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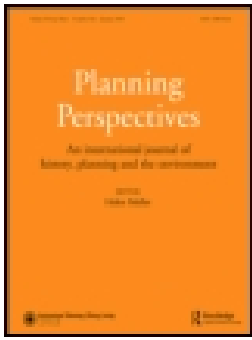
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The 1968 Tehran master plan and the politics of planning development in Iran (1945–1979)

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ABSTRACT

This paper traces the relationship between state development policies and planning Tehran's urban development from 1945 until the 1979 Islamic Revolution. It shows how the geopolitical context of the Cold War, and the political agendas of multilateral and bilateral development agencies (i.e. the World Bank and the Ford Foundation), together with the specific circumstances of the national modernization of Iran, were decisive in shaping the Iranian planning administration and the emergence of a comprehensive master planning approach. Moreover, this study demonstrates the critical role of the Iranian technocratic elite and professional middle class in establishing planning institutions and advocating for a vision of progress and development. The focus here is on the formation of the 'Plan Organization' as the first modern planning institution in Iran, and the ways in which this institution played a key role in shaping Iranian expert culture and urban planning practices. By examining the links between national development policies and urban planning, this paper presents how comprehensive master planning emerged as the preferred model for the planning and development of Iranian cities. The focus here is on the design and implementation of Tehran's 1968 Comprehensive Master Plan.

KEYWORDS

Tehran; planning urban development; foreign and local experts; plan organization; comprehensive master planning

Introduction

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

Many of us at this conference are what I would have to call cultural or technocratic mercenaries, hired intellectual 'guns' who move about the world from one country to another giving counsel, doing 'quick study', relying on accumulated knowledge, on too weak-data and too little experience and too often only on intuition; over programmed, rushed, and beneath it all, dreadfully unsure of ourselves and our various medicines and recipes. Yes, mercenaries, without uniforms or guns, but potentially just as lethal. Traveling medicine men.¹

What is remarkable about these opening words is that they show a recognition of the tenuous position of Western planners involved in modernizing Third World cities, and the ethical dilemmas they faced – questioning their rational, apolitical and universal problem-solving position. Since the end of WWII, the international flow of knowledge and expertise had extended across the world, particularly

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¹Robertson, "Shahestan Pahlavi," 44.

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with President Truman's announcement in 1949 of the Point Four Program to help poor countries to develop and improve their quality of life. The Truman doctrine advised 'Third World' countries to replicate certain characteristics of 'developed' nations – namely, high levels of urbanization and industrialization, and a rapid growth in material production, in order to solve the problem of 'under-development'.² This paper shows how the Cold War geopolitical context, and agendas of multilateral and bilateral development agencies and their expertise (i.e. the World Bank, and the Ford Foundation), together with the specific circumstances of the national modernization of Iran, had deep-seated implications for the urban planning practices and development of Tehran. This study shows that the imperative to form Iran into a progressive, modern nation-state and regional super-power defined Iranian planning policies and practices, which in turn shaped the trajectories of urban development in Tehran. The rise of the nationalist government in Iran after WWII, the nationalization of the oil industry, and the 1953 CIA-led coup d'état are all crucial to understanding why the Pahlavi government implemented modern planning and development with such zeal.

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

There has been an extensive effort among scholars to offer in-depth analyses of post-WWII Iranian planning history, and the ways in which dissemination and adaptation of planning ideas and models have shaped planning practices and the built environment of Tehran.³ Nevertheless, the focus of these studies has mostly been on certain areas of research namely, critical analyses of the top-down role of the state and inefficiencies of planning administrations and practices; evaluating the success and failures of the comprehensive master planning approach in decentralizing Tehran and controlling urban growth; and investigating the role and involvement of individual foreign planners/architects (such as Victor Gruen or Louis Kahn) in urban planning and architecture projects. Additionally, recent studies of Madanipour (2010) and Khatam (2015) offered important contributions to these existing scholarships by reflecting on the national and global ideas of development and planning, and the role of planners within the planning apparatus.

Madanipour in his seminal research on Tehran Action Plan by Constantinos Doxiadis, critically reflects on the post-war adaptation of modernist planning approaches in Iran, and shows in detail how the dominant modernist planning ideology and strong faith of both local and international planners in scientific and rational planning had long-lasting effects on Tehran's planning practices and development trajectories.⁴ Moreover, the urban sociologist Azam Khatam examines, the history of Tehran's urban reforms through the lens of political economy and critically discusses the intertwined processes of urban modernization and arbitrary rule in the cities of the global south, and

²Escobar, *Encountering Development*, 4.

³Amirahmadi and Kiafar, "Tehran growth"; Amirahmadi, "Regional Planning in Iran"; Ahrens, *Die Entwicklung der Stadt Tehran*; Habibi, *De La Cite a La Ville*; Hourcade, "Téhéran"; Hourcade, and Adl., *Tehran*; Seger, *Tehran, Eine Stadtgeographische Studie*; Madanipour, *Tehran the Making of the Metropolis*; Emami, "Urbanism of Grandiosity"; Mohajeri, "The Shahestan blueprint".

⁴Manadipour, "The Limits of Scientific Planning".

confirms the interconnectedness of the global, national, and local actors and forces in planning and shaping major urban renewal projects in Tehran.⁵

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

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

The political economy of development after the WWII

The end of the WWII profoundly transformed the world order. The rise of the anti-colonial and nationalist movements across the Third World, led to a new political rearrangement, opening up pathways to nation building, development, and modernization.⁶ In these terms, national economic development became central to establishing independence from imperial powers and gaining ‘freedom to manoeuvre within the international economy and geopolitical constraints’.⁷ Timothy Mitchell notes, that by the 1950s the word ‘economy’ referred to ‘the totality of [monetized] exchanges within a defined [geographical] space’.⁸ By embedding a national ‘economy’ into new models and measurements, it became possible to conceptualize a national space abstracted from its history and geographical realities.⁹ Moreover, Mitchell argues that this new meaning of ‘economy’ provided forms and formulas for old (European) and new (US) industrialized powers to retain and expand

⁵Khatam, “Tehran Urban Reforms”.

⁶Escobar, *Encountering Development*, 31.

⁷Ibid.

⁸Mitchell, *Rule of Experts*, 83–4. Also cited in Rangan, “Development in Question,” 571.

⁹Ibid.

their imperial influence.¹⁰ Nevertheless, the new definition became particularly useful for nationalist leaders in the Third World trying to establish political and territorial control in the absence of a homogenous population.¹¹ As a result, the new idea of 'economy' offered an alternative method for Third World leaders to create a 'national space' determined by a 'character of calculability', rather than by geographical histories.¹²

The contest over the economic development of the Third World began in the 1950s, when it became the site of struggle between the capitalist west and the Soviet bloc. Yet the US and its Western allies were much more systematic in promoting the hegemonic objective of 'development', and in funnelling aid to the governments of the Third World in exchange for political allegiance. In 1944, the US and its allies established two key institutions of post-war international development – the International Bank for Reconstruction and Development, known as the World Bank, and the International Monetary Fund. These institutions adapted the new idea of 'economy', and began for the first time to classify development in terms of gross domestic product (GDP), ranking countries and regions according to their level of economic development. Charting the future development path for Third World nations, these organizations presented themselves as experts in measuring progress.¹³ Together, they maintained a strong faith in technology and science as neutral tools for improving standards of living across the Third World as a means toward global political stability.

By the 1950s, these multilateral development agencies with their legion of engineers and experts, had become important players in shaping trajectories of development in the Third World. State-led industrialization and economic development through local (and newly established) government institutions became central to their approach.¹⁴ Long-term economic development planning was treated as a path for 'underdeveloped' nations to catch up with industrialized nations and improve the welfare of their citizens, and urban planning was an integral part of that.¹⁵ In fact, the interplay between international development agencies and state institutions has had important implications for the planning culture and administration in many of these nations. Iran provides a very good case study to demonstrate how various global and local actors and agencies participated in shaping Iranian planning institutions, and thus particular urban planning practices and development.

The Allied occupation of Iran in 1941 – with the Soviet Union occupying northern Iran and British and American forces in the south – radically changed Iran's domestic political situation when the Allies forced the pro-German Reza Shah Pahlavi to abdicate and pass the crown to his 22-year-old son, Mohammad Reza Shah Pahlavi. The abdication of Reza Shah opened up a democratic space that lasted for 12 years, and had a significant impact on international and domestic relations. The rise of separatist movements during the Soviet–Iranian Conflict in 1946 'inflamed the nationalist sentiments of Iran's bureaucratic elite, senior army officers, and a section of secular-nationalist intelligentsia', who aimed to strengthen the nation-state and protect Iran's territorial independence and democratic nationhood.¹⁶ As a result, the newly founded National Front brought together a coalition of nationalist and reformist groups, attracting support from the urban bourgeoisie and the newly formed professional middle class.¹⁷ The National Front's objective was to reduce Western

¹⁰Ibid., 83–4.

¹¹Rangan, "Development in Question," 572.

¹²Ibid.

¹³Unger, "Histories of Development".

¹⁴Avermaete, "The Ford Foundation's Footprint".

¹⁵Ibid.

¹⁶Matin, *Recasting Iranian Modernity*, 90.

¹⁷Ibid.

dominance in Iran and reassert the authority of the parliament, reducing the Shah to a constitutional monarch.

By 1950, the anti-imperialist and anti-colonialist atmosphere prompted the National Front to question the British dominance of Iranian oil revenues. In 1951, when National Front leader Mohammad Mossadegh became Prime Minister, the new administration immediately nationalized the Iranian oil industry. For the new administration, oil was viewed as central to development and the solution to Iran's perceived underdevelopment. They believed that the nationalization of oil would help the government acquire a certain degree of autonomy: to 'free' the national economy from the ruling class of big landowners, Shia clerics, and rich merchants in the Bazaar. Up until the mid-twentieth century, Iran remained largely rural and under the control of major landowners. From 1943 to 1962, landowners and bureaucrats held a large advantage in parliament, even over merchants and the clergy.¹⁸ It was under these circumstances that the nationalist government began to rely heavily on oil revenue to develop the country, and to embrace the idea of national economic development planning as a rational process of calculation, control, and intervention for nation building and territorial integrity.

The plan organization as an agent of nation building and development

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

Though the nationalist government had been overthrown, primary administrative changes had already been founded through concentrated efforts by political elite and technocrats who were part of Mossadegh's government. Many of these bureaucrats were educated in Europe and 'came from old land-owning and capital-holding families, [who] knew the Iranian economic mode of operation and society well'.¹⁹ They believed that without 'a new organization with full authority and free of traditional fetters',²⁰ development projects could not be planned and implemented. Thus in 1949, they laid the foundation of the 'Plan Organization' to monitor the national budget, and prepare national development plans, as well as supervise their implementation.

By the early 1950s, the Plan Organization had become 'Iran's technocratic headquarters' and a base for both Iranian and international economists and engineers (Figure 1).²¹ The Plan Organization pressed for governmental reform and held a firm belief that they were best equipped to improve Iranian society and economy through planning and development. Among the Iranian technocratic elite, Abolhassan Ebtehaj, a forceful banker-economist was one of the key actors behind the formation of the Plan Organization (Figure 2). As the Governor of the Mortgage Bank (Rahni Bank), he helped make home ownership possible for civil servants. In his role as President of the Central Bank he had first-hand experience of governmental inefficiency, and strongly believed that Plan Organization should operate independently from the government. In its early years, the Plan

¹⁸Ahraf, "Class system in Pahlavi Period".

¹⁹Khatam, "Tehran Urban Reforms," 96.

²⁰Bostock and Jones, *Planning and power in Iran*, 97.

²¹Schayegh, "Iran's Karaj Dam".

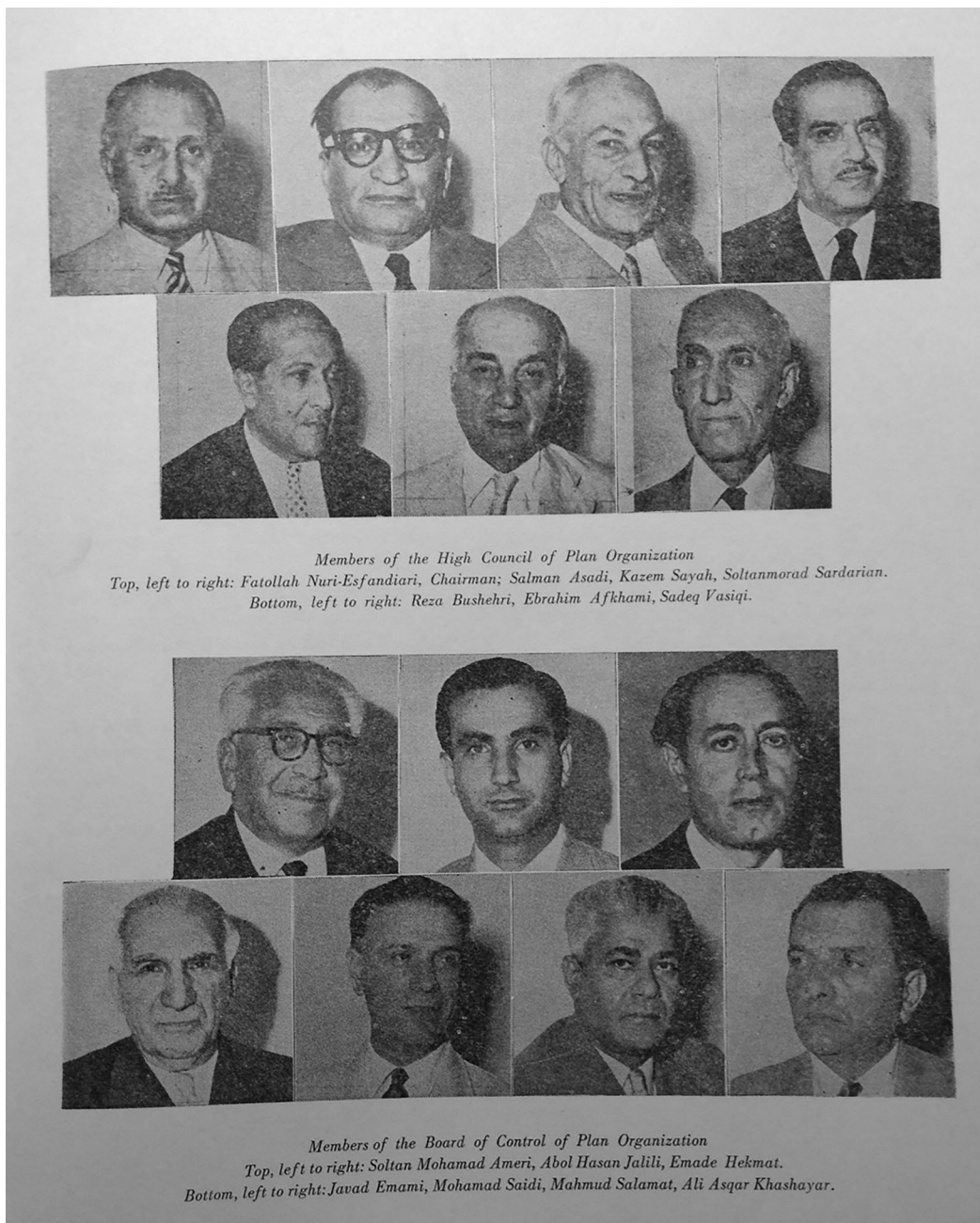


Figure 1. Iranian technocratic elite at Plan Organization. Source: Historical Review of Second Development Plan. Archive of British Library.

Organization operated with exceptional autonomy, a reflection of both its founders' ambition and the democratic atmosphere of the early 1950s. As the Head of the Economic Bureau later observed:

It [the Plan Organization] had its own substantial financial resources earmarked. It had the authority to disperse directly. It could hire consultants to study projects or it could study the projects itself. It could

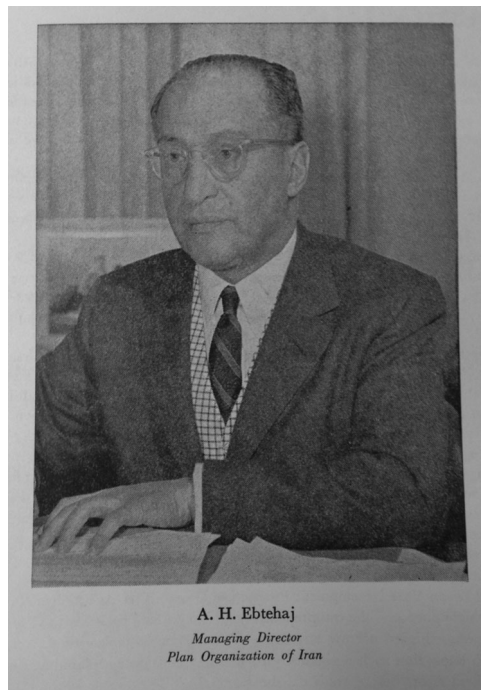


Figure 2. Abolhassan Ebtehaj, director of Plan Organisation. Source: Historical Review of Second Development Plan.

tender out or directly choose the contractors for construction. ... It had the responsibility for the implementation or execution of the projects it had decided upon. It could borrow from abroad. It had its own separate auditors appointed by the parliament.²²

The Plan Organization was financed by oil revenue and significant loans from the World Bank, and American-backed Ford Foundation, and the Truman Point Four Program.²³ Yet its first years coincided with political conflict arising from the nationalization of the oil industry and British embargoes imposed on Iranian oil. As a result, the first seven-year plan (1948–1955), prepared by Morrison-Knudsen International (an American consulting firm), never really moved forward. Compounding the delay, emerging international development agencies, such as the World Bank, were still in the early years of their overseas operations and did not yet have clear policies for allocating funds and development aid to the Third World.

It was in this tenuous context that Ebtehaj was appointed as managing director of the Plan Organization, and began to restructure it. Ebtehaj and his colleagues represented the nationalist technocrats and were aware of growing dissatisfaction with the government after the 1953 coup. They believed that the Plan Organization, as an independent agency, could once again revive hope and the promise of a better quality of life. Despite Ebtehaj and his colleagues' somewhat naive belief that the planning authority could be insulated from politics and the state apparatus, the Shah maintained the right to appoint its managing director, and in later years he occasionally interfered in plans or vetoed projects. Moreover, the Plan Organization was beset by suspicion from the landed

²²Farmanfarmaian, interview, 1982.

²³Cody, *Exporting American Architecture*, 149; Madanipour, "The Limits of Scientific Planning".

and mercantile elite, who held key posts in the government and perceived it as a threat to their economic and social supremacy, as well as by conservative clergy members, who saw industrialization as a threat to traditional ways of life.²⁴

In 1954, Ebtehaj was able to rearrange the bureaucratic structure of the Plan Organization, and established three main departments: the Technical Bureau, the Economic Bureau, and the Statistical Department. Each department played an important role in preparing plans and budgets, and each received considerable support from bilateral and multilateral development agencies. First, Ebtehaj established the Technical Bureau and appointed Safi Asfia, an Iranian engineer who had graduated from the École Polytechnique in Paris, to lead it. The Iranian scholar Abbas Milani calls 'Asfia the "technocrats" technocrat'.²⁵ The Technical Bureau recruited a large number of American and European engineers and architects under the supervision of Robert Black, then the president of the World Bank, and William E. Warne, the head of development in the Point Four Program for Iran.²⁶ The Harvard Advisory Group, founded by the Ford Foundation, supported the establishment of the Economic Bureau, headed by Khodadad Farmanfarmaian, a Princeton-educated economist from an Iranian aristocratic family. Lastly, the Statistical Department was founded to compensate for the lack of sufficient data about the country's natural resources, financial situation, and manpower. Later in the early 1960s, the US Peace Corps had assisted the Statistical Department to survey and gather data across the country.²⁷ The young American volunteers in the Peace Corp were helped by their Iranian counterparts, who at the same time learned how to make surveys, collect information, and archive.²⁸ Ultimately, the Plan Organization became not only the headquarters of the Iranian technocracy, but also the headquarters of American and European expertise in Iran.

Global and local development agendas and their influence on urban planning practice

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

In the 1950s and 1960s, the technocrats were most concerned with industrialization and modernization happening as quickly and efficiently as possible.²⁹ Like most development experts at the time, they strongly believed in the power of science, technology, and rational planning, putting immense trust in the benevolent power of experts. To escape the undignified condition of 'underdevelopment' as fast as possible, the ruling technocrats pushed for urban infrastructural projects with immediate results that could be easily understood as symbols of modernity and economic progress. However, the political power of landowners in rural areas was a considerable barrier for both local and foreign experts – it was impossible to plan or implement any development projects in rural areas without the

²⁴Bostock and Jones, *Planning and power in Iran*, 112.

²⁵Milani, *Eminent Persians*, 92.

²⁶Ebtehaj, *The Memoirs of Abolhassan Ebtehaj*.

²⁷Interview with Farivar Sadri, September 2015 – former director of design and urban planning at the Technical Bureau of the Ministry of Interior, 1970–1973.

²⁸Farivar Sadri, "Iran Contemporary Urban Planning Development".

²⁹Amuzegar, *Technical Assistance in Theory and Practice*.

cooperation of the landed ruling class.³⁰ Aware that intervention in the agriculture sector and rural areas would be politically challenging and slow, the Plan Organization chose to divert their efforts elsewhere. Yet this approach clashed with that of experts in the Point Four Program and the Ford Foundation, who were both worried about Soviet influence on agrarian society, and saw economic development as a tool for political stability.³¹ Despite the ambition of advisors from the Point Four Program and Ford Foundation to reform the agricultural sector and develop rural areas, Iranian planners did the opposite, instead emphasizing industrialization and development in urban areas.³²

The Plan Organization prepared the Second Plan (1955–1962) in only nine months, and obtained \$75 million from the World Bank to pay for it.³³ The Second Plan took a project-based approach to development, focusing on industrialization and urbanization. This was based not only on the technocrats' desire for industrialization, but also due to the World Bank's philosophy of project-based lending, which helped orient national planning efforts towards infrastructure-related projects and physical planning. Ironically, the World Bank policy contradicted the Point Four Program's and Ford Foundation's strategies in support of rural development.³⁴ The result is that agricultural expenditure in the Second Plan was limited to the construction of three dams.³⁵ As Mofid noted, urban populations benefited most from these dams – for example, the Karaj Dam chiefly supplied electricity and water for Tehran's rapid urban growth in response to growing demands from the Tehrani middle class.³⁶

Table 1 shows the sharp difference between the number of urban and rural projects in the Second Plan, revealing the significant quantity of urbanization projects. Another striking point is the lack of public housing. This was due both to the power of the landed elite, who saw public housing as a threat to their income, and to the World Bank's lending policy.³⁷ Before the 1970s, the bank 'viewed housing as a social expenditure rather than productive investment',³⁸ and was therefore reluctant to support housing projects or urban poverty programmes.

Over the first 25 years (1945–1970) of its operation, the World Bank became increasingly active in urban lending programmes concerned mainly with economic productivity, and no funds were available for 'socially-oriented development projects'.³⁹ As a consequence, from the 1950s until the mid-1960s, 'the bank placed an overwhelming emphasis on infrastructure-related projects ... only a small fraction of funds was made available for agriculture, and no funding was allocated for education, health, or other "social" needs'.⁴⁰ This restrictive lending programme led to many cases of borrowing countries changing their policies, affecting broad sectors of the economy and society.⁴¹

In the second half of 1950s, the piecemeal approach of the Second Development Plan was particularly influential in both the urbanization of Tehran, and the promotion of the engineering and architecture professions. The Plan Organization commissioned private firms, architects, and engineers to design and construct large-scale urban projects such as the Tehran Radio Station, Mehrabad

³⁰Ibid.

³¹Ibid.

³²Mofid, *Development Planning in Iran*.

³³Ibid.

³⁴Amzugar argues that the inconsistency among policies of aid agencies began to complicate the decision-making processes at the Plan Organization.

³⁵Mofid, *Development Planning in Iran*, 44.

³⁶Ibid. For more on this topic see Schayegh, *Iran's Karaj Dam Affair*.

³⁷Ramsamy, *World Bank and Urban Development*, 69.

³⁸Ibid.

³⁹Ibid., 46; Pugh, "Urban Bias".

⁴⁰Ibid., 43.

⁴¹Mason and Asher, *The World Bank since Bretton Woods*, 421.

Table 1. List of urbanization projects of Second Development Plan (1955–1962) and the list of rural development projects.

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

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

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

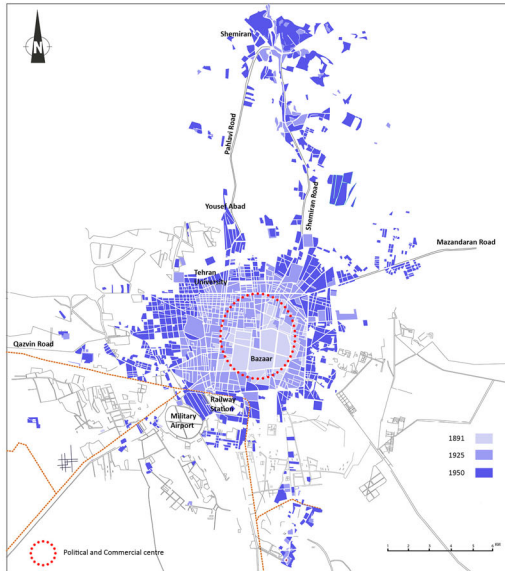
International Airport, and Tehran University's Faculties of Science, Literature, and the Fine Arts Art. With the long list of urban projects to be implemented, the Plan Organization gave precedence to local engineers and architects – Mohsen Forughi, Vartan Hovanessian, and Abdol Aziz Farmanfarmanian were among many who played key roles in shaping the professional and academic bodies of Iran's architecture and planning culture.

The implementation of the Second Plan (1955–1962) and the corresponding rapid industrialization and modernization of Tehran was accompanied with an unprecedented urban growth and construction boom. The piecemeal approach towards urban development allowed different agencies and stakeholders to engage in the production of urban space without any coordinating mechanism. For example, landowners were free to divide and register their land, and determine the size and form of streets in and around the city.⁴² By the early 1960s, the city was growing in every direction, despite both housing and infrastructure developments remaining completely unregulated. Tehran's population jumped from 1.7 million in 1956 to 2.7 million in the mid-1960s.⁴³ As Figure 3 shows, within a decade the structure of the city had rapidly expanded outwards. The lack of regulation led to severe congestion in the city centre and the migration of the wealthier classes to the northern suburbs. This meant that the quality of urban spaces and the provision of social infrastructure in poorer areas were

⁴²Madanipour in *Tehran the making of a Metropolis*, argues that the new form of land plot and street pattern produced by landlords in the city was regarded as a 'rationalisation' of form in order to maximize profit through making this commodity affordable to the emerging urban middle class.

⁴³Ibid.

Map of Tehran Urban growth 1950



Map of Tehran Urban growth 1960

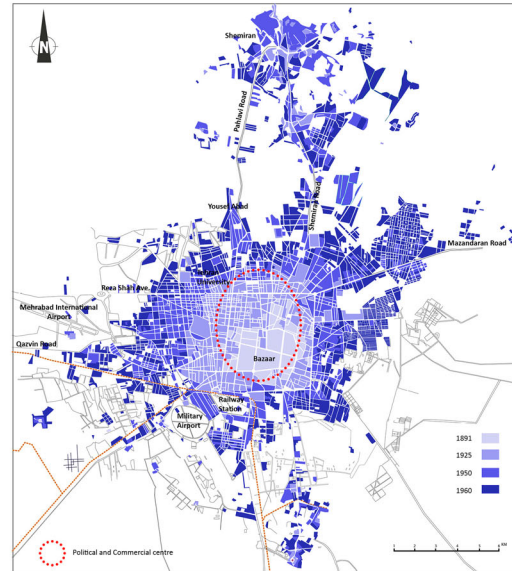


Figure 3. Shows the rapid urban expansion of Tehran from 1950 to 1960. Source: Drawn by author, compiled from: Tehran urban growth map in 1970, published in Cultural Atlas of Tehran (see bibliography).

grossly neglected. As a result, Tehran was becoming a divided city both socially and spatially: the rich and the middle class in the north, versus the poor and working class in the south.

Additionally, during the implementation of the Second Plan, the Plan Organization obtained significant executive power, causing tension with other ministries and well-known landlords.⁴⁴ Fearful of the increasing power of the Plan Organization and of Ebtehaj's growing power, the Shah forced Ebtehaj to resign in 1959. In fact, Ebtehaj was critical about the interference of the Shah in government decision-making and his dismissive attitude towards rational economic measures. The Shah transferred the power and responsibilities of the head of the Plan Organization to the Prime Minister, who was subordinate to the Shah. Consequently, from 1960, development planning was brought under the direct control of the state and the Shah, and the Plan Organization lost much of the authority and autonomy that many young technocrats had championed.⁴⁵

The absence of a rural development plan

While the Plan Organization and its experts were reluctant to invest in rural areas, and busy drafting the Third Plan (1962–1968), the Shah arbitrarily devised the Land Reform policy to abolish the traditional feudal system, and extend state authority in the countryside.⁴⁶ The steady rise in oil revenues, and the support of the Point Four Programme gave the Shah confidence to confront powerful and influential landowners, clergies, and merchants. This radical reformation firstly took place independent from Plan Organization's development plans, and secondly, incited vast opposition from the clergy and landed elite,⁴⁷ as it reduced their power and influence in favour of state-led

⁴⁴Khatam, "Tehran Urban Reforms," 99.

⁴⁵Majidi interview, 1982. Majidi was director of Plan Organisation from 1972–77.

⁴⁶Hooglund, *Land and Revolution in Iran*, 45; Khatam, "Tehran Urban Reforms," 100.

⁴⁷Ibid., 100.

industrialization and a shift toward capitalism. The land reform programme was implemented in three phases between 1962 and 1972. However, the reform has never implemented properly due to the presence of major landowners in key governmental positions within the state apparatus who negated the impact of the reform by influencing the process of decision-making.

Eric Hooglund has shown that by the end of the third phase, a significant amount of land remained under the control of a relatively small group: 'the amount of crop land owned by absentees following redistribution was about 50 per cent of the country's total of 16.6 million hectares'.⁴⁸ Nevertheless, the other half was distributed among 2.1 million former sharecroppers, who on average became owners of 3 hectares (ha) of land. Statistic about Iranian rural development estimated that each village household averaged five members, thus the actual beneficiaries of the programme numbered more than 9 million people.⁴⁹ Additionally, Hooglund argues that a minimum of 7 ha is necessary for subsistence farming, and any less only aggravates poverty.⁵⁰ Consequently, in the early 1970s, land speculators began buying agricultural lands cheaply from indebted peasants who had decided to instead seek employment in cities. The economic downturn in rural areas in the early 1970s resulted in the migration of roughly 3 million villagers to cities, and in particular, to Tehran.⁵¹ Ultimately the government never intended to eliminate large-scale ownership of agricultural land, while it did want to limit the amount of land any individual might own.⁵² Consequently, the land reform not only failed to abolish the large ownership of land but also led to the rise of a new form of land speculation at the periphery of cities, rural degradation and rural-urban migration. The outcome of the land reform had significant implications for urbanization processes across the country, and more specifically in Tehran, which raised serious challenges for experts at Plan Organisation.

The third-plan and the emergence of comprehensive urban planning

[...] Comprehensive urban planning has evolved out of the traditions of architecture and design, its gradual convergence with national economic planning has gone unnoticed or, at least, uncommented.⁵³

The Third Five-Year Plan was implemented beginning in 1962, with the assistance of the Harvard Advisory Group funded by the Ford Foundation and the Economic and Technical Bureaus of the Plan Organization. The Third Plan was more comprehensive than the previous two, in the sense that 'instead of listing projects to undertake, set policies for all economic and social sectors and laid out steps and schemes to implement projects'.⁵⁴ Moreover, the Third Plan was intended to help decentralize the planning process, allowing for more local decision-making and engaging a larger section of the population in the development process.⁵⁵ The Plan Organization viewed the Third Plan and the comprehensive planning approach as necessary devices to strengthen the planning administration, and overcome the interference of the Shah and ruling classes, namely landlords and clerics.

Within the framework of the Third Plan, comprehensive urban planning was introduced as a model for guiding urban development, as well as a means of controlling the rapid and unregulated

⁴⁸Hooglund, *Land and Revolution in Iran*, 79.

⁴⁹Ibid., 72.

⁵⁰There is disagreement among scholars on the consequences of land reforms on peasant inequality, agricultural productivity, and the peasantry who didn't work on estates (for more on Land Reform see: Hooglund, *Land and Revolution in Iran*; and Lambton, *The Persian land reform*).

⁵¹Bayat, "Tehran: Paradox City".

⁵²Ibid.

⁵³Friedmann, "The Future of Comprehensive Planning," 316.

⁵⁴Khatam, "Tehran Urban Reforms," 99; Bhariar, *Economic Development in Iran*, 95.

⁵⁵Farmanfarmaian, interview, 1982.

growth of Iranian cities.⁵⁶ As a result, the Third Plan included 16 comprehensive master plans for cities across the country.⁵⁷ For the first time, a legal structure set qualifications for Iranian engineers and architects to establish their own engineering firms, and to take part in preparing plans and other state-sponsored urban projects. Another new law required that all public sector development projects had to involve a qualified Iranian engineering firm, and in the case of foreign partnerships, the Iranian partner had to have a minimum 51% share.⁵⁸ The combined establishment of Iranian firms and the insistence that they be responsible for the design of urban plans and be involved in projects demonstrates the ambition to form a local planning profession, and gain independence from Western organizations to further develop Iran without foreign assistance.

These firms were labelled ‘consultant engineering’ firms, and architecture and urban planning was subsumed within them. The three fields were understood to be intimately connected: urban planning was seen as architecture and engineering on the scale of a whole city.⁵⁹ In other words, architects and urban planners were seen as ‘technical experts’, under the supervision of the Plan Organization’s technocrats and economists. The formation of these new Iranian consultancy firms provided a base for the establishment of a professional body for Iranian architecture and urban planning, and set the standard for a remarkable degree of exchange and collaboration between Iranian and Western experts. Figure 4 shows the list of designed master plans in 1970, and highlights the dominance of Iranian firms.

The Plan Organization maintained the right to select and approve the consulting engineering firms and contractors for each project, tempting more and more Iranian architects and engineers to return from abroad. The Plan Organization successfully cultivated respect for local professionals at the same time as they encouraged the next generation of architects, planners, and engineers.⁶⁰ These ambitious professionals, familiar with modern management and technology and fluent in English and French, were seen as great innovators at home and as great negotiators abroad. The Third Plan initiated a new phase where Westerners were no longer advisors and mentors but partners and collaborators. This era saw the rise of a culture of ‘consulting engineers’, and ‘comprehensive planning’ that has lasted until today.

While the Third Plan left the preparation of the comprehensive master plans to Iranians, it also established the High Council of Urban Planning and Architecture to guide the preparation of master plans and set policies for their implementation. The Prime Minister was the head of the High Council of Urban Planning and Architecture, which also included members of the Plan Organization, the Cultural Heritage Organization, and the seven cabinet ministries most concerned with urban affairs.⁶¹ This ‘blueprint’ approach to urban planning excluded consulting engineering firms and the urban planners who were mostly architects or engineers from the implementation and decision-making processes. Instead, the Third Plan granted municipalities the responsibility for executing the comprehensive plans to empower the local government.⁶²

Prior to 1960, Tehran (like other municipalities) had limited responsibilities and no political, financial, or technical resources to initiate urban development projects. A 1968 reconstruction law

⁵⁶Farhoodi et al., “A Critique of the Prevailing Comprehensive Urban Planning”.

⁵⁷Farivar Sadri, *Iran Contemporary Urban Planning Development*.

⁵⁸Ibid.

⁵⁹Taylor, “Anglo-American Town Planning”; Madanipour, *Tehran the Making of a Metropolis*.

⁶⁰Roudbari, “Instituting Architecture,” 173–205.

⁶¹The ministries involved are: The Ministry of Justice with its special division for land registration; the Ministry of Energy with the provision of water and electricity supply; the Industrial Development Organization with the location of new industries; the Ministry of Health; the Ministry of Education.

⁶²Karbaschi, “The Role of Decision Making Processes,” 83.

Iran – Approved Master Plans for Urban Centres May 1971

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

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

Figure 4. The list of approved Master Plans in 1971. Source: Secretariat, High Council for Urban Planning, Ministry of Housing and Development, Published in World Bank Report in 1972, 'A Program of Reinvestment Studies in Iran' – Report No. SA-28a.

obliged municipalities to manage land-use in their own inner-city areas and suburbs, and Tehran was the first one to take advantage of that new power.⁶³ They could now decide the height, construction quality, and safety of buildings according to master plans, zoning plans, and other criteria issued by the Ministry of the Interior and the High Council of Urban Planning and Architecture.⁶⁴

While the introduction of comprehensive urban planning helped to develop the planning profession and planning institutions, there were still no policies or regulations regarding collaboration and coordination between them. In the case of the 1968 Tehran master plan, for example, the links between the municipality and the consultant engineers were still unclear.⁶⁵ The resultant lack of coordination and their common absence from decision making at the High Council of Urban Planning and Architecture led to serious problems in the implementation process of Tehran's master plans. In fact, by looking at the implementation of the Third Plan and the emergence of master planning and new planning administration one can find that the technocratic elite at the Plan Organization used planning more as a tool for state building, rather than regulating or controlling urban development.

1968 master plan and staging the new Tehran

In 1964, Abdolaziz Farmanfarmaian and Associates (AFFA) (an Iranian consulting engineering firm) was selected by the Plan Organization to design the first comprehensive master plan for Tehran, together with Victor Gruen as the American partner. Farmanfarmaian was the cousin of the head of the economic bureau and had graduated as an architect from the École des Beaux Arts in Paris and moved to Tehran in the 1950s as an employee of Tehran's mayor's office.⁶⁶ He was among the first architects who established consulting firm for architecture and engineering in the country, and by 1975 became the biggest architecture/planning firm in Iran with 400 architects, engineers, and service employees in its offices in Tehran. Gruen was an Austrian-American architect and planner based in Los Angeles, known as the 'Mall Maker' for giving an architectural shape to American consumerism.⁶⁷ By the early 1960s, he had shifted from designing shopping malls to city planning, publishing a critique of the suburbanization and deterioration of many once vibrant downtown neighbourhoods of the United States in his book *The Heart of Our Cities*,⁶⁸ published the same year the project began.

The Tehran Comprehensive Plan was designed to bring new order to the irregular urban expansion of the city and respond to the growing number of rural migrants and the congested city centre. The Tehran Comprehensive Plan (TCP) that was approved in 1966 entered the implementation phase in 1968. At the time, more than 30% of Iran's urban population lived in Tehran.⁶⁹ The TCP was inspired by a post-war modernist idea of planning that sought to create the 'ideal city' through 'comprehensive' development.⁷⁰ The plan's aim was to reduce the density of the city centre by proposing a series of centres to reorient growth and reorder social structures. Tehran's growth is restricted by mountains to the north and the east and by desert to the south, making expansion in those directions physically and economically impractical. Instead, the TCP proposed a linear decentralization, stretching the city westward (Figure 5). This way 5 million inhabitants – the maximum

⁶³In 1968, the "Urban Renewal Law" (URL) confirmed the obligatory purchase of properties for implementing public projects in the built-up areas as well as undeveloped lands. Municipalities were thus authorized to intervene with property rights and land ownership.

⁶⁴Karbaschi, "The Role of Decision Making Processes," 84.

⁶⁵Farhoodi et al., "A Critique of the Prevailing Comprehensive Urban Planning".

⁶⁶Milani, *Eminent Persians*, 151.

⁶⁷Hardwick, *Mall Maker*.

⁶⁸*Ibid.*, 214.

⁶⁹Amirahmadi and Kiafar, "Tehran: Growth and Contradiction".

⁷⁰Hall, *Urban and Regional Planning*.

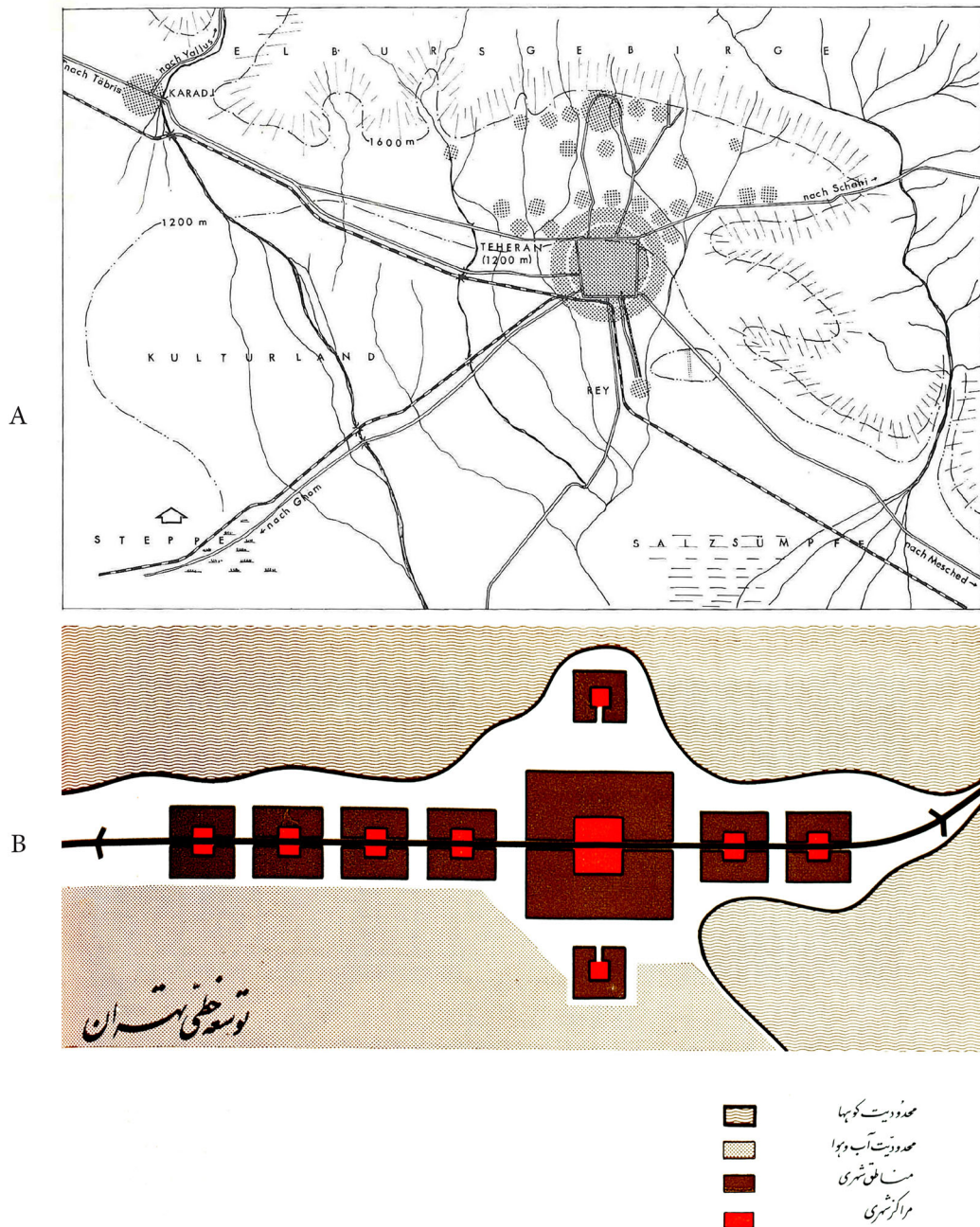


Figure 5. Diagram (A) shows the existing pattern of growth in Tehran in 1960, and Diagram (B) shows the proposed strategy of Tehran masterplan in 1966. Source (A): 'Die Entwicklung der Stadt Tehran' (Tehran Urban Development), Peter George Ahrens: 82. Source (B): Art and Architecture Magazine, No. 5. special issue of Tehran Comprehensive Plan, 1970.

that the city could supply with water – could be accommodated over 25 years, expanding the city from 180 km² in 1966 to 650 km² in 1991, but this time with rigid boundaries and carefully defined districts and neighbourhoods.

The TCP approach towards the future development of the city was similar to the American post-war planning debates, which focused on resolving urban problems through decentralization, and reorganization of the living space of cities using two key elements: the ‘neighbourhood unit’ and the ‘super-highway’.⁷¹ The TCP envisioned that by 1991 Tehran would have 10 different regional centres, each supporting half a million inhabitants in an area of 150 ha, separated by large green areas and linked by a network of highways and rapid public transportation (Figure 6). Over 150 km of highways would enable the growth of the city west, with private automobiles as the primary mode of transport.⁷² The optimism and utopian vision of Gruen and his Iranian partner to produce the ideal city for ‘modern living and modern transportation’ had a significant impact on the plan.⁷³ Inspired by Clarence A. Perry notion of Neighbourhood Units and Ebenezer Howard’s Garden City,⁷⁴ Gruen and Farmanfarmaian’s proposal introduces a range of neighbourhood units, with different densities for different income groups. As shown in Figure 7, neighbourhood units for lower, middle, and upper income groups varied in population from 3000 to 5000 residents.⁷⁵ These neighbourhoods were designed based on Perry’s units, organized around certain key planning principles, like the necessity for a school and playground within 500 m of each house, and neighbourhoods defined by major streets, with 10% of the land area dedicated to open spaces and community activities.⁷⁶

The ‘neighbourhood unit’ and the ‘super-highway’ schemes were designed to distribute facilities and services and create high-quality living space. The TCP envisioned the city as a city for the middle class with no poor population. The assumption was that Tehran would be socially mobile, and the visible life-style of the upper classes would motivate the city’s poorer residents to get better jobs to earn more. Ultimately, the new Tehran was imagined to be a utopia for the lower classes, as imagined their mobility to higher class levels regardless of the limitations of the parts of the city they inhabited.⁷⁷

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

⁷¹Hansen, “Metropolitan Planning”; Domhardt, “The Garden City Idea”.

⁷²Farmanfarmaian and Gruen, *Tehran Master-plan report*.

⁷³Mennel, “Victor Gruen”.

⁷⁴Hardwick, *Mall Maker*, 221.

⁷⁵*Art & Architecture magazine*, vo.5: 51–3.

⁷⁶Lloyd Lawhon, “The Neighbourhood Unit”.

⁷⁷Emami, “Urbanism of Grandiosity”.

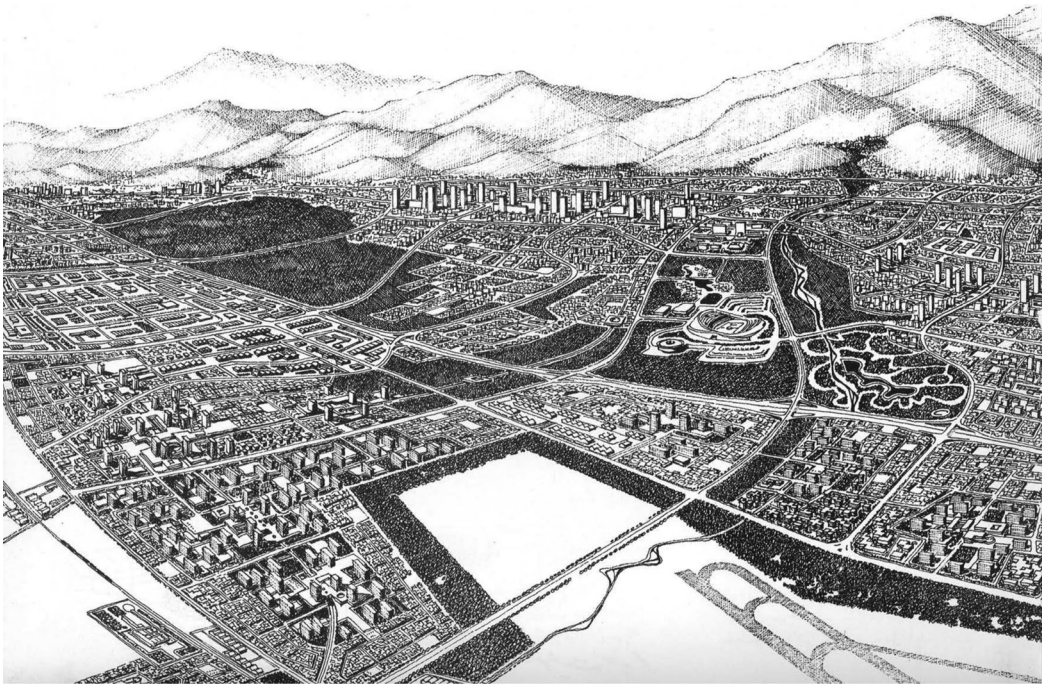


Figure 6. The scheme of Tehran Comprehensive Plan, projecting the ideal model of Tehran expansion towards the west, Source: TCP report 1966, Tehran Municipality.

which was typical of a comprehensive planning approach that prioritized grand visions for the rational engineering of space and society.

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

The rise in global oil prices in the early 1970s and the resultant increase in oil revenues positioned Iran among the top 20 economies in the world, and brought confidence for the state to initiate large-scale urban projects. With wealth concentrated in Tehran, the city's industry and services experienced phenomenal growth. Tehran's population jumped from 2.7 million in 1966 to 4.5 million in 1976.⁷⁸ Land speculation and rapid rural–urban migration became the main impediments to both the Comprehensive Plan and the application of a logical growth pattern. Rather than invest in factories or industrial development, wealthy Tehranis sought a way to reproduce their wealth in a faster and more reliable way: land and housing speculation. The Tehran Comprehensive Plan proposed rigid service boundaries for the city, and as a result the price of real estate in inner city Tehran increased by an average of 250% from 1966 to 1971.⁷⁹ With the majority of inner city land in the hands of the state and small group of landowners, a new spatial contrast began to appear, in addition to the contrast between the north (rich) and the south (poor). The rising price of land in the inner city began to distinguish it more strongly from the more peripheral future growth areas of the Comprehensive Plan, which further began to complicate the plan's implementation.

⁷⁸Madanipour, "Tehran Urban Development and Planning".

⁷⁹"A Decade of Growth," in *Art and Architecture* magazine, vol. 18–9, 92–3.

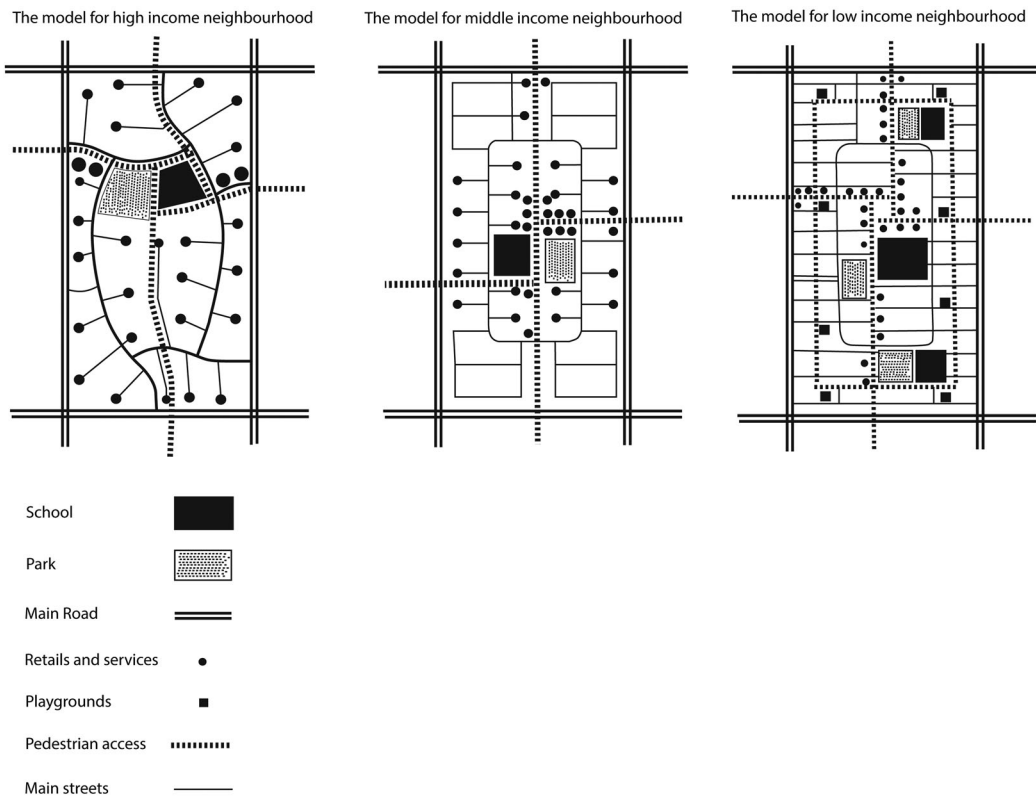


Figure 7. Different neighborhood unit schemes proposed by Tehran Comprehensive Plan for different income groups. Source: Drawn by author, compiled from Art and Architecture Magazine, No. 5. special issue of Tehran Comprehensive Plan, 1970.

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

Figure 8 shows the map of Tehran's urban growth in 1974, and the direction of Tehran's urban expansion and division of functions in inner and outer city areas. Two lines of highways facilitated the expansion of the city towards the north and west. The north-south Vanak Highway connected the rich suburbs in the north to the centre and the international airport, while the four-lane Karaj Highway connected the industrial town of Karaj 40 km west of Tehran to working-class suburbs and different factories in the west to the airport and city centre. The two motorways directed urban growth towards the north and the west and transformed Tehran into a car-centric city. Two different types of urban activities were located along these two highways which produced a new form of duality in the city. For example, the Hilton Hotel, the international exhibition centre and luxury residential condominiums were located along the Vanak Highway; whereas car factories, working-class neighbourhoods, sport facilities and football stadiums were built along the Karaj

Map of Tehran Urban growth 1974

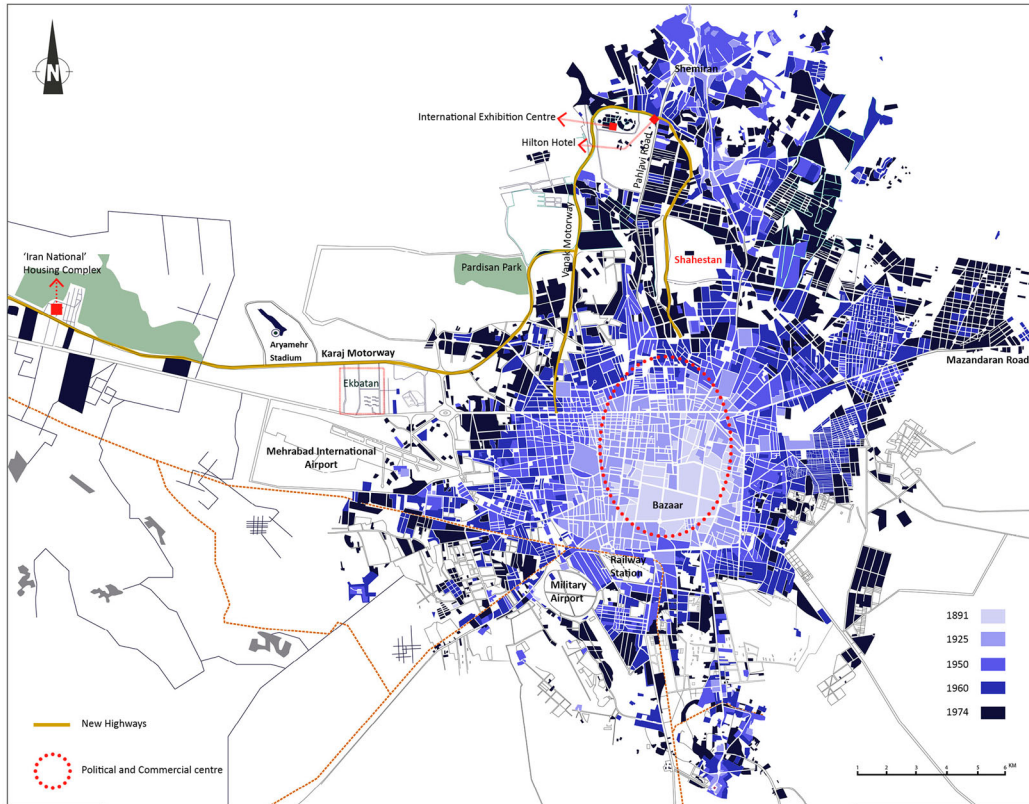


Figure 8. Tehran urban expansion in 1974. Source: Drawn by author, compiled from Map of Tehran in 1974, published in Cultural Atlas of Tehran, 1976.

Highway. For middle-class Tehranis and experts at Plan Organisation, all of these projects, whether a Hilton hotel or a car factory, were spaces of pomp and prominence, highlighting the rapid progress of the Iranian capital.

The neighbourhood units that Gruen and Farmanfamaian planned for Tehran were never fully implemented. However, their scheme influenced a large number of mass housing projects across the city. The working-class neighbourhood next to the Iran National Car Factory (Peykan Shahr), and the Ekbatan mass high-rise residential complex, for the middle and upper-middle classes, are two examples of new residential developments influenced by the neighbourhood unit concept.

Peykan Shahr was designed in 1971 by young Iranian architect Fereydoon Davarpanah, who graduated from the École des Beaux Arts in Paris and established his consulting engineering firm in Tehran. In the design of the working-class neighbourhood of Peykan Shahr, the plan consisted of 57 apartment blocks in different sizes and densities, including 34 blocks of 3–5 floors each, 14 blocks of 9-storey buildings, and 9 blocks of 13 storeys,⁸⁰ offering a range of layouts for different family structures. But in contrast to the Gruen scheme, which locates the public spaces in the centre of the neighbourhood, Peykan Shahr lays the blocks out around different shared spaces for the

⁸⁰ *Art and Architecture magazine*, vol. 12–3, 117.

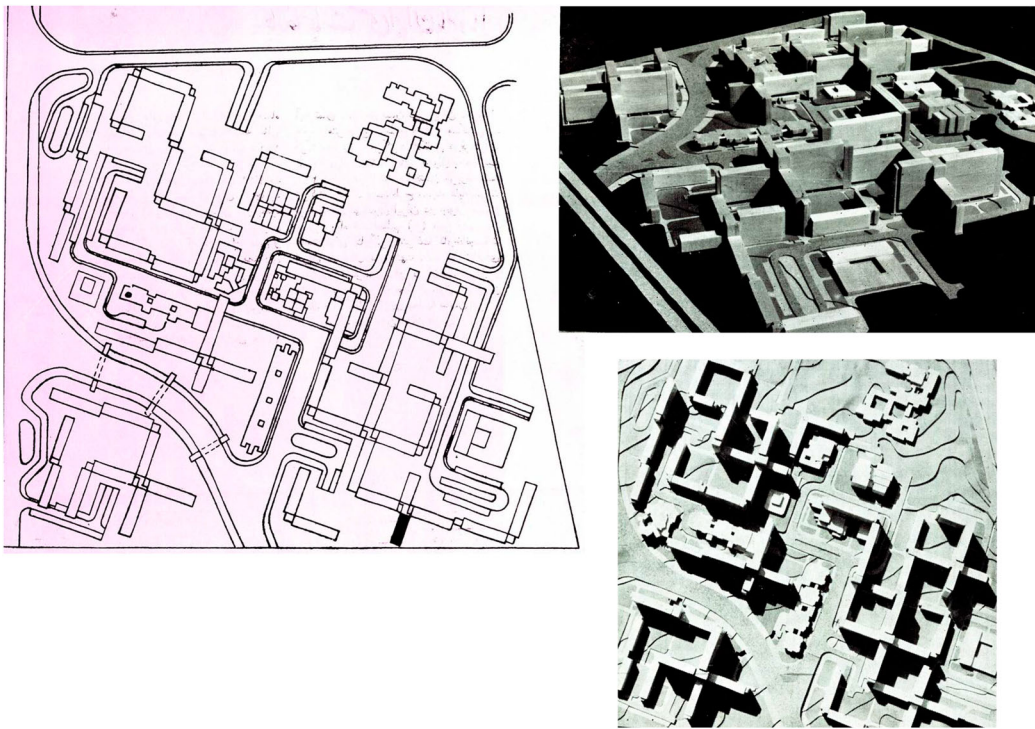


Figure 9. Scheme and model of 'Iran National' housing complex (Peykan Shahr), 1972. Source: Art and Architecture magazine, 1972, vol. 12–13, page 117–119.

families residing in them (Figure 9). These smaller scale open areas offered room for family groups to intermingle and facilitated the socialization of smaller communities within the neighbourhood. The design of the Peykan Shahr neighbourhood was characterized by concrete blocks, flat roofs, and an irregular, asymmetrical plan, which appears to have adapted some of the *Ziellenbau* characteristics that were developed by German and Dutch architects and planners in 1920s and 1930s. Ultimately the plan of the Peykan Shahr neighbourhood combined some of the principles of the neighbourhood unit scheme proposed by the master plan, and also a number of different modernist design elements of European social housing.

The Ekbatan high-rise complex was designed in 1976 by South Korean architect Kim Swoo Geun, the local architecture firm Rahman Golzar, and the Gruzen Partnership, an American firm with a legacy of federal housing projects going back to the thirties.⁸¹ The American, Iranian, and South Korean designers had to plan modern apartments for 15,500 middle-class families on a plot of 240 ha, located to the east of the Mehrabad International Airport. The site was located outside of the first phases of the development boundaries of the Tehran Comprehensive Plan and was owned by a private landowner. The project designed a series of U and Y shaped towers with ultra-modern apartments, and various types of floor plans and flat sizes, from one bedroom flats to four bedroom penthouses (Figure 10). The Ekbatan project was designed in two phases, and the first phase is very much in line with the Gruen and Farmanfarmaeian 'neighbourhood unit' scheme. In this phase, the towers were designed in different densities from 12-storey apartments to 9 and 5-storey

⁸¹Habibi, "Modern Mass Housing in Tehran".



Figure 10. Top image shows the areal photo of Ekbatan mass housing project. Source: DSH Design Group, <http://wp.dshdesigngroup.com/ekbatan/> (accessed 14 October 2015).

apartments around a linear centre that would provide all the needs of residents. The centre consisted of a massive linear shopping centre, schools, four sport fields, a hospital, and a post office. Beneath the shopping centre were parking spaces; and residential parking was also mainly underground. The spaces in-between tower blocks were taken up by well-designed parks and gardens and swimming pools.

The case of Ekbatan shows that the advent of modern construction technology and intense collaboration between Iranian professionals with international architects and planners provoked immense changes in the spatial pattern of Tehran. The development of middle and upper-middle class tower block housing in different parts of Tehran flourished in the 1970s and has persisted to this day. The Atisaz Complex, the Saman Towers, the Eskan Towers and the Behjat Abad Apartment Complex, for example, were all built in the form of a cluster of residential towers directly linked to main avenues and motorways. Living in homes with ‘modern amenities’, Western-style furniture,



Figure 11. On the left, the condition of housing in historic centre of Tehran. On the right, the back allies of Tehran bazaar. Source: Seger, 'Tehran, Eine Stadteographische Studie' (Geographic studies of Tehran), 1978.

secure gates, and janitors defined the identity of many upper class citizens living in the city's north.⁸² Consequently the closed system of neighbourhood units that are connected with motorways became a dominant pattern of Tehran urban development, creating class-segregated suburbs.

In contrast to modern residential neighbourhoods in northern parts of Tehran, traditional courtyard housing and shanties were still characteristic in the south of the city. Even a decade after land reform, continued migration from rural areas was increasing pressure on the housing market. Large traditional houses in the centre and south of the city, once the homes of well-to-do families, were subdivided to accommodate the influx of new arrivals. In 1976, some 22,000 households in these areas had seven or more people living in one room (Figure 11).⁸³ These numbers created a significant challenge for the state, which promised modern infrastructure and economic development that would produce a high quality of life for everyone in Tehran. Though a small number of low-income housing projects in the south were sponsored and constructed by the Mortgage Bank, the Plan Organization and the municipality, they still could not solve the scarcity of housing for the urban poor. As a result, the number of shantytowns around Tehran, mostly near the airport and the city of Rey, continued to grow in the 1970s.⁸⁴

The new centre for Tehran

To shift the high density of activities away from the historic centre, the 1968 master plan proposed a new one, called 'Shahestan' after the Royal Family, in the vast 544 ha undeveloped areas of Abbas-Abad in the north of the historic centre. Figure 8 shows the location of Shahestan on a 1974 map of Tehran. The project was designed by American planner Jaquelin Taylor Robertson and UK architecture and planning firm Llewelyn Davies. The core of the plan was the creation of a massive urban square to be known as 'Shah and Nation Square', which would match in size with Tiananmen Square

⁸²Karimi, *Domesticity and Consumer Culture*. For more on construction of 1970s Tehran's luxury residential high-rise see example of Eskan tower by Feniger and Kallus, "Israeli Planning in the Shah's Iran".

⁸³Costelo, "The Morphology of Tehran".

⁸⁴Hourcade, "Téhéran," 36.

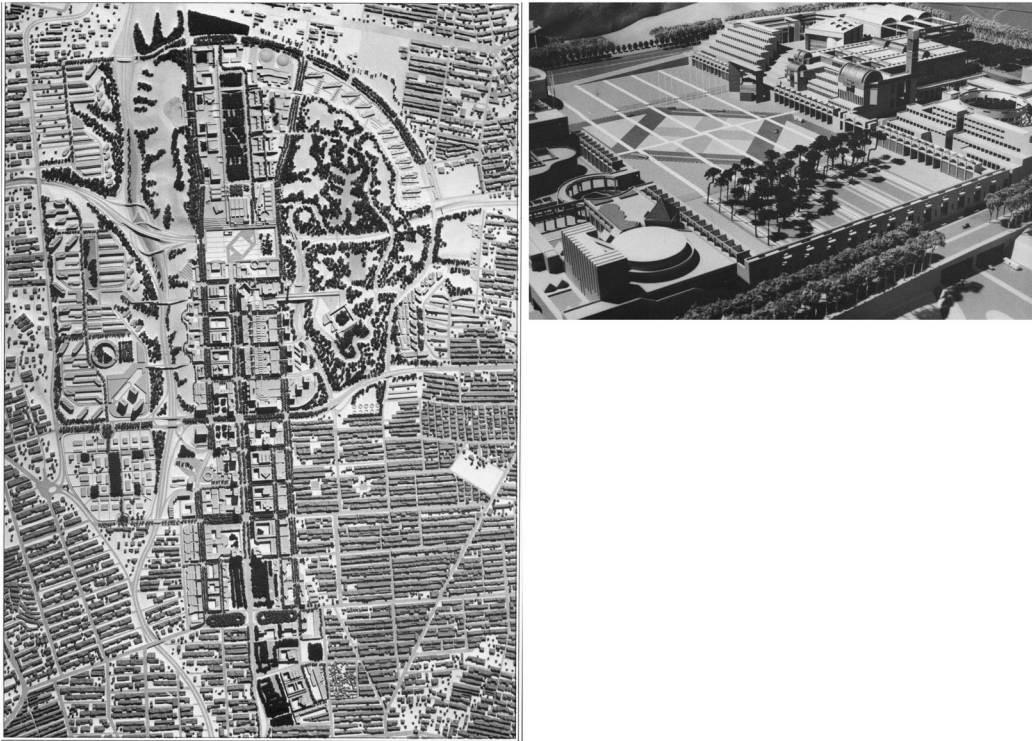


Figure 12. The Shahestan master plan on the right – on the top left design of the ‘Shah and Nation’ square. Source: Shahestan Pahlavi, a New City Centre for Tehran, Report by Liewelyn-Davies International, planning consultants, vol. 2. 1976.

in Beijing. Around it would be arranged the key institution of a modern Iran. The planners called it a national centre for the twentieth century, and compared its proportions and the arcades that lined it to Isfahan in the sixteenth century (Figure 12).⁸⁵ This project would expose the bazaar, Tehran’s oldest and busiest marketplace, to even stronger market competition and remove the economic heart of the city away from the older, central districts.

The Shahestan Plan, had it been implemented, would have further accentuated the divide between a westernized, affluent, northern city and the historic city with its narrow lanes, courtyard houses, mosques, and bazaars. In fact the bazaar was viewed by the state and local professionals ‘as a remnant of the past, but also as an institution incapable of change, and, therefore a major impediment to Iran’s continued economic development’.⁸⁶ In contrast to this view point, the Grand Bazaar continued to be a dense collection of covered ‘narrow arteries that make up an area exceeding one square kilometre and consisting of several kilometres of passageways’.⁸⁷ Since WWII, the size of the Grand Bazaar had steadily increased, in 1978 becoming the largest covered shopping area in the world.⁸⁸

⁸⁵For more on the project of new centre for Tehran see Emami, “Urbanism of Grandiosity”; Mohajer, “The Shahestan blueprint”, Khosravi, “Politics of DeMonst(e)ration”.

⁸⁶Keshavarzian, *Bazaar*, 134–5.

⁸⁷*Ibid.*, 43.

⁸⁸*Ibid.*

Conclusion

By the late 1970s, one could hardly find similarity between the reality of Tehran and the 'ideal city' image which was presented by the 1968 master plan. Tehran had become an extremely contested city which illustrates a situation of intense segregation under political, social, and economic stress. While the cosmopolitan elite passed de Gaulle Expressway, and Eisenhower Boulevard to get to their luxury villas and flats in the north, many others still lacked clean drinking water. The planners' top-down and rational treatment of Tehran's urban problems dismissed the dominant presence of different groups such as the urban poor (in shantytowns), merchants (at the Bazaar), and landowners (speculating on housing) and their crucial role in shaping the city. Both Iranian and foreign 'experts' at the Plan Organization and 'consultant engineering' firms blithely ignored the following factors: the rapid rural-urban migration, the speculation of land and housing; segregated luxury high-rise residential complexes that sharply contrasted with the poor shantytowns; the rapid decline of the historic centre due to over intensification; and the massive irregular expansion of the Bazaar as the major economic centre of the city. The urban experts and decision makers, with their scientific, rationale, and technocratic approach, overlooked these urban consequences, under the assumption that all aspects of the city can be measured, monitored and addressed as a technical and physical problem.

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

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