iran, Tehran Urban Agglomeration, 2000.

As well as socio-economic problems, the unbridled growth of informal settlements in Tehran peripheries brought about the devastation of agricultural lands and the contamination of natural environment, soil and water. As a result of the rising problems of Tehran urban region, in 1997, the Ministry of Housing and Urbanism commissioned the newly established Urban Planning and Architecture Research Centre of Iran (UPARC), to study Tehran urban region.⁶⁹⁶ The UPARC, under supervision of Majid Ghamami, explored Tehran urban region from seven major aspects of demography, economy, social, natural hazards, water resources, transportation network, and urban management. The UPARC argued that the urban future of Tehran would not be limited to a city with 22 municipal districts and population of 7 million. Referring to the 2.4 million population living in settlements outside the municipal boundaries, the UPARC maintained that the emergence of an urban agglomeration was a reality which could not be ignored, as it was directly connected to the life of the city. Tehran's urban problems needed to be solved at the regional scale.⁶⁹⁷ By analysing large urban regions worldwide, such as the Randstad

⁶⁹⁶ The Urban Planning and Architecture Research Centre of Iran, "Tehran Urban Agglomeration," (Ministry of Housing and Urbanism, 2000).

⁶⁹⁷ Ibid.

in the Netherlands, the UPARC accentuated the necessity of finding a comprehensive approach to Tehran urban region.⁶⁹⁸ In this regard, the UPARC studied appropriate locations for future settlements at the regional scale, connected with an efficient traffic system and rich regional green spaces [Figure 6.7].⁶⁹⁹ The UPARC reports were approved by the High Council of Architecture and Urban Planning in 2001, while in reality their recommendations were never taken seriously.⁷⁰⁰

6.4 Envisioning strategic policies for 2025

From the late 1970s onwards, there was a growing global concern about inefficiencies of master plans, and the realisation of the urgent need for a shift in planning style. The long-term planning of infrastructure and services proved to be inappropriate for both developed countries with relatively slow urban expansion, and also for developing countries with rapid rates of urbanization.⁷⁰¹ Furthermore, the static and rigid features of master plans, and their inability to prevent undesirable development appeared as chief weaknesses.⁷⁰² The 1970s economic downturn and energy crises challenged the further realization of master plans and resulted in the cessation of many large-scale urban development projects worldwide. Future uncertainties made it increasingly clear that mere land-use and physical planning could not respond quickly and efficiently to unexpected economic changes, sudden demographic shifts, and environmental challenges.⁷⁰³ By this time, public disillusionment with traditional master planning was widespread globally.⁷⁰⁴ It

⁶⁹⁸ Shirazi, "Sustainable Planning for a Quasi-Urban Region, Necessities and Challenges: The Case of Tehran-Karaj."

⁶⁹⁹ Ibid.

⁷⁰⁰ Ibid.

⁷⁰¹ Alison Todes et al., "Beyond Master Planning? New Approaches to Spatial Planning in Ekurhuleni, South Africa," *Habitat International* 34, no. 4 (2010); Marcello Balbo, "Urban Planning and the Fragmented City of Developing Countries," *Third World Planning Review* 15, no. 1 (1993).

⁷⁰² Todes et al., "Beyond Master Planning? New Approaches to Spatial Planning in Ekurhuleni, South Africa.," Brindley, Rydin, and Stoker, *Remaking Planning: The Politics of Urban Change*.

⁷⁰³ Louis Albrechts, "Strategic (Spatial) Planning Reexamined," *Environment and Planning B: Planning and design* 31, no. 5 (2004).; Todes et al., "Beyond Master Planning? New Approaches to Spatial Planning in Ekurhuleni, South Africa."

⁷⁰⁴ Maurice Ash, *The Crisis in Planning* (Town and Country Planning Association, 1977).

was hard to find anyone with a good word to say about planning, and the planning profession was growing demoralized.⁷⁰⁵ Resulting from the rising pessimism with traditional master planning, there was a growing interest in taking a new direction in planning, but this was not clear or straightforward, particularly in countries such as Iran.⁷⁰⁶

Tehran's increasing problems made it clear that managing uncontrolled growth would need a new direction in planning and envisioning the future of the city. In the 1990s strategic approaches to spatial organization of cities and regions became increasingly prevalent worldwide.⁷⁰⁷ Transition from Master Planning to Strategic Spatial Planning was coupled with a shift towards neoliberalism and global capitalism.⁷⁰⁸ The 1990s neoliberal reforms greatly affected the general direction of strategic thinking and planning. Although "saying strategic planning is neoliberal per se may be farfetched, ... Strategic Spatial Planning has undergone a process of neoliberalization in many countries".⁷⁰⁹ It should be highlighted that there is no "right theory" of Strategic Spatial Planning.⁷¹⁰ As a reaction to the limitations of Master Planning, Louis Albrechts, one of the main proponents of Strategic Spatial Planning, concluded that "strategic planning must be viewed broadly, since it is not a single concept, but a set of concepts, procedures, and tools that must be tailored carefully to whatever situation is at hand".⁷¹¹ Strategic Spatial Planning, therefore, can be defined as a planning method that formulates planning scenarios and robust strategies by systematically analysing the uncertainties of the future.⁷¹² As a response to future uncertainties, flexibility and adaptability became distinctive characters of Strategic Spatial Planning.⁷¹³

⁷⁰⁵ Brindley, Rydin, and Stoker, *Remaking Planning: The Politics of Urban Change*.

⁷⁰⁶ Ibid.

⁷⁰⁷ Patsy Healey, *Making Strategic Spatial Plans* (Routledge, 2006).

⁷⁰⁸ Christer Persson, "Perform or Conform? Looking for the Strategic in Municipal Spatial Planning in Sweden," *European Planning Studies* (2019).

⁷⁰⁹ Ibid.

⁷¹⁰ Ibid.

⁷¹¹ Ibid.

⁷¹² Charles W Thomas, "Learning from Imagining the Years Ahead," *Planning Review* (1994).

⁷¹³ Albrechts, "Strategic (Spatial) Planning Reexamined."; Robert A Beauregard and Andrea Marpillero-Colomina, "More Than a Master Plan: Amman 2025," *Cities* 28, no. 1 (2011).

In the early 2000s, the necessity to revise the traditional planning approach and to provide a strategic plan for Tehran was officially discussed among the city authorities.⁷¹⁴ This was a reaction to fast-paced changes in the city, in contrast to slow process of master planning and the complexities of its realization. Unlike the procedure of preparing of a master plan, in which one selected planning firm was in charge of all the planning responsibilities, the municipality attempted to come up with a way to speed up the whole process. To envision the first Tehran Strategic Spatial Plan (TSSP), a consortium of 22 Iranian planning firms was shaped, supervised by Boom Sazegan Consultant Engineers.⁷¹⁵ Boom Sazegan was given the task of envisioning the plan, with input from the 22 firms. In parallel with the preparation of the TSSP, the 22 planning firms were separately working on the plan for each district. The city authorities regarded this approach as an innovation in the Iranian planning system.⁷¹⁶

Despite the locals' effort to make the planning of Tehran without foreign expertise, the Paris Urban Agency (APUR) was invited to analyse and evaluate the forward-looking strategies for Tehran's development. APUR experts criticized this so-called innovative approach and argued that overlaps and ambiguities between the firms involved would hinder an effective operation of this hierarchical system of planning.⁷¹⁷ They questioned how a planning firm could work on the development plan of one district, without having a clear picture of the development strategies for the city as a whole.⁷¹⁸ They contended that in this complex conglomeration of planning firms, giving the responsibility of planning each district to separate engineering consultants could not provide a holistic vision for the future of the city and its growing regions.⁷¹⁹ Despite this criticism, all the controversies and the lack of coordination among the planners of the consortium, the TSSP was finalized and approved in 2005.⁷²⁰

Rather than introducing a land-use plan and functional zoning of the city with construction regulations, the TSSP aimed to add new social and environmental dimensions to the urban development of Tehran, and therefore proposed a set of strategies and policies for the next 20-years, by 2025. The plan identified

⁷¹⁴ Sadri, *Tahavolat-E Tarhizi Shahri Iran Dar Dorane Moaser [Contemporary Urban Planning Changes in Iran]*, 158.

⁷¹⁵ Madanipour, "Sustainable Development, Urban Form, and Megacity Governance and Planning in Tehran."

⁷¹⁶ Amir Mansori, "Lessons from Apur's Report on Tehran Strategic Plan," *Mnazar* 2 (2009).

⁷¹⁷ Madanipour, "Sustainable Development, Urban Form, and Megacity Governance and Planning in Tehran."

⁷¹⁸ Atelier Parisien d'Urbanisme (APUR), "Mission De L'apur À Theran," (Paris, France2005).

⁷¹⁹ Ibid.

⁷²⁰ Madanipour, "Sustainable Development, Urban Form, and Megacity Governance and Planning in Tehran."

Tehran's urban problems as an uncontrolled expansion of the city, socio-economic segregation, an ineffective public transport system, lack of water, environmental pollution and natural hazard vulnerability.⁷²¹ To deal with these urban challenges, the TSSP introduced a sustainable development of Tehran as the main direction of the plan. To make Tehran's urban development sustainable, the underlying goal was to create a city with some distinctive qualities including: an "Islamic city" with traditional identity; a "safe city" resistant against natural hazards; a "clean city" where environmental pollution is under control; a "moving city" with efficient movement and mobility across the city; a "green city" with expanded green areas; a "cultured city" with a growing number of cultural and recreational facilities; a "dynamic city" where the needs of citizens would be effectively met.⁷²² However, it was not clear how these strategies could systematically address Tehran's urban problems and guide the city towards a more liveable and sustainable megacity.⁷²³

Despite bringing new social and environmental dimensions, the TSSP could not go beyond perspectives and discourses linked to traditional master planning and remained limited to short-term market-driven interventions, lacking a holistic vision. The proposed strategies were more idealistic than realistic. The idealism of the plan hindered the envisioning of efficient and feasible development strategies and resulted in an unclear vision which depicted an unrealistic picture of Tehran with little attention to the urgent environmental issues and physical, economic, and social needs of a rapidly growing city.

By evaluating the final outcome of the plan, APUR experts assessed the method of coming up with those strategic goals. They believed that strategic planning is more the matter of process than the final outcome.⁷²⁴ APUR experts therefore encouraged planners to re-consider the TSSP by proposing a number of scenarios for the future of the city, as well as how those strategies could be translated into physical plans.⁷²⁵ Moreover, in spite of the complexity of Tehran urban agglomeration and the necessity of its re-organization, the TSSP paid little attention to the connection of the city to its surrounding towns and growing informal settlements. In the 1990s, the urban growth which took place in Tehran urban region was four times faster than the growth of the

⁷²¹ Tehran Strategic Plan, "Boom Sazegan Consultant Engineers," (2006).

⁷²² Ibid.

⁷²³ Madanipour, "Sustainable Development, Urban Form, and Megacity Governance and Planning in Tehran."

⁷²⁴ (APUR), "Mission De L'apur À Theran."

⁷²⁵ Ibid.

city itself.⁷²⁶ However, similar to the TMP, the TSSP cut the city off from its peripheries, neglecting to foster a connection between the two.⁷²⁷ Disregarding Tehran urban region eventually led to an unplanned and defective regional expansion.⁷²⁸

6.5 The development of Tehran West

The development of “District 22”, a new district in the northwest of the city, exemplifies how the TSSP was eventually translated into physical developments, and what kind of socio-economic and environmental qualities these strategies brought to the city. As the vastest district in Tehran, District 22 has the area of 6,000 hectares and occupies one seventh area of the entire city [Figure 6.8].⁷²⁹ The history of District 22 dates back to the late 1960s, when the TMP recognised the great potential of vast vacant lands in the west of Tehran as a new extension to the city.⁷³⁰ The plan proposed two new satellite towns in the west, Latmer and Vardavard, with each divided into northern and southern parts. Due to the proximity to the mountains and suitable ecological conditions, the northern sides were planned for middle- and high-income strata, while the southern part was planned for the extension of heavy industries and allocated as low-income housing for industrial workers.⁷³¹ Soon after the approval of the plan in 1969, the north sections of Latmer and Vardavard, which today shape the District 22, were subdivided to smaller tracts of lands, and around 20 percent of the land was privatized by royal families. Despite the provision of detailed plans for the development of Latmer and a rapid construction of Azadi Sport Complex for 1974 Asian Games on the east side, the late 1970s economic crisis in Iran limited the development of the area. After the 1979 Islamic revolution, the revolutionaries confiscated the private land of royal families and declared the vacant land in the west of Tehran as public property, and during the Iran-Iraq war in the 1980s, around 25 percent of this land was used for military purposes.⁷³²

⁷²⁶ Shirazi, “Sustainable Planning for a Quasi-Urban Region, Necessities and Challenges: The Case of Tehran-Karaj.”

⁷²⁷ Ibid.

⁷²⁸ (APUR), “Mission De L'apur À Theran.”

⁷²⁹ Sharestan Consultant Engineers, “Report on Development Pattern of the District 22,” (2003).

⁷³⁰ Gruen and Farmanfarmaian, “Tehran Comprehensive Plan.”

⁷³¹ Ibid.

⁷³² Sharestan Consultant Engineers, “Report on Development Pattern of the District 22.”

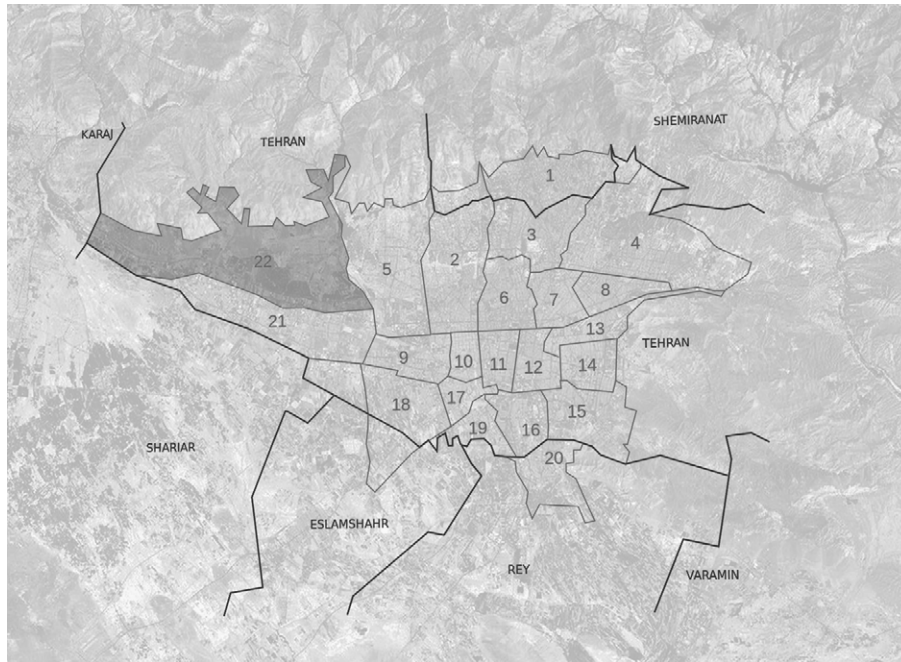


FIG. 6.8 The location of District 22 within the Tehran municipal boundaries. / Source: Author.

Moreover, due to the rising migration from war-stricken regions to Tehran, housing corporations began to construct a number of dispersed residential complexes for government employees and low-income families in the area.

Based on the TMP recommendations, ATEC proposed the official addition of the west of Tehran into the city's municipal boundaries.⁷³³ Up until the early 1990s, Tehran was divided into 20 districts each with a district municipality, with all united by the municipality of Tehran. In the mid-1990s, the northeast of Tehran was officially added to Tehran's boundaries under name of District 22, and the southeast area as District 21. As a reaction to a massive wave of migrants to Tehran in the 1980s, ATEC planning team encouraged a prompt provision of detailed plans for the development of District 22. Soon, Bavand Engineering Consultants began to elaborate on the plan, following the TMP's recommendations.⁷³⁴ Later on Bavand established a collaboration with Arman Shahr Engineering Consultants to finalize the plan.⁷³⁵

⁷³³ ATEC, "Tarh-E Samandehi-E Tehran."

⁷³⁴ Bavand Consulting Engineers, "District 22 Comprehensive Plan," (1998).

⁷³⁵ Sharestan Consultant Engineers, "Preliminary Identification of the District 22," (2003).

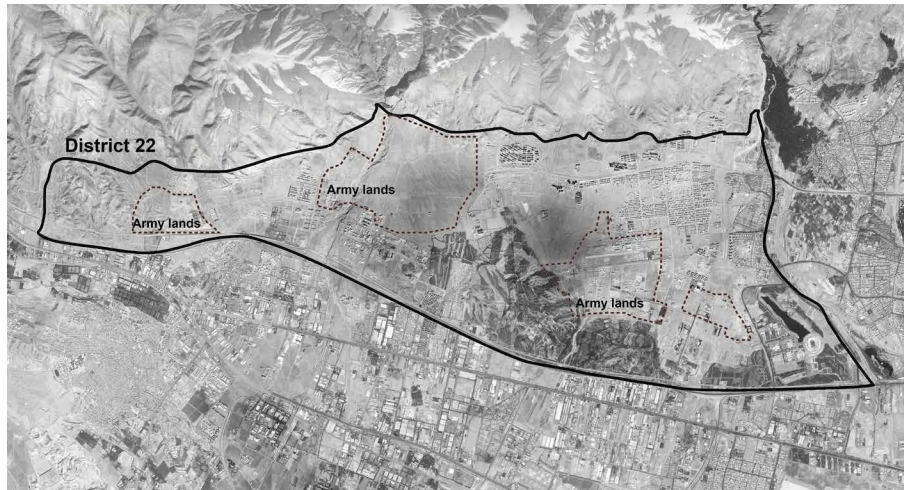


FIG. 6.9 Dispersed housing development and empty lands of the army in District 22 in 2007. / Source: Google earth, 2007.



FIG. 6.10 Land use and functional zoning of District 22. / Source: Sharestan Consultant Engineers, "Report on Development Pattern of the District 22," (2003).

The master plan for District 22 was eventually approved in 1999. However, the approved plan did not enter into the implementation phase due to the commissioning of the TSSP in the early 2000s and the formation of the consortium of 22 planning firms. Sharestan Engineering Consultants was selected as the planning company in charge of District 22 to align its master plan with the envisioned strategies for the entire city. In that time, the area was almost vacant except for some dispersed housing developments with a population of around 5,000 [Figure 6.9].

In line with the TSSP, Sharestan Engineering Consultants considered the sustainable development of District 22 as the underlying goal of the planning provision.⁷³⁶ By regarding the district as the last opportunity to create “an exemplary model for sustainable development of Tehran”, the planners aimed at making District 22 a new centre not only for Tehran, but also for the entire region.⁷³⁷ District 22 was therefore planned to be the biggest touristic and recreational centre of Tehran Metropolitan Region.⁷³⁸ To enrich the environmental quality of the area, the construction of an artificial lake was planned in the central part.⁷³⁹ Moreover, all elements of the site were interwoven with a multifunctional spine that was well connected to the highway networks [Figure 6.10].⁷⁴⁰

Despite adopting some environmental and social measures, the new plan could not go beyond the land use and functional zoning of the area. Moreover, during the construction phase the development direction of District 22 deviated from the regulatory framework of the approved master plan and thus contrasted with the sustainability goals of the TSSP. By increasing attractiveness, and therefore the flow of investment, towards District 22, the empowered and entrepreneurial municipality began to play the role of market facilitator. The west part of Tehran, therefore, became a place for speculative development and capital-oriented competition, in which army organization, as the main landowners, played a leading role. Possessing a quarter of the land in the area enabled the army organization to transform the still-intact landscape of District 22 by constructing high-rise residential towers, mainly to serve as housing for army families and the war veterans. By selling the density, the municipality authorized the erection of high-rises, despite being in total conflict with the approved master plan. The municipality regarded District 22 as a good potential source of income and ran a competition among private and public investors. Thus, District 22 became a prime example of a rebellious development and commodification of the city in which the excessive construction of dispersed high-rises, with 25 to 40 floors connected with wide boulevards, characterizes the area [Figure 6.11].

⁷³⁶ Sharestan Consultant Engineers, "Upstream Strategies for Tehran Urban Development," (2003).

⁷³⁷ Ahmadrza Hakiminejad, "The Wrong City in Making: The Case of Tehran District 22," in *Symposia Iranica: Fourth Biennial Iranian Studies Conference*, ed. Institute of Iranian Studies (Scotland2019).

⁷³⁸ Sharestan Consultant Engineers, "Report on Development Pattern of the District 22."

⁷³⁹ Sharestan Consultant Engineers, "Environmental Studies of the District 22," (2003).

⁷⁴⁰ Sharestan Consultant Engineers, "Transportation Studies of the District 22," (2003).



FIG. 6.11 The excessive construction of dispersed high-rises in District 22. / Source: Mohsen Ataei.

By giving permission for flagship projects, the municipality aimed at attracting more capital to the area. More recently, “Iran Mall”, a huge mega-mall with around 1.5 million square metres, has been constructed by private investors and claims being the biggest mega-mall in the Middle East. Consisting of vast areas for business, cultural and sport, as well as a large hotel complex, Iran Mall has transformed District 22 into the largest business centre in Tehran urban region [Figure 6.12].⁷⁴¹

Today, District 22 is plagued with urban problems, and a new extension which was initially thought of as an opportunity, now poses a threat to the entire city of Tehran. And yet, the intensity of speculative development and lack of clear vision for the future of the district has left city authorities far behind the fast-paced illegal constructions and has made it impossible for them to effectively manage the situation.⁷⁴²

⁷⁴¹ Ibrahim El Hayek, Bernd Stimpfle, and Michael Sendelbach, “Glass Bow for the Iran Mall in Tehran,” *ce/papers* 2, no. 5-6 (2018).

⁷⁴² Madanipour, “Urban Planning and Development.”



FIG. 6.12 The rapid construction of the biggest Middle Eastern mega mall (Iran Mall) in District 22. / Source: Diba Tensile Architecture.

Recently, comparatively lower housing prices and rents in the area have drawn people from all over the city towards District 22. As a result of American sanctions over Iran's nuclear program and the subsequent economic crisis in the country, a large number of people, particularly younger generation who cannot afford inflationary prices in the city, have to move out to this newly developed area. Their dependency on jobs inside the city has resulted in a daily commute, and in turn rising traffic in the west of Tehran. It is estimated that the population of the district will reach over half a million by 2025.⁷⁴³ By rising environmental, physical, and social problems in the area, extensive illegal constructions have been largely criticized. The local critics contend that District 22 will "end up being a vertical slum".⁷⁴⁴ Ahmadrza Hakiminejad, Iranian urbanist and researcher, voices a similar criticism and argues that District 22 "is literally a re-production of Pruitt-Igoe on a massive scale, half a century after its demolition".⁷⁴⁵

⁷⁴³ Municipality of District 22, "Biannual Report for the District 22 Tehran," (2013).

⁷⁴⁴ Oliver Wainwright, "'Like La with Minarets': How Concrete and Cars Came to Rule Tehran,"

⁷⁴⁵ Ahmadrza Hakiminejad, "The Wrong City in Making: The Case of Tehran District 22," in *Symposia Iranica: Fourth Biennial Iranian Studies Conference*, ed. Institute of Iranian Studies (Scotland 2019).

6.6 Conclusion

In the 1980s, Iran was characterized as an internationally isolated country suffering from a stagnated economy and destruction resulting from of an 8-year war.⁷⁴⁶ Under the pressure of slow economic growth, the Islamic government faced a severe budget deficit.⁷⁴⁷ Moreover, American and European economic sanctions challenged the Islamic government by halting trade with Iran and blocking Iranian assets abroad.⁷⁴⁸ The political and economic turmoil not only resulted in the dismissal of foreign experts and investors from the country, but also brought about a massive departure of foreign-trained Iranian experts.⁷⁴⁹ Despite the revolutionaries' claim to create an Iranian planning system independent from foreign influences, transnational planning was never completely abandoned as planners were still dependent on foreign technical advice for urban infrastructures. Although the task of the physical planning was given to local planners, infrastructure and transportation developments, and technical studies such as seismic and air pollution strategies, were all developed by foreign consultants. The revolutionary government publically diverted from the former planning system, but in reality, planning after the Islamic revolution differed from the planning system in Pahlavi regime more in rhetoric than in practice. The analysis of the changing roles and values of planning after the 1979 Islamic Revolution indicates a long-term attempt of transition from traditional master planning to a more efficient approach in planning. The rising criticism of the deficiencies of the former urban plans for Tehran led to the provisioning of the first TSSP with a consortium of local planners in 2005, in which the sustainable development of the city became a main priority. However, the TSSP could not develop a clear definition for urban sustainability, or a systematic approach for how to achieve it in Tehran. It could not go beyond perspectives and discourses linked to the TMP and remained limited to short-term market-driven interventions, lacking a holistic vision for Tehran and its regions.

⁷⁴⁶ Khatam, "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism."

⁷⁴⁷ Amuzegar, "The Iranian Economy before and after the Revolution."

⁷⁴⁸ Ibid.

⁷⁴⁹ Ibid.

Despite the long-term goal to fundamentally change the planning framework in Iran, the new approach for strategic planning was essentially rooted in former master planning, which was practiced in a very international context. In order to translate urban strategies into physical plans, local planners imitated foreign urban models without adjusting them to fit in to the local context. They mainly focused on land use and functional zoning, paying little attention to the social, economic and environmental impacts of the plans. Moreover, the necessity of immediate action in the rapidly changing, market-oriented atmosphere of the 1990s degraded strategic planning into a number of short-term actions, which may have temporarily mitigated the problems, but led to bigger and unexpected challenges in the long term. To address Tehran's urban problems in a more constructive and progressive manner, a new approach in planning Tehran urban region is required. Despite fast-paced growth of Tehran region, there has been insufficient debate on a regional approach to Tehran's urban planning and governance. It is necessary to revisit the city in relation to its rapidly changing region. To steer Tehran toward being an example of a sustainable city, where economic, environmental, and social objectives can manifest in reality, there is an urgent need of planning long-term, holistic scenarios which can be achieved by successive short-term interventions, scenarios which reconsider Tehran and its growing region as one single entity.



View towards Milad Tower, Tehran, the 2010s. Source: Wallpaper Flare

7 Conclusion – Transnational Planning of Tehran

The Changing Role of Planners and Planning

In February 2022, Iran celebrated the 43rd anniversary of the Islamic Revolution, a revolution that relentlessly demanded social justice and economic equality. In 1979, the newly established Islamic government planned to use the capital city of Tehran as an example of a just Islamic city where the urban poor could enjoy the right to housing and freely benefit from urban services. The prevalent adversity of Tehran in the late 1970s was associated with the transnational planning that took place during the former regime, and the city-wide control of modernist urban planners. These issues ultimately led to the dismissal of foreign planners and marginalization of many Iranian planners. Due to the political forces after the 1979 Islamic Revolution, local planners were pushed out of political, economic and social processes and so had a very limited and pre-defined role in the future of the city. Following a very engineer-driven approach towards the physical planning of the city, planners were mainly required to unquestioningly carry out the exact technical work that was asked of them. The growing dormitories for low-income groups, in the name of social housing projects, in Tehran urban region since the early 2000s is evidence of planners' mono-functionality, and the use of planning as a tool for the State to exploit the city in different ways [Figure 7.1].



FIG. 7.1 Pardis social housing project, located in the west of Tehran region. / Source: Unknown

Contrary to what is widely accepted in the literature of Tehran urban studies, this thesis demonstrates that transnational planning practices during the Pahlavi regime did not result in the domination of foreign planners in planning decisions and development direction of the city, but rather in the formation of a modern planning system which affected the imagination of local planners and city authorities about the future of Tehran, its economic, social and environmental dimensions. By scrutinizing the role of multiple global, national and local actors in provisioning and realizing Tehran master plans, this thesis presents a more complex narrative of transnational exchange of planning ideas than what have been previously established.

The three sections of this concluding chapter answer the main research question: “What role did Iranian planners play in Tehran master planning at a time of transnational exchange of planning ideas and how did they incorporate foreign urban models to achieve their own goal of urban growth?” By focusing on transnational exchange of planning ideas, the first section debates that there was not one type of transnational planning practice in Tehran but a great diversity in the ways in which foreigners and Iranians collaborated. This section offers a new perspective towards transnational planning of Tehran through elaborating on multiple

types of transnationalism, and the dominant features of each. To have a deeper understanding of the role of Iranian planners in Tehran master planning, the second section underscores the interplay between planning ideas, policies and impacts and its significance for transnational studies. It explains that negotiation between multiple (inter)national actors was not limited to the phase of planning, but also took place at various moments of translating imported planning ideas into local planning policies, and their realization. The last section examines how such transnational ties and collaborations affected the growth agenda of Tehran. It highlights how the cumulative effect of imported planning ideas and their translation to planning policies eventually gave rise to the unfettered growth of Tehran, and subsequently socio-spatial segregation and city-region disparities.

7.1 Multiple types of transnationalism

This thesis identifies constant shifts in the transnational approach to Tehran urban planning practices. Transnationalism in Tehran was not a static but rather a very dynamic and variable. Based on the analysis of this study, transnational planning practices in Tehran can be categorized into three different but interrelated types, which emerged chronologically as a result of changing international relations: 'intervention', 'negotiation', and 'interaction'. 'Intervention' and 'interaction' both underline the two ends of extreme in transnational planning practices. 'Intervention' refers to the early planning practices during and after the two World Wars when foreign professionals directly intervened in Tehran urban development without local input. 'Interaction' highlights the mutual collaboration between foreign and Iranian planners during the 1970s. At this time, not only locals benefited from foreign urban innovations, but also foreigners, who considered such collaborations as an opportunity to experiment with a new planning approach that was more sensitive to contextual differences. In this regard, 'negotiation' was a transitional phase from 'intervention' to 'interaction'.

To have a deeper understanding of the shifts in transnational planning practices in Tehran, this thesis identifies three main determinants affecting the different types of transnationalism: the underlying causation of exchange of planning ideas; the changing role of local planners; and the increasing awareness among Iranians and foreigners about the confrontation of imported ideas with the local context due to cultural differences.

As the first determinant, the fundamental causation of cross-border exchange echoes the larger political, economic and cultural context of international relations.⁷⁵⁰ For example, after the two World Wars, Iran was in urgent need of foreign technical and financial aid to accelerate its modernization and industrialization. The oil-led geopolitics of the Cold War placed Iran at the intersection of international relations which triggered global powers to run ambitious development projects in the country. However, this did not last long and, particularly during the 1970s oil crisis, Iran became the first power in the Middle Eastern oil region. This was a turning point in Iran's international relations, meaning that Iranians could decide on which ideas from which countries to import. The booming oil economy and changing international position attracted an influx of foreign companies and experts to work on Tehran urban projects. This made Tehran a field of transnational exchange of planning ideas, and Iranian government appeared as a client clearly knowing what it wanted, and commanded to foreigners what to do. The changes made in the international planning team of the Shahestan Pahlavi project in order to meet the desires of the Shah and Queen, which is discussed in Chapter 5, is an explicit example of this.

As the second determinant, changing roles of Iranian planners in transnational planning of Tehran can be better understood by examining national policies which specified the type of collaboration between Iranian planners and their foreign counterparts. In the early years of modern planning practices, between 1930s-1950s, the Plan Organization facilitated the designation of foreign professionals to work on the future development of Iranian cities. In the existing archive, there is hardly any evidence of their consultation or intimate collaboration with local actors. As a result, these plans were never realized and were soon forgotten. Over time, Iranian politicians found that collaborating with foreign professionals was an efficient way of nurturing a generation of local experts. To promote an active exchange of knowledge, in the early 1960s, the Plan Organization passed a new rule which compelled invited foreign firms to work with Iranian companies. According to this rule, foreigners could only work on Iranian projects if they made a joint venture with local firms, giving them a minimum share of 50 percent. The rule was enthusiastically received by foreign-trained Iranian planners who could now use their own international networks to make foreign-local joint ventures and became increasingly involved in Tehran urban developments.

⁷⁵⁰ Stephen V Ward, "Re-Examining the International Diffusion of Planning," in *Urban Planning in a Changing World* (Routledge, 2012).

Later on, in the late 1970s, the Plan Organization obliged Iranian firms to form joint ventures together instead of with foreign firms. This new national policy was to encourage the internal exchange of planning knowledge. At this time, foreign experts were involved in urban projects more as external advisors and consultants.

These national policies provoked a paradigm shift in the role of local planners, from impotent receivers of foreign planning innovations to critical and active collaborators. This thesis argues that Iranian planners, who had mostly graduated from American and European universities, played a dual role in incorporating both a foreign planning system and the State's political agenda into Tehran master plans. Their active collaboration with both big-name foreign planners and local policy-makers and politicians led to the formation of a new system of planning in Tehran. They played an instrumental role to adjust foreign urban standards in a way to embrace the changing pattern of development in Tehran. They persistently evaluated, challenged and even, at times, rejected foreign urban models. Their approach towards the future development of Tehran was not based on a blind imitation of foreign urban models, but rather on critical interpretation and reconstruction of those models, in order to achieve a viable planning agenda for Tehran.

The third determinant challenges the transnational exchange of planning ideas and its linearity by highlighting the cultural differences between importing and exporting countries, and the way it affects both local and foreign planning thinking. Iran was a pioneering country to promote such awareness among planners and architects worldwide. By holding three international conferences, Iranians shaped a platform for transnational exchange of ideas in this regard. The first conference, "The Interaction of Tradition and Technology" held in Isfahan in 1970, brought together urban planners and architects from all over the world to discuss the problems of adapting foreign architectural and planning models and techniques to a local context in industrializing countries. The second conference, "Towards a Quality of Life: the Role of Industrialization in the Architecture and Urban Planning of Developing Countries" held in Shiraz 1974, highlighted the way that rapid industrialization created new particularities for the built environment, which demanded a new outlook to architecture and urban planning. The final one "The Crisis of Identity in Architecture", held in Ramsar in 1976, was the first international congress of women [Figure 7.2]. It provoked debate on the role of women in architecture and urban planning. As discussed in Chapter 3, Moira Moser Khalili presented her analysis of the TMP at this conference, and criticized the planners for negating the needs of women in the plan.



FIG. 7.2 The third international conference entitled “The Crisis of Identity in Architecture” held in Ramsar in 1976. / Source: Report of the Proceedings of the International Congress of Women Architects, Ramsar, Iran, 1976

Such international debates on the wider impact of American and European planning and architecture in the so-called developing countries continued throughout the 1970s, and provided international professionals to share their experience of working in those countries. In the 1978 conference of “Architectural Transformations in the Islamic World” held at Gouvieux, Jaquelin Robertson was invited to speak about his three years’ experience of working on Tehran Central Business District (Shahestan Pahlavi). His opening words exemplify the increasing awareness and concern about cultural differences in transnational exchange of planning ideas.

As international consultants we are in the business of translating, transplanting and transforming cultural systems for people often strange to us, most of whom we will neither see nor know... The legitimacy of the so-called Western model is being challenged by those people who have been forced, or have chosen, to import it... What working in an Islamic country will do to Western consultants may be as important in the long run as what Western consultants bring rightly or wrongly to Islam. And being a Western consultant, I am most interested, in a very selfish way, in what I am getting, as well as what I am trying to give...

*Certainly, this trend toward the internationalization of large cities, while not predetermined, is indeed already established. The job of protecting older emerging cultures against surface Westernization that is changing the prototype may well have to be undertaken in the West.*⁷⁵¹

7.2 Interplay between planning ideas, policies, and impacts

To have a deeper understanding of transnational planning of Tehran and the role of local planners therein, this thesis interrogates the interplay between planning ideas, planning policies, and planning impacts in different urban projects. Collaboration between foreign and local planners went beyond shaping urban ideas. As advisors and critics, they were actively engaged in translating those ideas into policies, as well as criticizing the impacts of those policies. Planning ideas in Tehran arose from an intellectual setting shaped by a close cooperation between foreign experts and local professionals. The analysis of the first Tehran Master Plan (TMP), the first Tehran Action Plan (TAP), and the plan for Tehran Central Business District (CBD) in Chapters 3, 4, and 5 show how Iranian planners utilized foreign planning models and adjusted them according to the State's political agenda to shape their own planning ideas and development theories for Tehran's urban future. Focusing on planning decisions and thoughts, and unravelling the underlying premises of each plan provide a deeper understanding about what the group of planners sought to achieve, how they related foreign planning ideas to the changing context of Tehran, and how they planned for a rapidly growing city.

Planning policies came about from the interaction between planning ideas and political and institutional processes.⁷⁵² By underlining the political nature of planning, this thesis discloses how those planning ideas and theories were interwoven with political practices over time. The political atmosphere of the time,

⁷⁵¹ Jaquelin Robertson, "Toward an Architecture in the Spirit of Islam" (paper presented at the Architectural Transformations in the Islamic World., Aiglemont, Gouvieux, France, April 1978).

⁷⁵² Stephen V. Ward, *Planning and Urban Change*, (London: Sage Publications, 2004).

a change in the market system, social movement and sudden demographic shifts, all exerted influence on the translation of planning ideas to planning policies. This thesis addresses a wide range of local actors and politicians whose interpretation of imported planning ideas made Tehran urban projects subject to constant tension and contestation. As a result of all these forces, often the key element of a plan would get lost in the procedure of translation to urban policies.⁷⁵³ Focusing on planning policies, therefore, allows us to understand how foreign planning initiatives were incorporated into urban regulations, facilitating a course of actions. These policies were sometimes in line with the adopted urban ideas, and sometimes against them. Moreover, examining the criticism that Tehran master plans faced at times reveals how foreign and local criticism affected the establishment of planning policies, either forced the modification of an approved plan or justified its rejection while encouraging a shift towards a new planning approach. This resulted in involving different groups of foreign planners or even establishing new policies to define a new type of foreign-local collaboration.

Planning impact is the outcome of the interaction between planning ideas and policies and the physical and social reality of the city.⁷⁵⁴ The impact of planning ideas was, to a certain extent, outside the planners' control, despite common beliefs about planners' power to manage the entire city.⁷⁵⁵ Thus it is not enough to only focus on the underlying ideas embedded in Tehran master plans to understand their wider impact on the city and its regions. Influenced by a broad range of socio-economic forces, there was often a large disparity between the original intention of an approved plan and its outcome.⁷⁵⁶ Therefore, the impact of transnational planning includes not only the original intentions of international planners but also all of their false predictions, in tandem with the unforeseen dimensions that the future could bring. Moreover, the planning impact was not just limited to the formal development of the city, but also to the various ways that such formal developments gave rise to informal settlements growing in and around the city. Therefore, (un)wanted impacts of planning in each time period triggered shifts in planning thinking, its type of transnationalism and its role and value to direct the future of Tehran.

⁷⁵³ Andre Sorensen, "Urban Sustainability and Compact Cities Ideas in Japan: The Diffusion, Transformation and Deployment of Planning Concepts," in *Crossing Borders : International Exchange and Planning Practices*, ed. Patsy Healey and Robert Upton (New York: Routledge, 2010).

⁷⁵⁴ Ward, *Planning and Urban Change*.

⁷⁵⁵ Ibid.

⁷⁵⁶ Ibid.

7.3 Transnational planning at a time of urban growth

This section describes how local planners employed foreign planning models and techniques to achieve their own growth agenda for Tehran. Analysis of long-term collective impacts of master planning on Tehran urban development shows that managing urban growth has remained one of the most serious challenges of urban planning to this day. City authorities and local and foreign urban planners have always struggled with the dilemma between accommodating urban growing in Tehran or seeking to reduce it. Throughout the twentieth century, Tehran experienced periods of major population growth and dramatically shifting political and economic circumstances. Since the provisioning of the first TMP in the 1960s the fast-paced city expansion has attracted urban planners' attention. Dealing with the rapid growth of the city was one of the main factors that greatly affected the conceptualization of the socio-spatial organization of Tehran. In practice, these policies not only failed to control the growth of the city, but actually stimulated informal expansion outside the demarcated borders of the city. As a result, urban growth simultaneously became both a planning concept and a subject of restriction policies. Although the planners' attempted to come up with a proposals that allowed for growth over time, local city authorities always believed in the power of top-down policies to curb the expansion of Tehran.

Since the 1960s, master planning became a powerful tool for managing socio-spatial and economic changes in Tehran. As discussed in Chapter 3, the TMP laid a distinct emphasis on the planning of the entire city. The planners focused on developing modern city centres to guide the future growth of Tehran whilst controlling urban sprawl. These multifunction city centres were seen as a solution to guide the future expansion of the city with the lure of commercial and retail activities. They were a force to not only reorganize the socio-spatial structure of the entire city but, more importantly, to stimulate its economic growth. The planners' belief in their ability to manage every aspect of urban life and their focus on predicting the future distracted them from the unwanted impacts of their planning decisions. Soon after its approval, various unpredicted forces, such as a sudden jump in Tehran's population, influenced the implementation of the plan. As every aspect of the city had been carefully planned and designed, any unforeseen side effects had particularly dramatic impacts.⁷⁵⁷

⁷⁵⁷ Dirk Schubert, "Cities and Plans—the Past Defines the Future," *Planning Perspectives* 34, no. 1 (2019).

Thus, the TMP became subject to constant revisions and gradually morphed in to a complex document that necessitated an unwanted flexibility.

In the early 1970s, in parallel with new developments based on the TMP, Tehran saw a rapid growth of informal settlements where poor migrants lived in inadequate housing in the peripheries. They were physically separated from the city, yet functionally dependent on it. Tehran had in essence become divided in two; a formal city and an informal one, each rapidly moving towards the other. This was a new challenge for the city authorities, unforeseen by the TMP. As shown in Chapter 4, Constantinos Doxiadis and his Iranian partner Iraj Etesam were invited to re-think Tehran's urban problems and envision the TAP to complement and critically examine the practicality and functionality of the TMP. The planners were not in accord with the TMP and shifted the focus from the city to its growing peripheries. They linked Tehran's urban problems to national development policies and highlighted the urgency to re-think the development of the city in relation to its region rather than limiting Tehran urban issues to its demarcated boundaries. They saw unlimited but guided growth of the city an important economic engine for the entire region. Despite some limitations of the TAP and criticisms regarding the practicality of Doxiadis's generic urban model, it is important to observe how the planners considered the social structure of the city and the ingrained socio-spatial dichotomies therein. Chapter 4 shows how the TAP was a wakeup call for growing inequality and social segregation in Tehran.

The 1973 oil crisis triggered an unprecedented economic boom in Iran and in turn changed its global status. Despite the rising socio-economic tensions in the city, in the mid-1970s planning priorities moved in another direction, as Tehran became a global city. Chapter 5 debates how Tehran's new role impacted the path of its growth and development. The wealth generated by oil empowered the State to run ambitious large-scale projects, at a time when Tehran was in dire need of investment for building low-cost housing for the growing population. This was coupled with the move to create a CBD to function at national and global scales. Named after the Shah, Shahestan Pahlavi, it was claimed as being the biggest CBD in the world. The involvement of a professional team of international planners, including Llewelyn-Davies International, collaborating with local counterparts, made Shahestan Pahlavi a seminal international example of planning and urban design of the day. The huge project overshadowed the development strategies in place of the rest of the city, once again directing attention from Tehran's outer regions towards inner-city areas. Despite the planners' concern for accommodating the future growth of the city, the rising economic power of the government empowered city authorities to consider top-down policies to curb further expansion. However, the construction boom and growing employment opportunities made Tehran increasingly attractive and it had to

absorbed more population from the entire country. Newcomers who could not afford life within the city and were forced to live in its borders, encountering strict municipal limitations which deprived them from electricity, potable water and other preliminary amenities. The municipal attempt to destruct these squats bought about massive demonstrations by the urban poor. The rising dissatisfaction of the Pahlavi regime and its development agenda also extended to other social groups and eventually led to the revolution and thus overthrowing the Shah.

As discussed in Chapter 6, the 1979 Islamic Revolution changed the direction of urban planning in Tehran once again. The ideology of the Islamic State to make Iran an internationally independent country led to a sudden cessation of local-foreign collaborations and the total disregard of existing urban plans, forcing many foreign-educated planners to leave the country. The main objectives of the new Islamic State were to deal with the urban poor, social justice, equity, and the right to housing. Regarding Tehran urban region as the main asset to provide the poor with cheap land resulted in a new phase in urban sprawl. The revolutionaries' advocacy for socio-economic equality did not last long without planning and it was not long before neoliberal reforms shifted focus from housing low-income groups to market-driven development. The increasing reliance of the autonomous municipality on private developers could not deliver the desirable public benefits they sought. Like as with many other countries, market principles in Iran were advocated as a way to generate new wealth by giving public and private developers what they wanted, rather than what people actually needed.⁷⁵⁸ As a result, the market became “the main indicator of where and when development should occur”.⁷⁵⁹ Contrary to the revolutionary aim, market-driven development of Tehran exacerbated poverty and exclusion in Tehran urban region. As urban planning transformed into a market-oriented and entrepreneurial practice, it became incapable of decreasing socio-spatial and environmental vulnerabilities of the city and its expanding regions.⁷⁶⁰

Since the 1990s, informal urbanism has characterized urban development in Tehran. Despite its more significant impact than formal urbanism, informal urbanism has been largely overlooked in urban planning discussions. Instead of excluding informal settlements from the planning agenda, the time is ripe to consider them as integral and inevitable elements of the city, a bottom-up resistance to the inefficiency of

⁷⁵⁸ Ward, *Planning and Urban Change*.

⁷⁵⁹ Tim Brindley, Yvonne Rydin, and Gerry Stoker, *Remaking Planning: The Politics of Urban Change* (Routledge, 2005), 9.

⁷⁶⁰ Ayda Eraydin, ““Resilience Thinking” for Planning,” in *Resilience Thinking in Urban Planning* (Springer, 2013).

formal planning. In Tehran, informal urbanism is not just limited to the poor and low-income groups who disturb formal planning regulations, but also deployed by middle- and high-income groups.⁷⁶¹ They often violate planning rules and building codes either on a micro-scale, such as opening a window towards neighbours, or on a bigger scale, such as by bribing municipal officials to exceed the determined building height, or changing the function of a building from housing to commercial. According to Aseem Inam's compelling argument, "informality is not as much about illegality but about the power to designate what is or is not legal, legitimate or illegitimate, and acceptable or unacceptable, including in urbanism".⁷⁶²

The real weakness of planners and planning practices in Tehran manifests in the exaggerated claim to curb the growth of the city on the one hand and their over-emphasis on formal urban developments on the other. Growth control policies have always been conversely followed by attracting new population. The unpredicted growth of the city made long-term plans inefficient, and short-term plans ineffective, resulting in unsustainable development. Careful analysis of provisioned plans for Tehran demonstrates that anticipating the future growth of the city and mitigating rapid urban change has remained the primary concerns of urban planners and city authorities. However, false predictions and the lack of adaptation measures to absorb unpredicted shocks and disturbances have resulted in the increased vulnerability of the city and fragilities of its growing region. The overwhelming scale and rate of Tehran urban growth has contributed to both inequality and environmental pressure.

The analysis of Tehran urban projects shows that dealing with Tehran's growth is not just a challenge for city authorities and their management capabilities, but also for planning thinking and planning approach.⁷⁶³ It is increasingly evident that Tehran does not need a grand urban plan, rather a paradigm shift in the role of planners' and a new perspective to make planning practices more compatible with the rate of urban growth while tackling growing environmental, social, and economic pressure. Rapid growth of the city and the increasing complexities of its urban system necessitate new modes of urban planning practices that are responsive and adaptive to the specifics of the city transforming its vulnerabilities into development opportunities.⁷⁶⁴

⁷⁶¹ Aseem Inam, "Designing New Practices of Transformative Urbanism: An Experiment in Toronto," *Urban Design International* 24, no. 1 (2019).

⁷⁶² Ibid.

⁷⁶³ Marco Keiner, "Towards Gigapolis? From Urban Growth to Evolutionable Medium-Sized Cities," in *Managing Urban Futures* (Routledge, 2016).

⁷⁶⁴ Aseem Inam, "Designing New Practices of Transformative Urbanism: An Experiment in Toronto," *Urban Design International* 24, no. 1 (2019).

Urban growth, an inextricable feature of Tehran, needs to be re-thought as an opportunity for environmental improvements, social equality, and economic development. The question is whether the potential of urban growth can be considered a solution rather than a problem, as leverage for resilient development of the city.

Dealing with Tehran's urban problems and embracing the reality of its urban growth necessitates re-thinking the role of planners and planning. Tehran should be allowed to grow, but in a more responsible and effective manner. Instead of implementing top-down policies to prevent growth in Tehran, the focus of planning practices needs to shift towards policies which manage growth whilst considering environmental, social and economic values. This leaves us with more critical questions than answers regarding the nature of future urban growth in Tehran, and the role of urban planners and urban planning therein. How can planning contribute in enhancing environmental and socio-economic values in Tehran, and what role can planners play to achieve this? How can planners be released from isolation and marginalization and become more proactively involved in planning decisions? Would resuming their connection with the cohort of international planners contribute to their way of thinking and imagination about the urban future of Tehran?

The meaning of history arises in the uncovering of relationships. That is why the writing of history has less to do with facts as such than with their relations. These relations will vary with the shifting point of view, for, like constellations of stars, they are ceaselessly in change. Every true historical image is based on relationship, appearing in the historian's choice from among the fullness of events, a choice that varies.

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Bibliography

Books and Journal Articles

- Abrahamian, Ervand. *A History of Modern Iran*. Cambridge: Cambridge University Press, 2008.
- . *Iran between Two Revolutions*. New Jersey: Princeton University Press, 1982.
- Ade, Chahryar, and Bernard Hourcade. *Téhéran, Capitale Bicentenaire*. [in English] Bibliothèque Iranienne. Paris; Téhéran: Institut français de recherche en Iran, 1992.
- Albrechts, Louis. "Strategic (Spatial) Planning Reexamined." *Environment and Planning B: Planning and design* 31, no. 5 (2004): 743-58.
- Alvandi, Roham. *The Age of Aryamehr : Late Pahlavi Iran and Its Global Entanglements*. Gingko-St Andrews Series. London: Gingko Library, 2018.
- Amirahmadi, Hooshang, and Ali Kiafar. "The Transformation of Tehran from a Garrison Town to a Primate City: A Tale of Rapid Growth and Uneven Development." In *Urban Development in the Muslim World*, edited by Hooshang Amirahmadi and Salah S.El Shakhs, 109-36. New Brunswick,NJ: Rutgers University Press, 1993.
- Amirahmadi, Hooshang. "Regional Planning in Iran: A Survey of Problems and Policies." *Developing Areas* 20, no. 4 (1986): 501-30.
- Amuzegar, Jahangir. "The Iranian Economy before and after the Revolution." *Middle East Journal* 46, no. 3 (1992): 413-25.
- Ansari, Ali M. *Modern Iran since 1921: The Pahlavis and After*. London: Pearson Education, 2003.
- Antyufeev, AV, and OA Antyufeeva. "Linear Cities: Controversies, Challenges and Prospects." Paper presented at the IOP Conference Series: Materials Science and Engineering, 2019.
- Ash, Maurice. *The Crisis in Planning*. Town and Country Planning Association, 1977.
- Atash, Farhad. "The Deterioration of Urban Environments in Developing Countries: Mitigating the Air Pollution Crisis in Tehran, Iran." *Cities* 24, no. 6 (2007): 399-409.
- Avermaete, Tom. "The Ford Foundation's Footprint." *Canadian Centre for Architecture (CCA)* (2015).
- Azad, Abul Kalam. "Iran-Us (United States) Relations since 1945." University of Dhaka, 2018.
- Bahrambeygui, Hooshang. "Tehran: An Urban Analysis." Durham University, 1972.
- Balbo, Marcello. "Urban Planning and the Fragmented City of Developing Countries." *Third World Planning Review* 15, no. 1 (1993): 23.
- Baldwin, George Benedict. "Planning and Development in Iran." The John Hopkins Press Baltimore, 1967.
- Bayat, Asef. "Tehran:Paradox City." *New Left Review* 66 (2010): 99 - 122.
- Beauregard, Robert A, and Andrea Marpillero-Colomina. "More Than a Master Plan: Amman 2025." *Cities* 28, no. 1 (2011): 62-69.
- Bernhardt, Christoph. "Path-Dependency and Trajectories." In *Concepts of Urban-Environmental History*, edited by Martin Knoll Sebastian Haumann, Detlev Mares, 65-79, 2020.
- Borbor, Dariush, and Ahmad Saeidnia. "Problems and Prospects of Master Plans in Iran." In *Urban Planning conference*, 2018.
- Boroujerdi, Mehrzad. "The Centrality of Tehran in Iranian Sociopolitical Life." (2015).
- Bostock, Frances, and Geoffrey Jones. *Planning and Power in Iran: Ebtehaj and Economic Development under the Shah*. London, England: F. Cass, 1989.
- Bosworth, C Edmund. *Historic Cities of the Islamic World*. Brill, 2007.
- Brindley, Tim, Yvonne Rydin, and Gerry Stoker. *Remaking Planning: The Politics of Urban Change*. Routledge, 2005.

- Bromley, Ray. "Doxiadis and the Ideal Dynapolis: The Limitations of Planned Axial Urban Growth." *Ekistics* 69, no. 415-417 (2002): 317.
- . "Towards Global Human Settlements: Constantinos Doxiadis as Entrepreneur, Coalition-Builder and Visionary." In *Urbanism: Imported or Exported? Native Aspirations and Foreign Plans*, edited by Joe Nasr and Mercedes Volait, 316-40. London: Wiley Academy, 2003.
- Carmona, Marisa, and Rod Burgess. "Strategic Planning & Urban Projects: Responses to Globalization from 15 Cities." *Transformations* 4 (2001).
- Chakrabarty, Dipesh. "The History of Studying History: What's Changed?" By UTS Faculty of Arts and Social Sciences (Jun 10, 2018).
- Christakis, Alexander N, and Kenneth C Bausch. *Colaboratories of Democracy: How People Harness Their Collective Wisdom to Create the Future*. IAP, 2006.
- Cody, Jeffrey W. *Exporting American Architecture 1870-2000*. Hoboken: Routledge, 2002.
- Cohen, Lizabeth. "A Consumers' Republic: The Politics of Mass Consumption in Post war America." *Journal of Consumer Research* 31, no. 1 (2004): 236-39.
- Conrad, Sebastian. *What Is Global History?:* Princeton University Press, 2016.
- Costello, Vincent Francis. "Tehran." In *Problems and Planning in Third World Cities*, edited by Michael Pacione, 156-86. London: Croom Helm, 1981.
- Cronin, Stephanie. "Iran and the Rise of Reza Shah: From Qajar Collapse to Pahlavi Power." *Middle Eastern Studies* 36, no. 1 (2000): 187.
- D.King, Anthony. "Writing Transnational Planning Histories." In *Urbanism: Imported or Exported? Native Aspirations and Foreign Plans*, edited by Joe Nasr and Mercedes Volait, 1-15. London: Wiley Academy, 2003.
- . "Writing Transnational Planning History." In *Urbanism: Imported or Exported?*, edited by Jose Nasr and Mercedes Volait, 1-15. Chichester: Wiley-Academy, 2003.
- Davoudpour, Zohreh. *Taadol Bakhshi Shahree Tehran*. [Balancing the city of Tehran]. Tehran: Vezarate Maskan va Shahrsazi, 2009.
- De Duren, Nora Libertun. "The Third Wave of Sprawl: The Dynamic of Peripheral Growth in Buenos Aires." In *The Routledge Handbook of Planning Megacities in the Global South*, edited by Deden Rukmana: Taylor and Francis, 2020.
- Dehghani, Naser Mashadizadeh. *Tahlili as Vizhegiha-E Barnamerizi-E Shahri Dar Iran*. [Analysis of Urban Planning Features in Iran]. Tehran: University of Science and Technology Press, 1995.
- Doxiadis, Constantinos, and Alexandros-Andreas Kyrtis. *Constantinos A. Doxiadis : Texts, Design, Drawings, Settlements*. Athens: Ikaros, 2006.
- Dubrow, Gail, and Mary Corbin Sies. "Letting Our Guard Down: Race, Class, Gender, and Sexuality in Planning History." *Journal of Planning History* 1, no. 3 (2002): 203-14.
- Duignan, Peter, and Alvin Rabushka. "United States in the 1980s." (1980).
- Ehlers, Eckart, and Willem Floor. "Urban Change in Iran, 1920-1941." *Iranian Studies* 26, no. 3-4 (1993): 251-75.
- Ehsani, Kaveh. "Municipal Matters: The Urbanization of Consciousness and Political Change in Tehran." *Middle East Report*, no. 212 (1999): 22-27.
- Ehsani, Kaveh. "Municipal Matters: The Urbanization of Consciousness and Political Change in Tehran." *Middle East Report*, no. 212 (1999): 22-27.
- . "Survival through Dispossession: Privatization of Public Goods in the Islamic Republic." *Middle East Report*, no. 250 (2009): 26-33.
- El Hayek, Ibrahim, Bernd Stimpfle, and Michael Sendelbach. "Glass Bow for the Iran Mall in Tehran." *ce/papers* 2, no. 5-6 (2018): 495-512.
- Emami, Farshid. "Civic Visions, National Politics, and International Design: Three Proposals for a New Urban Center in Tehran (1966-1976)." Massachusetts Institute of Technology, 2011.
- . "Urbanism of Grandiosity: Planning a New Urban Centre for Tehran (1973-76)." *International Journal of Islamic Architecture* 3, no. 1 (2014): 69-102.
- Emanuel, Muriel. *Contemporary Architects*. Springer, 2016.
- Eraydin, Ayda. "'Resilience Thinking' for Planning." In *Resilience Thinking in Urban Planning*, 17-37: Springer, 2013.
- Escobar, Arturo. *Encountering Development : The Making and Unmaking of the Third World*. Princeton University Press, 2012.

- Esfahani, Hadi Salehi, and M Hashem Pesaran. "The Iranian Economy in the Twentieth Century: A Global Perspective." *Iranian Studies* 42, no. 2 (2009): 177-211.
- Fanni, Zohreh. "Cities and Urbanization in Iran after the Islamic Revolution." *Cities* (2006). "Farmanfarmaian Az Tarhe Jame Tehran Migoyad." *Shahrnegar* 36 (2006): 18-25.
- Farmanfarmaian, Abdolaziz. "Farmanfarmaian Az Tarhe Jame Tehran Che Migoyad?," 18-25. Tehran: Shahrnegar, 2006.
- Feniger, Neta. "From Nahalal to Danesfahan: The Transfer of Israeli Modern Rurality to Village Planning in Iran." *The Journal of Architecture* 23, no. 3 (2018): 367-91.
- Fontenot, Anthony. "Notes toward a History of Non-Planning." *Places Journal* (2015).
- Forsyth, Hannah, and Jedidiah Evans. "Authentic Assessment for a More Inclusive History." *Higher Education Research & Development* 38, no. 4 (2019): 748-61.
- Franks, Ben. "New Right/New Left: An Alternative Experiment in Freedom." In *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism*, edited by Jonathan Hughes, and Simon Sadler: Routledge, 2013.
- Ghaffari, Fereydoon. *My Journey: From Anzali to Los Angeles*. CreateSpace Independent Publishing Platform, 2018.
- Ghamami, Majid. *Mojmo-E Shahri-E Tehran: Gozideh Motaleat-E Tarh-E Rahbordi-E Tose-E Kalbadi* [Tehran Urban Agglomeration]. Tehran: Markaz-e Motaleat va Tehqiqat-e Shahr-sazi va Memari Iran, 2004.
- Ghods, M. Reza. "Iranian Nationalism and Reza Shah." *Middle Eastern Studies* 27, no. 1 (1991): 35-45.
- Gholizadeh, Ali Akbar, and Mahdi Aminirad. "Determining the Optimal Structure of Tehran Municipality Income Basis Based on Risk and Returns." *Journal of Urban Economics and Management* 6, no. 23 (2018): 81-95.
- Giedion, Sigfried. *Space, time and architecture: the growth of a new tradition*. Harvard University Press, 2009.
- Gregory, Brew. "Economic Expertise and Rural Improvement in Iran, 1948-1963." Rockefeller Archive Center, 2017.
- Grigor, Talinn. "Tehran a Revolution in Making." In *Political Landscapes of Capital Cities*, edited by Jessica Joyce Christie, 2016.
- Gruen, Victor, Anette Baldauf, and Michael Stephen Gruen, eds. *Shopping Town : Designing the City in Suburban America*. Minneapolis: University of Minnesota Press, 2017.
- Gruen, Victor. *The Heart of Our Cities: The Urban Crisis: Diagnosis and Cure*. London: Thames and Hudson, 1964.
- Guarnizo, Luis Eduardo, and Michael Peter Smith. "The Locations of Transnationalism." *Transnationalism from below* 6 (1998): 3-34.
- Gunn, Susannah, and Jean Hillier. "When Uncertainty Is Interpreted as Risk: An Analysis of Tensions Relating to Spatial Planning Reform in England." *Planning Practice and Research* 29, no. 1 (2014): 56-74.
- Habibi, Mohsen, and Javad Salimi. *Ostokhan Bandiyeh Shahr-E Tehran*. [Tehran's physical structure]. Vol. II, Tehran: Moavenat fanni va omrani shahr-e Tehran, 1996.
- Habibi, Mohsen. *Az Shar Ta Shahr*. Tehran: University of Tehran, 1996.
- Habibi, Rana, Bruno De Meulder, and Seyed Mohsen Habibi. "Re-Visiting Three Neighbourhoods of Modern Tehran: Chaharsad-Dastgah, Narmak and Nazi-Abad." In *Urban Change in Iran*, edited by Fatemeh Farnaz Arefian and Seyed Hossein Iradj Moeini: Springer, 2016.
- Hajian, Babak. "Chehel Va Chahar Salegi-E Tasvib-E Avalin Tarh-E Jam-E Tehran." *Donyay-e eghtesad*, 2008.
- Hakiminejad, Ahmadreza. "Errors of Scale; the Story of Tehran's Abbasabad Lands." (2018).
- Hakiminejad, Ahmadreza. "The Wrong City in Making: The Case of Tehran District 22." In *Symposia Iranica: Fourth Biennial Iranian Studies Conference* edited by Institute of Iranian Studies. Scotland, 2019.
- Hall, Charles AS, and John W Day. "Revisiting the Limits to Growth after Peak Oil" *American scientist* 97, no. 3 (2009): 230-37.
- Hamnett, Stephen, and Robert Freestone. *The Australian Metropolis: A Planning History*. Vol. 25: Taylor & Francis, 2000.
- Hardwick, M. Jeff. "Creating a Consumer's Century : Urbanism and Architect Victor Gruen, 1938-1968." 2000.
- . *Mall Maker: Victor Gruen, Architect of an American Dream*. Philadelphia: University of Pennsylvania Press, 2004.
- Harms, Hans. "Cities of the Global South in the Context of Transnational Urbanism and International Development Policies." *Transnationalism and Urbanism* 25 (2012): 46-72.

- Harris, Richard, and Godwin Arku. "The Rise of Housing in International Development: The Effects of Economic Discourse." *Habitat International* 31, no. 1 (2007): 1-11.
- Harvey, David. *A Brief History of Neoliberalism*. Oxford University Press, USA, 2007.
- Healey, Patsy. *Making Strategic Spatial Plans*. Routledge, 2006.
- . "The Transnational Flow of Knowledge and Expertise in the Planning Field." In *Crossing Borders : International Exchange and Planning Practices*, edited by Patsy Healey and Robert Upton, 1-26. New York: Routledge, 2010.
- . "Circuits of Knowledge and Techniques: The Transnational Flow of Planning Ideas and Practices." *International journal of urban and regional research* 37, no. 5 (2013): 1510-26.
- Hein, Carola, and Dirk Schubert. "Resilience and Path Dependence: A Comparative Study of the Port Cities of London, Hamburg, and Philadelphia." *Journal of Urban History* (2020).
- Hein, Carola, and Mohamad Sedighi. "Iran's Global Petroleumscape: The Role of Oil in Shaping Khuzestan and Tehran." *Architectural Theory Review* 21, no. 3 (2017): 349-74.
- Hein, Carola, ed. *The Routledge Handbook of Planning History*. First edition. ed. 1 online resource : text file, PDF. vols. London: Taylor and Francis, 2017.
- Hein, Carola. "The Exchange of Planning Ideas from Europe to the USA after the Second World War: Introductory Thoughts and a Call for Further Research." *Planning Perspectives* 29, no. 2 (2014): 143-51.
- . "Crossing Boundaries: The Global Exchange of Planning Ideas." In *Making Cities Global: The Transnational Turn in Urban History*, edited by K. Sandoval-Strausz and Nancy H. Kwak: Penn Press, 2017.
- . "The What, Why, and How of Planning History." In *The Routledge Handbook of Planning History*, edited by Carola Hein, 1-12. London: Taylor and Francis, 2017.
- Helgeson, Edward, ed. *Iran-U.S. Claims Tribunal Reports* Vol. 31: Cambridge University Press, 1995.
- Hooshang, Amirahmadi, and Kiafar Ali. "Tehran: Growth and Contradictions." *Journal of Planning Education and Research* 6, no. 3 (1987): 167-77.
- Houchang, E. Chehabi. "Staging the Emperor's New Clothes: Dress Codes and Nation-Building under Reza Shah." *Iranian Studies* 26, no. 3-4 (1993): 209-29.
- Hourcade, Bernard. "Téhéran : Évolution Récente D'une Métropole." *Méditerranée, deuxième série* 16, no. 1 (1974): 25-41.
- . "Urbanisme Et Crise Urbaine Sous Mohammad-Reza Pahlavi." In *TéHéRan, Capitale Bicentenaire*, edited by Chahryr Adle and Bernard Hourcade, 207-22. Paris; Téhéran: Institut français de recherche en Iran ; Diff. Peeters, 1992.
- Hurd, Elizabeth Shakman. *The Politics of Secularism in International Relations*. Vol. 112: Princeton University Press, 2009.
- Hyun Bang Shin, Loretta Lees, Ernesto López-Morales. "Introduction: Locating Gentrification in the Global East." *Urban Studies* v53, n3 (2016): 455-70.
- Inam, Aseem. *Designing Urban Transformation*. New York and London: Routledge, 2013.
- . "Designing New Practices of Transformative Urbanism: An Experiment in Toronto." *Urban Design International* 24, no. 1 (2019): 60-74.
- International New Town Institute. *The New Town Travel Guides Milton Keynes*. 2017.
- Irazabal, Clara. "Transnational Planning: Reconfiguring Spaces and Institutions." In *Transnationalism and Urbanism*, edited by Stefan Krätke, Kathrin Wildner and Stephan Lanz, 72-91: Routledge, 2012.
- Kallus, Rachel. "The Crete Development Plan: A Post-Second World War Israeli Experience of Transnational Professional Exchange." *Planning Perspectives* 30, no. 3 (2015): 339-65.
- Kamali, Masoud. *Multiple Modernities, Civil Society and Islam: The Case of Iran and Turkey*. Liverpool University Press, 2006.
- Kano, Hiromasa. "Urbanization in Post-Revolution Iran." *The Developing Economies* 34, no. 4 (1996): 424-46.
- Karbaschi, Gholam Hossein. "The Role of Decision Making Processes in Urban Management Systems (Case Study of Tehran)." Newcastle University, 2013.
- Karim, Farhan. "Between Self and Citizenship: Doxiadis Associates in Postcolonial Pakistan, 1958-1968." *International Journal of Islamic Architecture* 5, no. 1 (2016): 135-61.
- Karimi, Pamela. *Domesticity and Consumer Culture in Iran | Middle East Research and Information Project*. Routledge, 2013.

- Katouzian, Homa. *The Political Economy of Modern Iran : Despotism and Pseudo-Modernism, 1926-1979*. London: Macmillan, 1981.
- Kazemi, Farhad, and Lisa Reynolds Wolfe. "Urbanization, Migration, and Politics of Protest in Iran." In *Population, Poverty, and Politics in Middle East Cities*, edited by Michael E Bonine, 256-84: University Press of Florida, 1997.
- Keiner, Marco, Martina Koll-Schretzenmayr, and Willy A. Schmid. *Managing Urban Futures : Sustainability and Urban Growth in Developing Countries*. Aldershot, England: Ashgate, 2005.
- Keiner, Marco. "Towards Gigapolis? From Urban Growth to Evolutionable Medium-Sized Cities." In *Managing Urban Futures*, 237-50: Routledge, 2016.
- Keshavarzian, Arang. *Bazaar and State in Iran: The Politics of the Tehran Marketplace*. Cambridge University Press, 2007.
- Khatam, Azam. "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism." York University, 2015.
- Khosravi, Hamed. "Politics of Demonst(E)Ration." *San Rocco* 6 (2013): 28-37.
- . "Camp of Faith: On Political Theology and Urban Form.", TU Delft, 2014.
- . *Tehran-Life Within Walls: A City, Its Territory, and Forms of Dwelling*. Hatje Cantz Verlag, 2017.
- King, Anthony. *Spaces of Global Cultures: Architecture, Urbanism, Identity*. Routledge, 2004.
- Kisatsky, Deborah. "Voice of America and Iran, 1949-1953: Us Liberal Developmentalism, Propaganda and the Cold War." *Intelligence and National Security* 14, no. 3 (1999): 160-85.
- Krätke, Stefan, Kathrin Wildner, and Stephan Lanz. "The Transnationality of Cities: Concepts, Dimensions and Research Fields. An Introduction." In *Transnationalism and Urbanism*, 13-42: Routledge, 2012.
- Kunzmann, Klaus R. "Urban Planning in the North: Blueprint for the South?". In *Managing Urban Futures*, 251-62: Routledge, 2016.
- Lee, Douglass B. "Requiem for Large-Scale Models." *Journal of the American Institute of Planners* 39, no. 3 (1973): 163-78.
- Lin, Shoufu, Ji Sun, Dora Marinova, and Dingtao Zhao. "Effects of Population and Land Urbanization on China's Environmental Impact: Empirical Analysis Based on the Extended Stirpat Model." *Sustainability* 9, no. 5 (2017): 825.
- Llewelyn-Davies, Richard. "Some Further Thoughts on Linear Cities." *The Town Planning Review* 38, no. 3 (1967): 202-03.
- Looney, Robert E, and PC Frederiksen. "The Iranian Economy in the 1970s: Examination of the Nugent Thesis." *Middle Eastern Studies* 24, no. 4 (1988): 490-94.
- Lu, Duanfang. *Third World Modernism: Architecture, Development and Identity*. Routledge, 2010.
- Madanipour, Ali. *Tehran: The Making of a Metropolis*. 1998.
- . "City Profile, Tehran." *Cities* 16 (1999): 57-65.
- . "Urban Planning and Development in Tehran." *Cities* 23, no. 6 (2006): 433-38.
- . "The Limits of Scientific Planning: Doxiadis and the Tehran Action Plan." *Planning Perspectives* 25, no. 4 (2010).
- . "Sustainable Development, Urban Form, and Megacity Governance and Planning in Tehran." In *Megacities: Urban Form, Governance, and Sustainability*, edited by J. Okata (Eds.) A. Sorensen, 67-92: Springer, 2011.
- Mahmodi, Marziye. "Examination of Planning System in Iran." *Manzar* (2009): 38-45.
- Mansori, Amir. "Lessons from Apur's Report on Tehran Strategic Plan." *Mnazar* 2 (2009): 77-80.
- Marefat, Mina. "Fractured Globalization: A Case Study of Tehran." In *New Global History and the City*, edited by Elliott R. Morss: New Global History Press, 2004.
- Mashayekhi, Azadeh. "Tehran, the Scene of Modernity in the Pahlavi Dynasty: Modernisation and Urbanisation Processes 1925-1979." In *Urban Change in Iran*, edited by Fatemeh Farnaz Arefian Seyed Hossein Iradj Moeini, 103-19: Springer, 2016.
- . "The 1968 Tehran Master Plan and the Politics of Planning Development in Iran (1945-1979)." *Planning Perspectives* (2018): 1-28.
- . "Regimes of Urban Transformation in Tehran: The Politics of Planning Urban Development in 20th Century Iran." Delft University of Technology, 2019.
- . "The Politics of Building in Post-Revolution Tehran." In *Routledge Handbook on Middle East Cities*, edited by Haim Yacobi and Mansour Nasasra, 196- 216: Routledge, 2019.

- Masnavi, MR, F Gharai, and M Hajibandeh. "Exploring Urban Resilience Thinking for Its Application in Urban Planning: A Review of Literature." *International Journal of Environmental Science and Technology* 16, no. 1 (2019): 567-82.
- Matin, Kamran. "Recasting Iranian Modernity: International Relations and Social Change." Hoboken: Taylor and Francis, 2013.
- Mazlish, Bruce, and Ralph Buultjens. "Conceptualizing Global History." (1993).
- Mazumdar, Sanjoy. "Autocratic Control and Urban Design: The Case of Tehran, Iran." *Journal of Urban Design* 5, no. 3 (2000): 317-38.
- Meadows, Donella H, Dennis L Meadows, Jorgen Randers, and William W Behrens. "The Limits to Growth." *New York* 102 (1972): 27.
- Mennel, Timothy. "Victor Gruen and the Construction of Cold War Utopias." *Planning History*, 3, no. 2 (2004).
- Middleton, Deborah Antoinette. "Growth and Expansion in Post-War Urban Design Strategies: C.A. Doxiadis and the First Strategic Plan for Riyadh Saudi Arabia (1968-1972)." Georgia Institute of Technology, 2009.
- Milani, Abbas. *Eminent Persians: The Men and Women Who Made Modern Iran, 1941-1979: In Two Volumes*. Vol. 1: Syracuse University Press, 2008.
- Minnery, John, Donovan Storey, and Jawoto Setyono. "Lost in Translation? Comparing Planning Responses to Urban Growth in the Global North and South." *Urban Geography* 33, no. 6 (2012): 850-65.
- Mirsepasi, Ali. "The Crisis of Secular Politics and the Rise of Political Islam in Iran." *Social Text*, no. 38 (1994): 51-84.
- Mohajeri, Shima. "The Protagonists Who Shaped Modern Tehran." In *Téhéran: Capitale Bicentenaire*, edited by Chahryar Adle, and Bernard Hourcade, 97-127: Inst. Français de Recherche en Iran, 1992.
- . "Louis Kahn's Silent Space of Critique in Tehran, 1973-74." *Journal of the Society of Architectural Historians*. 74, no. 4 (2015): 485-504.
- . "The Shahestan Blueprint: The Vestigial Site of Modernity in Iran." In *The Historiography of Persian Architecture*, edited by Mohammad Gharipour. Hoboken, United States: Routledge, 2015.
- . "Louis Kahn's Silent Space of Critique in Tehran, 1973-74." *Journal of the Society of Architectural Historians*. 74, no. 4 (2015): 485-504.
- . *Architectures of Transversality: Paul Klee, Louis Kahn and the Persian Imagination*. Routledge, 2018.
- Mohammad Ali Abdi, Sima Mahdizadegan, Farzaneh Kordi. *Shesh Dah-E Tarahi Maskan Dar Iran (1327-1387)*. [six decades of planning housing in Iran]. Tehran: Building and Housing Research Centre, 2017.
- Mohsen habibi, Zahra Ahari, Rashid Emami. "As Foro Rikhtan Baroha Ta Andishehe Shahrha." *Soffeh Journal* 50, no. no. 20 (2009): 51-61.
- Mosleh, Zahra Homa. "Rural-Urban Migration and Urban Poverty: The Case of Tehran, 1962-1978." California State University, 1983.
- Müller, Martin, and Elena Trubina. "The Global Easts in Global Urbanism: Views from Beyond North and South." *Eurasian Geography and Economics* (2020): 1-9.
- Müller, Martin. "In Search of the Global East: Thinking between North and South." *Geopolitics* 25, no. 3 (2020): 734-55.
- Mumford, Eric. *Designing the Modern City: Urbanism since 1850*. Yale University Press, 2018.
- Murray, Martin J. "Re-Engaging with Transnational Urbanism." In *Locating Right to the City in the Global South*, edited by Shenjing He Tony Roshan Samara, Guo Chen. London and New York: Routledge, 2013.
- Nadernezhad, Parvane. "Daramadi Bar Faaliatha-E Sazman-E Barname Dar Zaman-E Riasat-E Abolhassan Ebtehaj." *Payame Baharestan*, no. 16 (2012).
- Nasr, Joe, and Mercedes Volait. *Urbanism: Imported or Exported? Native Aspirations and Foreign Plans*. London: Wiley Academy, 2003.
- Nicholson, George, and Leith Penny. "Strategic Planning in London: The Past and the Future." *Cities* 3, no. 2 (1986): 125-36.
- Njoh, Ambe J. "Europeans, Modern Urban Planning and the Acculturation of 'Racial Others'." *Planning Theory* 9, no. 4 (2010): 369-78.
- Pacione, Michael. *Problems and Planning in Third World Cities*. London Croom Helm, 1981.
- Pahlavi, Mohammad Reza. *Answer to History*. New York: Stein and Day, 1982.
- Potter, Robert B, and Sally Lloyd-Evans. *The City in the Developing World*. Routledge, 2014.
- Price, Cerdic. "Non-Plan Diary." In *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism*, edited by Jonathan Hughes, and Simon Sadler: Routledge, 2013.

- Provoost, Michelle and Keeton, Rachel. *New Towns for the 21st Century : The Planned Vs. The Unplanned City*. Amsterdam: International New Town Institute, 2010.
- . "New Towns on the Cold War Frontier." In *Crimson*, 2007.
- Pyla, Panayiota. "Back to the Future: Doxiadis's Plans for Baghdad." *Journal of Planning History* 7, no. 1 (2008): 3-19.
- Rabiei-Dastjerdi, Hamidreza, and Maryam Kazemi. "Tehran: Old and Emerging Spatial Divides." In *Urban Change in Iran: Stories of Rooted Histories and Ever-Accelerating Developments*, edited by Fatemeh Farnaz Arefian and Seyed Hossein Iradj Moeini, 171-86: springer, 2016.
- Rana Habibi, Bruno De Meulder, Seyed Mohsen Habibi. "Re-Visiting Three Neighbourhoods of Modern Tehran: Chaharsad-Dastgah, Narmak and Nazi-Abad." In *Urban Change in Iran: Stories of Rooted Histories and Ever-Accelerating Developments*, edited by Fatemeh Farnaz Arefian Seyed Hossein Iradj Moeini, 31-47: Springer, 2016.
- Ratcliffe, John, and Ela Krawczyk. "Imagineering City Futures: The Use of Prospective through Scenarios in Urban Planning." *Futures* 43, no. 7 (2011): 642-53.
- Rauws, Ward. "Embracing Uncertainty without Abandoning Planning: Exploring an Adaptive Planning Approach for Guiding Urban Transformations." *DisP-The Planning Review* 53, no. 1 (2017): 32-45.
- "Regionalism Versus Centralism: An Analysis of Failure of Regional Planning in Iran." (2016).
- Reyner Banham, Paul Barker, Peter Hall, and Cedric Price. "Non-Plan: An Experiment in Freedom." *New Society*, March 20, 1969.
- Rezende, Vera. "Urban Planning in Guanabara State, Brazil: Doxiadis, from Ekistics to the Delos Meetings." *IPHS* (2016).
- Richardson, Harry W. "Regional Planning in Iran." *Growth and Change* 6, no. 3 (1975): 16-19.
- Robinson, Jennifer. "Global and World Cities: A View from Off the Map." *International Journal of urban and regional research* 26, no. 3 (2002): 531-54.
- Ryan, Brent D. *Design after Decline: How America Rebuilds Shrinking Cities*. University of Pennsylvania Press, 2012.
- Sadler, Simon. "Open Ends: The Social Visions of 1960s Non-Planning." In *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism*, edited by Jonathan Hughes, and Simon Sadler: Routledge, 2013.
- Sadri, Bahram Farivar. *Tahavolat-E Tarhizi Shahri Iran Dar Dorane Moaser*. [Contemporary Urban Planning Changes in Iran]. Tehran: Iranian Society of Consulting Engineers, 2014.
- Sandercock, Leonie. *Making the Invisible Visible: A Multicultural Planning History*. University of California Press, 1998.
- Sanyal, Bishwapriya. "Similarities or Differences? What to Emphasize Now for Effective Planning Practice." In *Crossing Borders : International Exchange and Planning Practices*, edited by Patsy Healey and Robert Upton. The Rtpi Library Series, 329-50. New York: Routledge, 2010.
- Schayegh, Cyrus. "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. 3 (2012): 612-43.
- Schubert, Dirk. "Cities and Plans—the Past Defines the Future." *Planning Perspectives* 34, no. 1 (2019): 3-23.
- Sedighi, Mohamad. "Kuy-E Narmak: A Resilient Heritage of Modern Housing in Tehran, Iran." TU Delft, 2016.
- . "Megastructure Reloaded: A New Technocratic Approach to Housing Development in Ekbatan, Tehran." *ARENA Journal of Architectural Research* 3, no. 1 (2018).
- Seger, Martin. *Teheran: Eine Stadtgeographische Studie*. Springer-Verlag, 1978.
- Sennett, Richard. "Boundaries and Borders." In *Living in the Endless City : The Urban Age Project by the London School of Economics and Deutsche Bank's Alfred Herrhausen Society*, edited by Deyan. Sudjic Richard. Burdett, 2011.
- Shakoori, Ali. "Regionalism Versus Centralism: An Analysis of Failure of Regional Planning in Iran." *Journal of Social and Economic Development* 18, no. 1-2 (2016): 202-20.
- Shirazi, M. Reza. "Sustainable Planning for a Quasi-Urban Region, Necessities and Challenges: The Case of Tehran-Karaj." *Planning Perspectives* 28, no. 3 (2013): 441-60.
- . *Contemporary Architecture and Urbanism in Iran: Tradition, Modernity, and the Production of 'Space-in-Between'*. Cham, Switzerland: Springer, 2018.
- Shirazi, Reza M, and Somaiyeh Falahat. "The Making of Tehran: The Incremental Encroachment of Modernity." In *Routledge Handbook on Middle East Cities*, edited by Mansour Nasasra Haim Yacobi 29, 2019.

- Shoshkes, Ellen. "Jaqueline Tyrwhitt: A Founding Mother of Modern Urban Design." *Planning Perspectives* 21, no. 2 (2006): 179-97.
- Smith, Michael Peter. *Transnational Urbanism : Locating Globalization*. Malden, MA Blackwell, 2001.
- . "Transnational Urbanism Revisited." *Journal of Ethnic and Migration Studies* 31, no. 2 (2005): 235-44.
- Sorensen, Andre. "Urban Sustainability and Compact Cities Ideas in Japan: The Diffusion, Transformation and Deployment of Planning Concepts." In *Crossing Borders : International Exchange and Planning Practices*, edited by Patsy Healey and Robert Upton, 117-40. New York: Routledge, 2010.
- . "Taking Path Dependence Seriously: An Historical Institutional Research Agenda in Planning History." *Planning Perspectives* 30, no. 1 (2015): 17-38.
- Stanek, Łukasz. "Introduction: The 'Second World's' Architecture and Planning in the 'Third World'." *The Journal of Architecture* 17, no. 3 (2012): 299-307.
- Sudjic, Deyan. *The Edifice Complex: How the Rich and Powerful--and Their Architects--Shape the World*. Penguin, 2006.
- Summitt, April R. "For a White Revolution: John F. Kennedy and the Shah of Iran." *The Middle East Journal* 58, no. 4 (2004): 560-75.
- Sutton, Francis X. "The Ford Foundation's Urban Programs Overseas: Changes and Continuities." *Philanthropy and the City: An Historical Overview* (2000).
- Tajbaksh, Kian. "Planning Culture in Iran: Centralization and Decentralization and Local Governance in the Twentieth Century (the Case for Urban Management and Planning)." In *Comparative Planning Cultures*, edited by Bishwapiya sanyal, 67-90. New York and London: Routledge, 2005.
- Tasan-Kok, Tuna. "Changing Interpretations of 'Flexibility' in the Planning Literature: From Opportunism to Creativity?." *International Planning Studies* 13, no. 3 (2008): 183-95.
- Tayab, Yasmine. "L'habitat Collectif a Teheran, Produit De Luxe Ou Logement Social? (Collective Housing in Teheran, Luxury Product or Social Housing?)." In *Le Monde Des Grands Ensembles*, edited by Frédéric Dufaux and Annie Fourcaut, 213-23, 2004.
- Theodosis, Lefteris. "Containing Baghdad: Constantinos Doxiadis program for a Developing Nation." *DC PAPERS, revista de crítica y teoría de la arquitectura*, no. 1 (2008): 167-72.
- . "Victory over Chaos? Constantinos A. Doxiadis and Ekistics 1945-1975." 2015.
- Thomas, Amy. "The Architect As: Agent of Ideology." Delft University of Technology, 2019.
- Thompson, Rafael X. Reuveny and William R. "The North-South Divide and International Studies: A Symposium." *International Studies Review* Vol. 9, No. 4 (2007): 556-64.
- Tlostanova, Madina. "The South of the Poor North: Caucasus Subjectivity and the Complex of Secondary 'Australism'." *Global South, The* 5, no. 1 (2011): 66-84.
- Urban, Florian. *Tower and Slab : Histories of Global Mass Housing*. London Routledge, 2012.
- Urschel, Donna. "The Style of Tehran: Architectural History Mirrors Life in Iranian Capital." Paper presented at the Library of Congress, 2004.
- Van Ginkel, Hans. "Urban Future." *Nature* 456, no. 1s (2008): 32.
- Van Stiphout, Wouter. "The Saddest City in the World: Tehran and the Legacy of an American Dream of Modern Town Planning." *The New Town* 2 (2006).
- Vitale, Patrick S. "Anti-Communism, the Growth Machine and the Remaking of Cold-War-Era Pittsburgh." *International Journal of Urban and Regional Research* 39, no. 4 (2015): 772-87.
- Wakeman, Rosemary. *Practicing Utopia : An Intellectual History of the New Town Movement*. Chicago: University of Chicago Press, 2016.
- Wannon, Urlan, and Gordon E Cherry. "The Development of Regional Planning in the United Kingdom." *Planning Perspectives* 9, no. 1 (1994): 29-60.
- Ward, Stephen V. *Planning and Urban Change*. 2nd ed. London: Sage Publications, 2004.
- . "Re-Examining the International Diffusion of Planning." In *Urban Planning in a Changing World*, 50-70: Routledge, 2012.
- Watson, Vanessa. "Seeing from the South: Refocusing Urban Planning on the Globe's Central Urban Issues." *Urban Studies* 46, no. 11 (2009): 2259-75.
- Webber, Melvin M. "Comprehensive Planning and Social Responsibility: Toward an Aip Consensus on the Profession's Roles and Purposes." *Journal of the American Institute of Planners* 29, no. 4 (1963): 232-41.

- Westad, Odd Arne. *The Global Cold War: Third World Interventions and the Making of Our Times*. Cambridge University Press, 2005.
- Westbrook, Nigel. "The Regionalist Debate in the Context of the 1970s International Architecture Forums in Iran." *Society of Architectural Historians, Australia and New Zealand* 13 (2014).
- Williamson, Christopher. "Urban Design in Central Milton Keynes: 25 Years on from the Masterplan." *Urban Design International* 1, no. 4 (1996): 335-56.
- Wolf, Eric R. *Europe and the People without History*. University of California Press, 2010.
- Wray, Ian. *Great British Plans: Who Made Them and How They Worked*. Routledge, 2015.
- Zhang, Bing, and Wan Liu. "Planning History Research in China: Past, Present, and Future." *Planning Perspectives* 33, no. 1 (2018): 113-24.

Archival Sources

- Abdolaziz Farmanfarmaian Associates. "The New City of Kan." Phase two: Detailed Plan: The Ministry of Housing and Urban Development, 1976.
- . "The New City of Lavizan." Phase one: Existing Condition and Conceptual Plan: The Ministry of Housing and Urban Development, 1976.
- Art and Architecture. No 2-48 (1969-1979).
- Art and Architecture, "The Caspian Sea Coast: Study on the Touristic Development.", 1970, 22-37.
- Art and Architecture, "Symposium on Housing and City Planning.", 1971, 129-30.
- Ahrens, Peter Georg. "Die Entwicklung Der Stadt Teheran Einestadtebauliche Untersuchung Ihrer Zukunfigen Gestaltung." 1960.
- Ajdari, Abbas. "Masale Maskan in Tehran Va Shahrestanhae Digar." *Architect* Number 2 (1946).
- . "Masale Maskan in Tehran Va Shahrestanhae Digar [The Problem of Housing in Tehran and Other Cities]." *Architect* Number 1 (1946).
- Anjuman-e Naft-e Iran. *Oil Industry in Iran*. Tehran: Iranian Petroleum Institute, 1963.
- ATEC. "Tarh-E Samandehi-E Tehran." Ministry of Housing and Urbanism, 1992.
- Atelier Parisien d'Urbanisme (APUR). "Mission De L'apur À Theran." Paris, France, 2005.
- Bahrambeygui, Hooshang. "Tehran: An Urban Analysis." Durham University, 1972.
- Bakhtiar, Laleh, Report of the Proceedings of the First International congress of Architecture, "The Interaction of Tradition and Technology", Ministry of Housing and Urban Development, Isfahan, Iran, 1970.
- . Report of the Proceedings of the Second International congress of Architecture, "Towards A Quality of Life: The Role of Industrialization in the Architecture and Urban Planning of Developing Countries", Ministry of Housing and Urban Development, Shiraz, Iran, 1974.
- . Report of the Proceedings of the Thirds International congress of Women Architects, "The Crisis of Identity in Architecture", Ministry of Housing and Urban Development, Ramsar, Iran, 1976.
- Barron, James. "American Architects in Iran Saw Gigantic Projects Fade Away." *New York Times*, Sept. 9, 1979.
- Bavand Consulting Engineers. "District 22 Comprehensive Plan." 1998.
- Boom Sazegan Consultant Engineers. "Tehran Strategic Plan." (2006).
- Doxiadis, Constantinos. *Architecture in Transition*. New York: Oxford University Press, 1963.
- Doxiadis. "Ecumenopolis: Tomorrow's City." (1968).
- . *Ekistics : An Introduction to the Science of Human Settlements*. London: Hutchinson, 1968.
- Doxiadis, Constantinos A. "Ecumenopolis: Tomorrow's City." *Britannica Book of the year* (1968).
- . "Ekistics, the Science of Human Settlements." *Science* 170, no. 3956 (1970): 393-404.
- Doxiadis Associates International. "Low-Income Communities in Tehran: Managerial and Administrative Aspects." Tehran: the Plan Organization, 1972.
- . "Low-Income Communities in Tehran: Physical Planning Aspects." Tehran: Sazman-e Barnameh va Budgeh, 1972.
- . "The Need for a Realistic Tehran Action Program." Tehran: Sazman-e Barnameh va Budgeh, 1972.
- . "Tehran Action Plan." Tehran: the Plan Organization, 1972.
- Faridi, Azar. "Is There Any Future for Town Planning in Iran?." *Art and Architecture* No 41-42 (1973): 114-19.

- Goldberger, Paul. "Llewelyn-Davies, City Planner, 68." *New York Times*, October 28, 1981.
- Golistani, D. "Poreje Yek Haste Markazi Barae Qarbe Tehran [a New Urban Centre for the West Part of Tehran]." In *Barresi Masaele Ejtemae Shahre Tehran*. Tehran: Tehran University, 1962.
- Gruen, Victor, and Abdolaziz Farmanfarmaian. "Tehran Master Plan." Tehran: The Plan Organization, 1966-1969.
- Holden, David. "A Napoleonic Vision of Iran as a New Japan: Shah of Shahs, Shah of Dreams." *New York Times* 26 (1974).
- Jalili, Mohamad Reza. "Citizenship in Industrial and Developing Countries." *Art and Architecture* 41-42 (November 1977): 120-22.
- Jaqueline Tyrwhitt, José Luis Sert, and Ernesto N. Rogers. *The Heart of the City: Towards the Humanisation of Urban Life; International Congress for Modern Architecture, Ciam 8*. New York: Pellegrini and Cudahy, 1952.
- Khalili, Nader, and Moira Moser Khalili. *Iran, Yesterday, Today, Tomorrow*. American Institute of Architects, 1973.
- Llewelyn-Davies, Weeks, Forestier-Walker and Bor.; Brian Clouston and Partners. *Landscape Report : A Report of the Master Plan for Shahestan Pahlavi*. Tehran: Sherkat Sahami Nosazi Shahestan Pahlavi, 1976.
- Llewelyn-Davies International. "Demand Report: The Feasibility of Private-Sector Development in Shahestan Pahlavi." London: Llewelyn-Davies Weeks Forestier-Walker and Bor., 1976.
- . *Book I: The Master Plan : Shahestan Pahlavi : A New City Centre for Tehran*. London Llewelyn-Davies International, 1979.
- . *Book II: The Urban Design : Shahestan Pahlavi : A New City Centre for Tehran*. [in English] London Llewelyn-Davies International, 1979.
- Lurie, Diana. "Busy Remodeler of the World." *life*, 7 October 1966, 55-60.
- Mahdavi, Freydone. "Moshkel Maskan [Housing Problems]." In *Baresi Masael Ejtemae Tehran [the Examination of Tehran's Social Problems]*, 317-20. Tehran: Motaleat va tahqiqate ejtemae, 1964.
- McLeod, Thos H. *National Planning in Iran : A Report Based on the Experiences of the Harvard Advisory Group in Iran*. Regina: Sask., 1964.
- Moser-Khalili, Moira. *Urban Design and Women's Lives*. Tehran: Women's Organization of Iran, 1975.
- Municipality of District 22. "Biannual Report for the District 22 Tehran." 2013.
- "Nakhostin Seminar Barresi-E Masael-E Ejtemaei Shahr-E Tehran 1341.", Markaz-e Motaleat va Tehqiqat-e Ejtemaei, 1964.
- Naraghi, Ehsan. "Motaleat Va Tahghiqate Ejtemae (Social Studies)." In *Baresi Masael Ejtemae Tehran [the Examination of Tehran's Social Problems]*, 9-12. Tehran: Motaleat va tahghiqate ejtemae, 1964.
- "New Reports: UDC Architect to Go to Tehran." *Progressive architecture* (August 1975): 26.
- Pace, Eric. "Teheran Planning One of the World's Largest Plazas." *New York Times*, September. 1, 1975.
- Pace, Eric. "Tehran Projects Face Challenges." *New York Times*, June 6 1976.
- Robertson, Jaquelin T. "Shahestan Pahlavi: Steps toward a New Iranian Centre." *Toward an Architecture in the Spirit of Islam* (1978): 44-51.
- Sharestan Consultant Engineers. "Environmental Studies of the District 22." 2003.
- . "Preliminary Identification of the District 22." 2003.
- . "Report on Development Pattern of the District 22." 2003.
- . "Transportation Studies of the District 22." 2003.
- . "Upstream Strategies for Tehran Urban Development." 2003.
- "Tehran Planning One of the World's Largest Plazas." *The New York Times Magazine*, September 1 1975.
- Tehran Development Council Secretariat. "An Analysis of the Tehran Comprehensive Plan." In *Technical Report, No. 1*. Tehran , 1976.
- . "Land Use, Urban Structure and Spatial Development in Tehran : A Preliminary Analysis." 1976.
- . "Major Planning and Development Issues Affecting Tehran's Future : An Interim Report to the Tehran Development Council.", Tehran, 1976.
- . *A Report on the Strategic Development of the Greater Tehran Region, 2536-2546 : Guidelines for a Comprehensive Planning Process*. Tehran, 1977.
- . "The Housing Cluster Prototypes.", 1977.
- . Tehran Development Council Secretariat. "Tehran's Built Form Guidelines for a Coordinated Urban Design Policy." 1978.
- The Plan Organization, *First Seven-Year Development Plan*. 1949.

- . *Second Seven-Year Development Plan*. 1961
- . *The Third Development Plan*. 1962-1968.
- . *The Fourth National Development Plan*. 1968-1972.
- . *The Fifth National Development Plan*. 1973-1978.
- The Urban Planning and Architecture Research Centre of Iran. "Tehran Urban Agglomeration." Ministry of Housing and Urbanism, 2000.
- "The Emperor of Oil, Shah of Iran." *Time*, 4 November 1974.
- U.S. Department of Commerce, Domestic and International Business Administration, Bureau of International Commerce. *Iran: A Survey of U.S. Business Opportunities*. 1977.
- "Woman's City Plan for Working Women." *progressive Architecture*, September 1975.
- Victor Gruen Associates. *Victor Gruen Associates : Architecture, Planning, Engineering.*, 1966.
- Victor Gruen Associates and Abdolaziz Farmanfarmaian Associates. "The Comprehensive Plan of Tehran.", Phase one, Volume I (General Overview), 1968.
- . "The Comprehensive Plan of Tehran.", Phase one, Volume II (Concept Development), 1968.
- . "The Comprehensive Plan of Tehran.", Phase one, Volume III (Study and Evaluation), 1968.
- . "The Comprehensive Plan of Tehran.", Phase one, Volume IV (Proposals for Major Issues), 1968.
- . "The Comprehensive Plan of Tehran.", Phase one, (Urban Renewal Studies), 1968.
- . "The Comprehensive Plan of Tehran.", Phase one, (Cultural Studies), 1968.
- . "The Comprehensive Plan of Tehran.", Phase one, (Transportation), 1968.
- . "The Comprehensive Plan of Tehran.", Phase one, (Technical Report), 1968.
- . "The Comprehensive Plan of Tehran.", Phase one, (Appendix, Concept Development), 1968.
- . "The Comprehensive Plan of Tehran.", Phase two, Volume I (General Overview of the Plan), 1968.
- . "The Comprehensive Plan of Tehran.", Phase two, Volume II (Untitled), 1968.
- . "The Comprehensive Plan of Tehran.", Phase two, Volume IV (Traffic Recommendation), 1968.
- . "The Comprehensive Plan of Tehran.", Phase two, Volume V (Reference Material), 1968.

Websites

- Constantinos and Emma Doxiadis Foundation, "Constantinos A. Doxiadis: Architect and Urban Planner: Major Projects." https://www.doxiadis.org/Downloads/major_projects_N.pdf
- Davies, Llewelyn. "Shahestan Pahlavi, Iran." <https://www.ldavies.com/home-slider/shahestan-pahlavi-iran/>.
- Encyclopaedia Iranica. "Abolhassan Ebtehaj.", <http://www.iranicaonline.org/articles/ebtehaj-abolhassan>
- Khatam, Azam and Arang Keshavarzian. "Decentralization and Ambiguities of Local Politics in Tehran.", 2016; <https://www.mei.edu/publications/decentralization-and-ambiguities-local-politics-tehran>
- Madanipour, Ali. "Civic Associations and Urban Governance in Tehran." Middle East Institute, <https://www.mei.edu/publications/civic-associations-and-urban-governance-tehran>
- United States Holocaust Memorial Museum, Washington, DC. "Iran During World War II." <https://encyclopedia.ushmm.org/content/en/article/iran-during-world-war-ii>
- Wainwright, Oliver. "'Like LA with Minarets': How Concrete and Cars Came to Rule Tehran." <https://www.theguardian.com/cities/2019/jan/09/like-la-with-minarets-how-concrete-and-cars-came-to-rule-tehran>

Publications

-Elmira Jafari (forthcoming), "Planning a Transition: Making Tehran Global", in *Histories of Urban Design*, edited by Tome Avermaete and Janina Gosseye.

-Elmira Jafari and Carola Hein (2022), "Tehran's Decentralization Project and the Emergence of Socio-Spatial Boundaries", *International Journal of Islamic Architecture*, 11(1), 45-71.

-Elmira Jafari and Carola Hein (2020), "Revisiting the Transnational Building of a Modern Planning Regime in Iran: the First Tehran Master Plan and the Interplay between Local and Foreign Planners", *Planning Perspectives*, 36(3), pp. 451-474.

-Elmira Jafari and Nicole De Tongi, (2019) "Perspectives on Decentralization Past, Present, and Future: A Review of Conferences in Grenoble, Milan, and Delft", *Planning Perspectives*, 35(1), 211-216.

-Elmira Jafari (2019), "Tehran's Decentralization Project: a Lasting Heritage of the 20th Century", in *DOCOMOMO International Conference Proceeding*, Iran.

-Elmira Jafari (2018), "Post-War Transnational Planning Practices: Victor Gruen's Proposal for Tehran's Low-Cost Housing", in *International Planning History Society (IPHS) Proceedings*, Japan.

The Making of the Modern Iranian Capital

On the Role of Iranian Planners in Tehran Master Planning at a Time of Urban Growth and Transnational Exchange (1930-2010)

Elmira Jafari

This dissertation puts together planning documents and multiple archival sources to demonstrate how urban planning and the role of planners have evolved in an ever-changing transnational context of Iran. It challenges the prevailing approach in the literature of Tehran urban studies that simply flattens the complexity of local-foreign collaboration and labels transnational planning of Tehran a top-down “Westernization” project. To depict a more nuanced picture of Tehran master planning at the time of transnational exchange and rapid urban growth, this dissertation introduces a new engaging and argumentative periodization with four distinct phases which brings transnational planning of Tehran to the fore, while reflecting on diverse political and socio-economic upheavals between 1930-2010. Dissection of Tehran master plans in each period through the lens of multiple actors offers a unique opportunity for a renewed interpretation of transnational planning of Tehran and the way Iranian planners steered Tehran urban developments while engaging with foreign experts and their planning systems. It presents a detailed analysis of overarching ‘ideas’ behind each plan, their translation to urban ‘policies’ and later on their broader (un)wanted ‘impact’ on the city and its regions. By recognizing a great diversity in transnational approach in Tehran planning practices, the dissertation concludes with how transnationalism first gave rise to the formation of the modern planning system and how later on led to contestations against it which revolutionized the role of urban planners and the political agenda for Tehran urban growth.

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