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Navigating a Petroleumscape

Shaping transnational oil modernity at the crossroads of global flows and local territories

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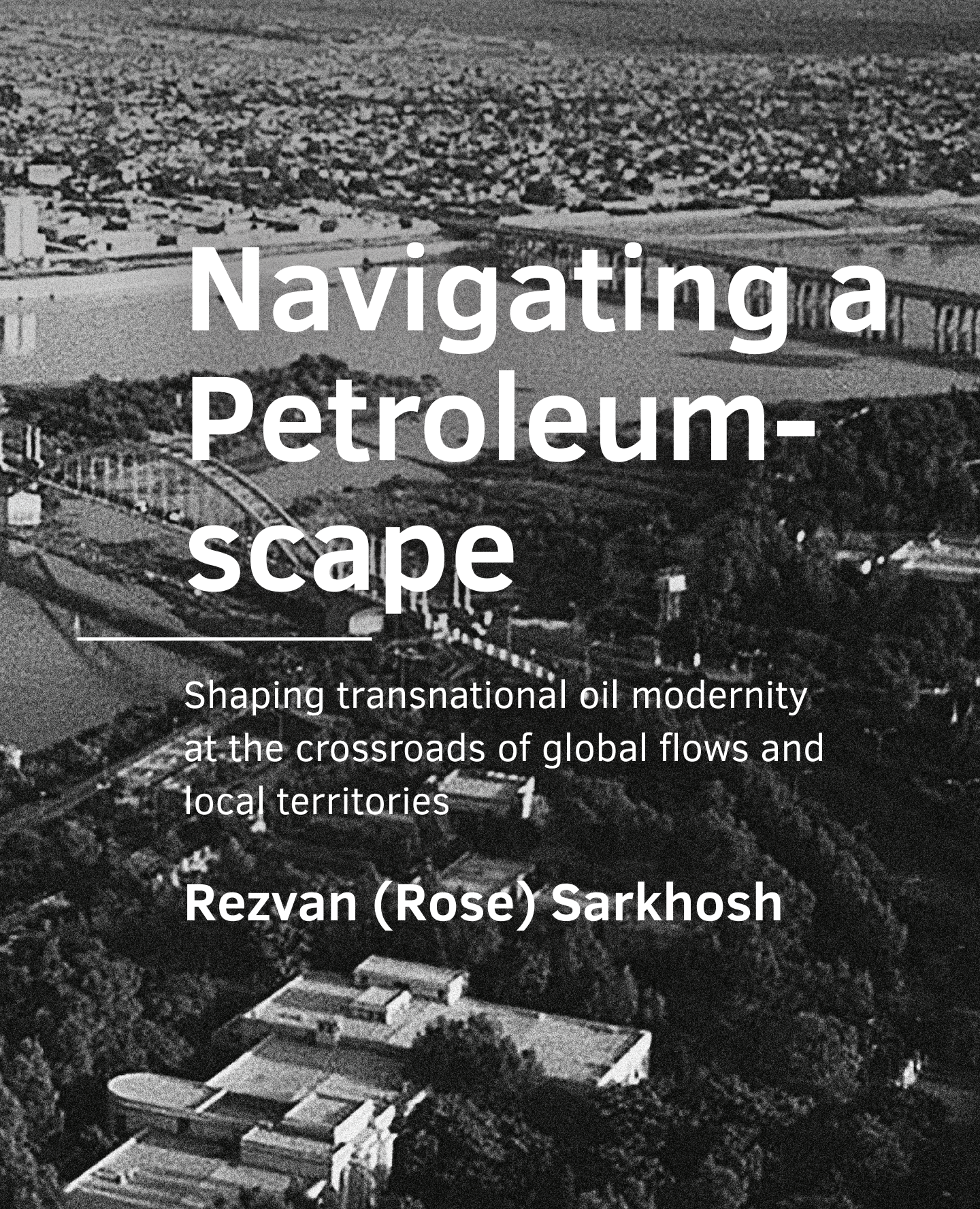
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Navigating a Petroleum- scape

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at the crossroads of global flows and
local territories

Rezvan (Rose) Sarkhosh

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Navigating a Petroleumscape

Shaping transnational oil
modernity at the crossroads of
global flows and local territories

Dissertation

for the purpose of obtaining the degree of doctor
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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
Monday 11 March 2024 at 10:00 o'clock

by

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For Iran

Preface

The thesis explores Ahwaz's transformation throughout the 20th century, emphasizing the profound impact of the oil industry on the city's architectural and urban development. From its emergence in obscurity to its prominence before the Iran-Iraq war, Ahwaz's journey mirrors the far-reaching influence of oil on urban modernity. The narrative weaves a complex tapestry of global dynamics and local distinctiveness, detailing how oil shaped not only the city's landscape but also its identity. The research underscores the intricate interplay between global forces and local characteristics, showcasing Ahwaz as a resilient blend of history, culture, and urban development. It highlights the city's defiance of simplistic categorizations, celebrating its diverse industries and the convergence of global influences. The study concludes by positioning Ahwaz as a living testament to the enduring legacy of the past, an ever-evolving urban canvas that reflects the complex interplay of architecture, culture, and power, perpetuated by the transformative force of petroleum.

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I also extend my thanks to Véro Crickx for her assistance in editing this document, ensuring its presentation in a polished and professional manner.

As I stand on the precipice of this academic achievement, I am acutely aware that this journey was not solitary but a collective effort. Each individual and institution mentioned in these acknowledgments has played an indelible role in shaping this narrative, and for that, I am profoundly grateful.

Rezvan (Rose) Sarkhosh

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1 Introduction

“Oil has been the lubricant of international relations and industry since the turn of the twentieth century.”¹ *Beinart, William, and Lotte Hughes*

1.1 Introduction to the Chapter

In an era marked by the swift currents of global interaction and the evolving reinterpretation of local values, a fundamental inquiry emerges concerning the historical underpinnings of the inception of modern global exchanges. As an architect, my quest to comprehend the profound interplay between environmental shifts and our lifestyles, and reciprocally, how our lifestyles shape the environment, has propelled me towards a quest for the fundamental pillars underlying global metamorphoses. These foundational queries have not only formed the bedrock of this research endeavour but also serve as guiding lights in navigating the intricate terrain of this study.

Since the dawn of the twentieth century, oil, arguably the most pivotal commodity of that era, stealthily emerged as an influential architect, moulding and remoulding interconnected and multi-layered global arenas across various dimensions. With its tantalising promise of boundless wealth and its pervasive, transformative impact, oil served as the catalyst propelling the tide of globalisation to envelop the entire globe.² Oil, acting as a catalyst, expedited the cross-cultural currents that flowed through the intricate tapestry of the built environment – “Oil has been the lubricant of international relations”³ – thereby catalysing the evolution of what we now recognise as “oil modernity.” It became the vital lubricant lubricating the machinery of international

¹ Beinart, William, and Lotte Hughes. *Environment and Empire*, Oxford University Press, Incorporated, 2007. *ProQuest Ebook Central*, <http://ebookcentral.proquest.com/lib/delft/detail.action?docID=415277>.

² To quote Harvey, ‘it is not just the history of a particular city but the history of a system of cities’. Harvey, David. *Social Justice and the City*. [in English] London: Edward Arnold, 1973.

³ Beinart, William, and Lotte Hughes. *Environment and Empire*, Oxford University Press USA – OSO, 2007.

relations, interlinking a diverse array of stakeholders, including global experts, corporations, national authorities, and local communities, often compelling them to coexist, albeit not always harmoniously, in a shared space of varying degrees of equity.

The multifaceted industries entwined with the realm of oil birthed a sprawling global network, intricately weaving together a diverse array of individuals. This expansive web gave rise to novel constellations of actors, comprising political and economic decision-makers, seasoned experts, diligent engineers, corporate officials, diligent labourers, visionary architects, and adept urban planners. Together, they orchestrated a symphony of knowledge exchange, technological diffusion, cultural intermingling, lifestyle shifts, commodity trade, material flows, and the transformation of architectural and urban landscapes.

The driving force behind the creation of these newly constructed spaces was undoubtedly profit for the oil actors. However, it's imperative to recognise that this profit-driven motive inadvertently led to the development of modern, functional environments within the oil company towns. In this context, oil transcended its role as mere capital or a source of wealth and power; it assumed the role of a catalyst for progressive environmental growth. These local oil spaces and the expansive global flows of oil actors were not independent entities but rather dynamic forces that continually shaped each other through intricate environmental and social transformations. Yet, the crucial question remains: How did the vast international network of global flows revolving around oil influence the emergence of transnational oil modernity within the unique local oil geographies? Remarkably, the architectural and urban spatial dimensions of petroleum-related structures, buildings, and infrastructure, along with their intricate interconnections and evolution over time, exerted a profound yet underappreciated influence on the unfolding narrative of modernity. Despite its significance, this facet of architectural and urban history has remained largely uncharted territory for scholars. Hence, there exists a compelling need to delve deeper into these unexplored dimensions, unravelling their complex dynamics and shedding light on their pivotal role in shaping the growth of modernity.

The exploration of “the spatial realities of petroleum”⁴ has consistently yielded unforeseen developments throughout the various political epochs that have marked the global history of the 20th century. Unlike other forms of modernity, the multifaceted nature of oil modernity is characterised by an astonishing diversity of actors, each driven by their unique economic, political, and social preferences. This inherent complexity has woven a rich tapestry of influences and outcomes that set it

⁴ Hein, C. M. “Space, Time, and Oil: The Global Petroleumscape.” Routledge – Taylor & Francis Group, 2021.

apart from its counterparts. One of the most remarkable aspects of oil modernity is the manner in which influential oil actors, whether they be oil companies, government entities, imperial powers, or economic stakeholders, have actively engaged in environmental and spatial constructions within the oil fields.⁵ These constructions encompass an array of structures such as factories, refineries, company headquarters, pumping stations, housing, and social facilities. Additionally, they extend to the transformation of landscapes through the creation of infrastructures and pipelines. This active involvement in shaping the physical environment allowed these oil actors to not only pursue their political, economic, and social strategies on the ground but also engendered what German historian in architecture and urban planning, Carola Hein, aptly refers to as a “global palimpsestic petroleumscape.” This layered and interconnected petroleumscape is emblematic of the intricate interplay between various stakeholders, resulting in a dynamic and ever-evolving spatial reality that has left an indelible mark on the global landscape.⁶

This thesis embarks on a compelling exploration of the multifaceted concept of the “petroleumscape” with the aim of unravelling the intricate role of petroleum in shaping and conceptualising spaces on a global scale. At its core, this research endeavour represents a concerted effort to develop a theoretical framework for understanding the profound impact of petroleum on the built environment, with a keen focus on the spatial and social transformations that ensue. The concept of the petroleumscape offers a profound lens through which to examine how oil operates as a catalyst for modernisation, imprinting its influence on the landscapes it traverses. It also delves into the lived experiences of individuals within the environments that oil has helped create, shedding light on the dynamic interplay between oil and space. Indeed, oil’s spatial significance is far-reaching, encompassing its role in extraction, transportation, storage, transformation, and even consumption. These various dimensions of oil’s spatial attachment serve as the backdrop against which the petroleumscape unfolds, ultimately shaping the course of modernity and human

⁵ Ibid.

⁶ Hein, Carola. *Oil Spaces Exploring the Global Petroleumscape*. [s.l.]: Routledge, 2021. <https://torl.biblioboard.com/content/3bbf4377-f998-4341-b1ae-0f0ef4c9a9ac>. 1. <https://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781000449495>
<https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=2933952>
<https://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781000449488>
<https://www.overdrive.com/search?q=542548C7-B8AF-4324-BECB-704CA6368D73>
<https://openresearchlibrary.org/ext/api/media/3bbf4377-f998-4341-b1ae-0f0ef4c9a9ac/assets/thumbnail.jpg>
<https://samples.overdrive.com/?crid=542548c7-b8af-4324-becb-704ca6368d73&epub-sample.overdrive.com>
<https://img1.od-cdn.com/ImageType-100/8125-1/{542548C7-B8AF-4324-BECB-704CA6368D73}IMG100.JPG>.

existence itself. This thesis endeavours to delve into these intricate layers, offering fresh insights into the profound ways in which oil has moulded our world.⁷

This research journey aligns closely with French researcher on Comparative Literature, Allan Stoekl's vision,⁸ recognising that the history of oil is not solely a chronicle of industrial progress but a profound exploration of humanity's relationship with a transformative and often elusive substance. Through this endeavour, the cultural dimensions of oil capitalism are unveiled, offering a rich tapestry of insights for scholars and society alike.⁹

Amid the vast expanse of industrial oil spaces that defined the 20th century, a fascinating dichotomy emerged – a fusion of shared general modern industrial traits and nuanced local adaptations, each tailored to meet unique regional needs. Within this intricate interplay, every city carved its distinctive identity within the global tapestry of modern industrial oil hubs. This realisation beckons us to embrace a perspective that transcends geographic boundaries, connecting local urban histories through the lens of international networks. Through this process, we gain a newfound appreciation for places that may have previously eluded our collective awareness. Building upon the comparative framework established by Carola Hein's groundbreaking concept of the “petroleumscape,” which delves into the study of diverse locations within the global landscape of modernity, this research undertakes a compelling exploration. It sets its sights on unravelling the concealed impacts of transnational oil flows, a facet of historical inquiry often overshadowed by more conspicuous narratives. In doing so, this study trains its focus on a Middle Eastern case study, a region whose collective significance in this context has yet to be comprehensively addressed.

In other words, this research aspires to illuminate the uncharted dimensions of local interdependencies that underpin the spatial transformation of petroleumscape. By delving into the Middle Eastern narrative, it seeks to amplify the voices and stories that have thus far remained concealed within the broader discourse of oil modernity. This endeavour is not only an intellectual pursuit but also a means to celebrate the rich tapestry of global urban histories, one city at a time.

The excavation of Ahwaz's urban history, particularly in the context of its evolution into a Middle Eastern oil city, presents a formidable scholarly challenge. Ahwaz,

⁷ Ibid.

⁸ Allan Stoekl *Foreword*, Ross Barrett and Daniel Worden (Eds.). *Oil Culture*. Minneapolis, University of Minnesota Press, 2014.

⁹ Ibid.

endowed with a strategic location as a major port city and regional trading hub, had long been enmeshed in the intricate web of global commerce, facilitating the exchange of goods and commodities with markets across the world. However, the advent of oil exploration, orchestrated mainly under the auspices of British imperial power, ushered in a transformative era for Ahwaz. Nestled in the heart of the Iranian oil fields, the city metamorphosed into a crucible of modern international interactions, set against an industrial backdrop. The growth and evolution of Ahwaz as an urban entity were fundamentally intertwined with the inexorable expansion of the oil industry into the region. This catalytic shift precipitated a cascade of changes, touching upon the city's identity's economic, socio-political, cultural, and environmental facets. Yet, a salient question lingers: How did the exclusive and multifaceted processes of cross-cultural exchanges associated with oil leave their indelible imprint on the physical fabric of our modern built environment in Ahwaz? The research seeks to unearth the hitherto concealed narratives and intricacies that define Ahwaz's journey from a bustling trading post to a dynamic oil city, providing a vital piece to the puzzle of global urban history and the enduring legacy of oil modernity.

This comprehensive exploration embarks on a critical journey into Ahwaz's built form and spatial structure, unfurling the intricate tapestry of historical currents, influential forces, and pivotal actors that collectively propelled its urban evolution. At its core, this study seeks to challenge the prevailing narratives of the city's history, placing oil at the epicentre of the sociopolitical transformations that unfurled across Iran during the tumultuous twentieth century. The temporal boundaries of this investigation span from 1901—an epoch when systematic efforts were initiated to identify a suitable site for the nascent oil enterprise in Southern Iran—to 1980—a watershed moment marked by the eruption of hostilities between the Iranian Government and Iraq. Within this meticulously delineated timeframe, a profound examination unfolds, shedding light on the tools that wrought chronological changes in the built environment of Iranian oil fields. Moreover, it discerns the distinctive characteristics that defined each architectural era, providing the foundation for an incisive architectural classification. Crucially, this research delves into the multifaceted roles played by diverse stakeholders—ranging from public to private, national to international—in their capacities as proprietors of land and structures. These actors emerge as instrumental agents in the transformational process, shaping the city's urban fabric in profound ways.

Finally, it embarks on a compelling journey to unearth the historically specific experiences that have shaped Ahwaz, delving deep into the city's multifaceted identity. In doing so, it endeavours to reveal the intricate tapestry of the city's urban form—a complex interplay of dualities that give rise to contrasting socio-spatial worlds. Ahwaz emerges as a multifaceted city, characterised by its rich diversity and marked by a conspicuous absence of a unitary character often associated

with colonial cities. This multifaceted urban landscape is host to a myriad of ethnic groups, each contributing to the city's vibrant social fabric. Within the mosaic of Ahwaz, this study uncovers the diverse settlement patterns, spatial planning, and design approaches that have resulted from a tapestry of political strategies. At its core, this research seeks to address a fundamental question: How can we discern and decode the nuanced interplay between politics and urban development, leading to the unique settlement patterns, spatial configurations, and design philosophies that define Ahwaz's urban form? By shedding light on this intricate relationship, the study offers a fresh perspective on the city's evolution, providing historical insights that resonate with contemporary urban discourse.

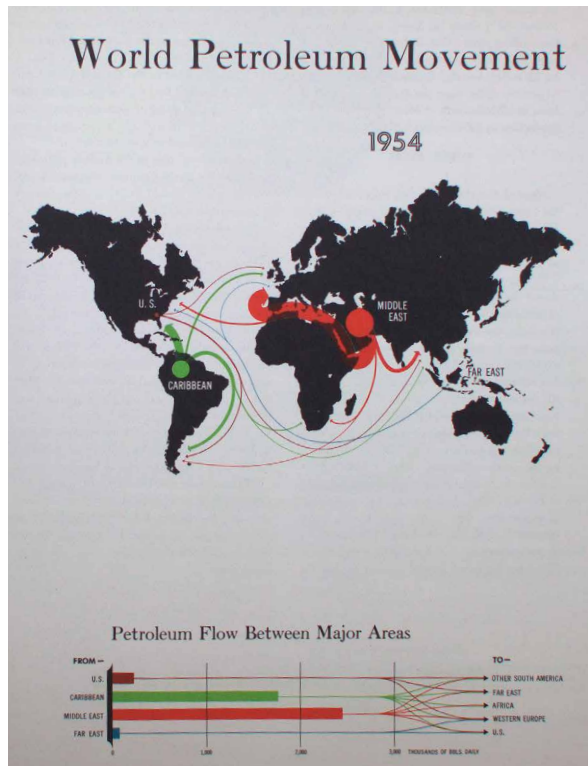


FIG. 1.1 World Petroleum Movement.

Source: *Middle East Oil Development*. ArcRef: 134844C. BarCode: Z01622274. 1956. BP Archives.
Date: 1954. Accessed: February 2018.

1.2 Extensive literature review

The global impacts of oil have been a subject of extensive scholarly inquiry across various academic disciplines, including politics, economics, and the social sciences.¹⁰ Scholars have conducted comprehensive research to understand the multifaceted role of petroleum in shaping geopolitics, economies, and societies worldwide. One prevalent area of study has focused on how oil functions as a source of immense wealth, often becoming a catalyst for political and economic rivalries among nations.¹¹ This competition for control over oil resources has led to significant

-
- ¹⁰ Cobban, T. *Cities of Oil: Municipalities and Petroleum Manufacturing in Southern Ontario*, University of Toronto Press, 2013.
- El-Shakhs., e. b. H. A. a. S. S. *Urban development in the Muslim world*, New Brunswick, N.J. : Center for Urban Policy Research, c, 1993.
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- . "Recessional and Gulf War Impacts on Port Development and Shipping in the Gulf States in the 1980's." *GeoJournal* 18, no. 3 (1989): 273-84.

- ¹¹ International Security and Defense Policy Center, Energy, and Economic Development (Program) Rand Environment, and Keith Crane. 2009. *Imported Oil and U.s. National Security (Rand Corporation Monograph Series)*. RAND Corporation. <https://resolver.ebscohost.com/Redirect/PRL?EPPackageLocationID=2418090.1094875.32733809&epcusercontentid=s2947694>.
- Texas Journal of Oil, Gas, and Energy Law, and University of Texas at Austin. School of Law. *The Blackbook, an Oil and Gas Citation and Legal Research Guide* First ed. Austin, TX: University of Texas School of Law. 2015.
- Steven C. Agee Economic Research and Policy Institute, and Oklahoma Energy Resources Board. *Oklahoma's Oil and Natural Gas Industry : Economic Impact and Jobs Report*. Oklahoma City: Oklahoma City University. 2011.
- Tordo, Silvana, Michael Warner, Osmel Manzano, and Yahya Anouti. *Local Content Policies in the Oil and Gas Sector*. World Bank Studies. Washington: World Bank. 2013.

geopolitical struggles, resource conflicts, and attempts to redraw territorial boundaries. Moreover, researchers have explored the intricate historical processes of colonialism and post-colonialism in regions spanning from South Africa to Northeast China, South America, Europe, and the Middle East.¹² These studies seek to unravel how the discovery and exploitation of oil have influenced the development and transformation of societies, economies, and political structures across the globe. The scholarly examination of oil's global impact serves as a testament to its profound significance in shaping the modern world and the intricate interplay of power, economics, and society that surrounds this vital natural resource.

Conducting an extensive literature review is crucial for gaining a comprehensive understanding of the development of a petroleumscape, particularly in the context of Ahwaz and its intricate intersection with international flows during the 20th century. A thorough literature review can help provide valuable insights into various aspects of this complex phenomenon. Here are some key reasons and objectives for conducting such a review:

- **Historical Context:** This literature review helps establish the historical context surrounding the development of Ahwaz as a petroleumscape. It can uncover the key events, actors, and policies that shaped the region's oil-related transformations.

Hosein, R. *Oil and Gas in Trinidad and Tobago : Managing the Resource Curse in a Small Petroleum-Exporting Economy*. Cham, Switzerland: Palgrave Macmillan. 2021.

Gustafson, Thane. *Wheel of Fortune : The Battle for Oil and Power in Russia*. Cambridge, Mass.: Belknap Press of Harvard University Press. 2012. <https://doi.org/10.4159/harvard.9780674068018>.

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Sanderson, Henry, and Michael Forsythe. *China's Superbank : Debt, Oil and Influence - How China Development Bank Is Rewriting the Rules of Finance*. Bloomberg. New York: Wiley. 2012.

Torbat, Akbar. *Politics of Oil and Nuclear Technology in Iran*. Cham, Switzerland: Palgrave Macmillan. 2020.

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¹² Joffé E. G. H, and Richard N Schofield, eds. *Geographic Realities in the Middle East and North Africa : State, Oil and Agriculture*. History and Society in the Islamic World. Abingdon, Oxon: Routledge. 2021.

Westman, Clinton, Tara L Joly, and Lena Gross, eds. *Extracting Home in the Oil Sands : Settler Colonialism and Environmental Change in Subarctic Canada*. Arctic Worlds. Abingdon, Oxon: Routledge. 2020. <https://doi.org/10.4324/9781351127462>.

Balkan, Stacey, and Swaralipi Nandi, eds. *Oil Fictions : World Literature and Our Contemporary Petrosphere*. Anthropocene: The Slsa Book Series. University Park, Pennsylvania: Penn State University Press. 2022.

Heilbrunn, John R. *Oil, Democracy, and Development in Africa*. New York: Cambridge University Press. 2014.

Bosma, Ulbe, Juan A Giusti-Cordero, and G. R Knight, eds. *Sugarlandia Revisited : Sugar and Colonialism in Asia and the Americas, 1800-1940*. International Studies in Social History, Volume 9. New York: Berghahn Books. 2007.

Askari, Hossein. *Collaborative Colonialism : The Political Economy of Oil in the Persian Gulf*. New York, NY: Palgrave Macmillan. 2013. <https://doi.org/10.1057/9781137353771>.

- **International Perspectives:** By examining existing literature, the study gains insights into how Ahwaz's petroleumscape fits into the broader narrative of international oil flows. Understanding the global dynamics of oil production, distribution, and consumption is essential.
- **Socio-economic Impact:** Literature sheds light on the socio-economic impact of oil development in Ahwaz. This includes its effects on local communities, labour forces, and economic structures.
- **Political and Geopolitical Factors:** Existing research provides insights into the political and geopolitical factors that influenced the petroleumscape of Ahwaz. This includes the roles of international actors, governments, and oil companies.
- **Cultural and Social Changes:** Literature helps us understand the cultural and social changes that accompanied the development of Ahwaz as an oil-centric city. This involves shifts in lifestyles, cultural practices, and identity.
- **Comparative Analysis:** A literature review also helps identify comparative case studies or similar petroleumscape developments in other regions. This provides valuable benchmarks and points of comparison for the analysis.
- **Architectural and Urban Transformation:** Given the study's primary focus on architectural and urban aspects, the literature review uncovers how oil development influenced the built environment in Ahwaz. This involves changes in urban planning, infrastructure, and architectural styles.
- **Gaps in Existing Knowledge:** Through the review, the research identifies gaps in the existing literature. These gaps inform the research questions and help pinpoint areas where the study contributes new insights.

This comprehensive literature review serves as the foundation for the research by providing a solid understanding of the existing knowledge and a framework for exploring the petroleumscape of Ahwaz in a broader global context. It also guides the research in identifying the unique contributions the research makes to this field of study.

The study's approach to mining the existing literature on various aspects related to oil and its influence on global modern architecture, the built environment, urban planning policies, land use, and territory transformations is comprehensive and essential for understanding the underlayers of physical space changes, particularly in Middle Eastern architecture. These different dimensions of research contributed

to the study include the Oil industry, Oil and Global Modern Architecture & Built Environment, Oil and Global Policy of Urban Planning, Oil and Territory, Oil and Global Modernity, Oil and Modern Culture, Global Exchanges and Architecture, Oil and Global Architectural Exchanges, Mining Iranian Architecture, Oil & the Iranian built environment, Oil-related international industries, Oil and modern Iranian culture, Oil and Iranian Policy of Urban Planning, Oil and Iranian Territory.

By synthesising insights from these various dimensions of literature, the study is well-equipped to thoroughly analyse the petroleumscape of Ahwaz and its architectural and urban transformations. Additionally, it helps identify the interplay between global and local factors in shaping the built environment in the Middle East, contributing to a richer understanding of the region's architectural history. This study builds upon the works of established scholars in the field of historical urban studies, especially those who have explored the intersection of oil, architecture, and urban development in the Middle East.¹³ Here's how the contributions of these scholars inform and enrich the research:

Carola Hein's research on the "petroleumscape" provides a valuable framework for understanding how the oil industry has shaped urban environments. As the Iranian planner and historian, Kaveh Ehsani's work on Iranian urbanism and politics offers insights into the specific Iranian context and helps contextualise the developments in Ahwaz within the broader Iranian urban landscape. The studies of Nelida Fuccaro -historian and professor of modern Middle Eastern history- on urban history in the Arabian Peninsula, provide comparative perspectives on urbanisation patterns and oil-driven transformations in the region. The expertise of Rasmus Christian

¹³ Hein, C. M. "Space, Time, and Oil: The Global Petroleumscape." Routledge - Taylor & Francis Group, 2021.

Fuccaro, Nelida. *Histories of Oil and Urban Modernity in the Middle East*. [in English] Comparative Studies of South Asia, Africa and the Middle East ; 33, 1. Durham, NC: Duke Univ. Press, 2013.

Lavagne d'Ortigue, Pauline, Jean-François Gournay, and Gaulle Université Charles de. «Un Empire Dans L'empire ? : Les Villes De L'anglo Iranian Oil Company Et Le Modèle Britannique De Colonie Pétrolière.» [s.n.], 2007.

Alissa, Reem I. R. "Building for Oil : Corporate Colonialism, Nationalism and Urban Modernity in Ahmadi, 1946-1992." 2012.

Nasser, Rabbat, Architecture Massachusetts Institute of Technology. Dept. of, and Z. Pamela Karimi. "Transitions in Domestic Architecture and Home Culture in Twentieth Century Iran." Massachusetts Institute of Technology, 2010.

Elling, Rasmus Christian. "Abadan: Oil City Dreams and the Nostalgia for Past Futures in Iran." 2015.

Elling, Rasmus Christian. "The World's Biggest Refinery and the Second World War: Khuzestan, Oil and Security." 2013.

Crinson, Mark. *Modern Architecture and the End of Empire*. [in English] British Art and Visual Culture since 1750, New Readings. Aldershot, Hants, England ;: Ashgate, 2003.

LeMenager, Stephanie. *Living Oil : Petroleum Culture in the American Century*. [in English] Oxford Studies in American Literary History. Oxford University Press paperback. ed. New York, NY: Oxford University Press, 2016.

Elling – a Danish scholar of Middle Eastern studies– in Iranian studies and urban history is valuable for understanding the dynamics of urban development in Ahwaz and its connections to broader geopolitical factors. The British architectural and art historian Mark Crinson's research on colonial and postcolonial architecture informs the analysis of how colonial practices and postcolonial developments have influenced architecture and urban planning in Ahwaz. The work of Pamela Karimi –Iranian-American architect and historian of art and architecture– on modern Iranian architecture and urbanism helps explore Iran's architectural heritage and modernisation processes, including Ahwaz. French scientist on the human and social sciences Pauline Lavagne d'Ortigue's¹⁴ research on urban transformations in Iran provides comparative insights into how oil-rich cities like Ahwaz have evolved over time. Alissa Reem, the Arab architect, landscape designer, and researcher, studies the impact of oil on urban development in Kuwait. They offer parallels and contrasts with the case of Ahwaz, enhancing understanding of the broader regional context. The other Arab historian, Farah Al-Nakib's research on Kuwait's urban history and the impact of oil, serves as a reference point for examining the urban changes driven by the oil industry in Ahwaz. The American environmental researcher Stephanie LeMenager's insights into environmental history and cultural transformations are relevant when studying the ecological changes associated with oil in Ahwaz.

Integrating these scholars' findings and methodologies into the research builds a robust foundation for exploring the petroleumscape, architectural developments, and urban transformations in Ahwaz, contributing to the growing field of historical urban studies in the Middle East.

1.2.1 Oil industry

The multifaceted realm of oil has been a subject of intense scholarly scrutiny across diverse disciplines, including economics, politics, sociocultural studies, energy resources, and environmental sciences. To comprehend the complexities of this vast subject, it is imperative to establish a solid historical research foundation that provides insights into the various dimensions of oil's influence.¹⁵

¹⁴ Lavagne d'Ortigue, Pauline, Jean-François Gournay, and Gaulle Université Charles de. «Un Empire Dans L'empire ? : Les Villes De L'anglo Iranian Oil Company Et Le ModèLe Britannique De Colonie Pétrolière.» [s.n.], 2007.

¹⁵ Williamson, Harold Francis, and Arnold R. Daum. *The American Petroleum Industry*. [in English] Northwestern University Studies in Business History. Evanston, Ill.: Northwestern University Press, 1959. Corley, T. A. B. *A History of the Burmah Oil Company*. [in English] London: Heinemann., 1988.

One notable work that contributes significantly to this historical research is Thomas Anthony Buchanan Corley's "A History of the Burmah Oil Company" (1988),¹⁶ a comprehensive two-volume publication. Corley meticulously narrates the Company's history, focusing on its technical contributions to the development of the oil industry in Iran. This work serves as a crucial resource for delving into the intricacies of the oil sector's evolution. Ronald Ferrier and James Bamberg's trilogy, "The History of the British Petroleum Company" (1982, 1994, & 2000), offers a detailed account of the history of British Petroleum from the early 20th century, particularly in the context of its operations in Iran.¹⁷ Their extensive research and narrative prowess shed light on the intricate relationship between the Company and the Iranian oil landscape. In the realm of international perspectives on the history of the petroleum industry, Daniel Yergin's "The Prize: The Epic Quest for Oil, Money, and Power" (1991)¹⁸ stands as a best-selling and influential work. Yergin's book provides a sweeping view of the evolution of the petroleum industry, offering insights into the global dynamics of oil, its economic significance, and its role in shaping international power structures.

These seminal works in the field of historical research have paved the way for a more nuanced understanding of oil's historical trajectory, its multifaceted impacts, and its central role in shaping global affairs. They serve as foundational texts that continue to inform and inspire further exploration into the history and influence of oil.

Bamberg, J. H. *The History of the British Petroleum Company*. [in English] Cambridge: Cambridge University Press, 1995.

Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power*. [in English] Free Press trade paperback edition. ed. New York: Free Press, 2008.

Mitchell, Timothy. *Carbon Democracy : Political Power in the Age of Oil*. [in English] First paperback edition ed. London: Verso, 2013.

Ross, Michael Lewin. *The Oil Curse : How Petroleum Wealth Shapes the Development of Nations*. Princeton, N.J.: Princeton University Press, 2012.

Ferrier, Ronald W., and James H. Bamberg. *The History of the British Petroleum Company*. [in English] Reprinted. ed. Cambridge: Cambridge University Press, 2000.

¹⁶ Corley, T. A. B. *A History of the Burmah Oil Company*. [in English] London: Heinemann., 1988.

¹⁷ Bamberg, J. H. *The History of the British Petroleum Company*. [in English] Cambridge: Cambridge University Press, 1995.

Ferrier, Ronald W., and James H. Bamberg. *The History of the British Petroleum Company*. [in English] Reprinted. ed. Cambridge: Cambridge University Press, 2000.

¹⁸ Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power*. [in English] Free Press trade paperback edition. ed. New York: Free Press, 2008.

1.2.2 Oil and Global Modern Architecture & Built Environment

In recent years, the spatial practices of oil within the realms of architectural and urban modernity have garnered significant attention in the flourishing field of scientific research. This burgeoning scholarship profoundly emphasises unravelling the intricate and multifaceted processes underlying the development of oil-infused spaces.¹⁹

¹⁹ Hein, Carola. *Oil Spaces : Exploring the Global Petroleumscape*. [in English] New York: Routledge, Taylor & Francis Group, 2022.

Fuccaro, Nelida. *Histories of Oil and Urban Modernity in the Middle East*. [in English] Comparative Studies of South Asia, Africa and the Middle East ; 33,1. Durham, NC: Duke Univ. Press, 2013.

Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power*. [in English] Free Press trade paperback edition. ed. New York: Free Press, 2008.

Al-Nakib, Farah. *Kuwait Transformed : A History of Oil and Urban Life*. Stanford, California: Stanford University Press, 2016. doi:10.1515/9780804798570.

Alissa, Reem I. R. "Building for Oil : Corporate Colonialism, Nationalism and Urban Modernity in Ahmadi, 1946-1992." 2012.

Michael J. Watts, "Crude Politics: Life and Death on the Nigerian Oil Fields," *Niger Delta Economics of Violence Working Papers* 25 (2009): 1–27;

Janet Stewart, "Making Globalization Visible? The Oil Assemblage, the Work of Sociology and the Work of Art," *Cultural Sociology* 7, no. 3 (2013): 363–84.

Hindelang, Laura, and Nationalfonds Schweizerischer. *Iridescent Kuwait : Petro-Modernity and Urban Visual Culture since the Mid-Twentieth Century*. Berlin ;; De Gruyter, 2021. doi:10.1515/9783110714739.

Amin, Galal A. *The Modernization of Poverty a Study in the Political Economy of Growth in Nine Arab Countries, 1945-1970*. Boston: BRILL, 2022.

Ameringer, Charles D. "The Enduring Legacy: Oil, Culture, and Society in Venezuela - by Miguel Tinker Salas." *Historian* 73, no. 2 (2011).

Fuccaro, Nelida. "Shaping the Urban Life of Oil in Bahrain: Consumerism, Leisure, and Public Communication in Manama and in the Oil Camps, 1932-1960s." *Comparative Studies of South Asia, Africa and the Middle East* 33, no. 1 (2013): 59-74.

Alissa, Reem I. R. "Building for Oil : Corporate Colonialism, Nationalism and Urban Modernity in Ahmadi, 1946-1992." 2012.

al-Nakib, F. "Kuwait's Modern Spectacle: Oil Wealth and the Making of a New Capital City, 1950-90." 2013.

Nelida Fuccaro²⁰, a distinguished historian specialising in modern Middle Eastern history, has made substantial contributions to this field through her extensive work and publications. Her books, including “Histories of City and State in the Persian Gulf: Manama Since 1800,”²¹ “Shaping the Urban Life of Oil in Bahrain” (2013)²², and “Histories of Oil and Urban Modernity in the Middle East (2013),” stand as exemplary works within Persian Gulf studies. Fuccaro’s exploration of oil modernity stands as a noteworthy highlight among recent scholarship. Fuccaro’s research delves deeply into the complex dynamics of early oil cities in South Asia, Africa, and the Middle East, employing a multidisciplinary approach. She astutely identifies urban environments as pivotal drivers of oil’s transformative influence and the subsequent reconfiguration of societal structures within oil-based societies. Her work sheds light on the intricate interplay between oil policies, the influential role of place in the urban landscape, and the transformative processes that have often been obscured within the literature on Middle Eastern oil development.

One of Fuccaro’s notable contributions is her use of public and private spaces, ranging from port facilities and markets to farms and neighbourhoods, as a template for mapping the political, religious, and commercial life within these oil cities. She skilfully traces the development of a public sphere characterised by contestation and conflict, offering a nuanced understanding of the social and cultural outcomes of the oil boom. Her exploration reveals oil company towns as heralds of new leisure and consumer culture, impacting both expatriates and local citizens. Fuccaro’s work also draws attention to the continuity and similarities between early petroleum modernity and subsequent developments associated with Western Imperialism, colonialism, and industrial urbanism in the post-World War II period. This historical analysis plays a crucial role in her examination of oil company towns established by foreign multinational oil companies.²³

²⁰ Ph.D., is a historian and professor of modern Middle Eastern history at the New York University Abu Dhabi. She has worked and published extensively on the History of the Modern Iraqi State, with a particular focus on the Yazidi, and Kurdish populations of the country. Books: *Histories of City and State in the Persian Gulf: Manama Since 1800*

²¹ Fuccaro, Nelida. *Histories of City and State in the Persian Gulf : Manama since 1800*. Cambridge ;; Cambridge University Press, 2009.

²² Fuccaro, Nelida. “Shaping the Urban Life of Oil in Bahrain: Consumerism, Leisure, and Public Communication in Manama and in the Oil Camps, 1932-1960s.” *Comparative Studies of South Asia, Africa and the Middle East* 33, no. 1 (2013): 59-74.

²³ Watenpaugh, Keith David. *Being Modern in the Middle East: Revolution, Nationalism, Colonialism, and the Arab Middle Class*. Princeton, NJ: Princeton University Press, 2014. doi:10.1515/9781400866663. <https://doi.org/10.1515/9781400866663>
<https://www.degruyter.com/doc/cover/9781400866663.jpg>

Furthermore, Fuccaro underscores the importance of investigating the history of oil cities in comprehending the intricate relationships between modern planning, environmental changes, and social developments in connection with the global “macro-politics” of oil. She posits that uncovering the urban histories of oil landscapes, even those that no longer exist, addresses contemporary concerns regarding the public narratives and cultural heritage of the countries involved. Fuccaro’s scholarly endeavours offer a rich tapestry of insights into the complex interplay of oil, space, and modernity, making her work a vital cornerstone in the study of oil-infused urban environments and their profound impact on societies and cultures.

Alissa Reem IR’s dissertation, “Building for Oil: Corporate Colonialism, Nationalism and Urban Modernity in Kuwait, 1946-1992” (2012)²⁴, stands as a significant contribution in shedding light on the multifaceted role of oil in shaping political, social, and cultural transformations. Within her work, Reem IR introduces the concept of the oil company town as a groundbreaking architectural and urban planning prototype, particularly understudied in the Middle East context. Focusing on the Kuwait Oil Company (KOC) town of Ahmadi, her research delves into the realm of oil colonial urban modernity. She meticulously unravels the racist development patterns and socio-spatial engineering that defined employees’ living spaces and lifestyles within these oil-dominated landscapes.

Farah al-Nakib’s work, “Kuwait’s Modern Spectacle” (2013)²⁵, offers a distinctive perspective on Kuwait’s oil-driven urbanisation during the initial three decades of oil exploration. Al-Nakib characterises this transformation as more of a “spectacle” than a lived reality, emphasising the rapid and unexpected consequences of oil wealth. She challenges the notion of the rational city and its mega-urban projects as desired by the state, highlighting the paradoxes in how the city appeared versus how it functioned in practice. Her inquiry centres on the visual aspects of urban development and the implications of Kuwait’s newfound prosperity. Laura Hindelang, too, explores Kuwait’s modernisation facilitated by oil through a lens focused on infrastructure expansion during the 1950s to 1970s.²⁶ Her research underscores the significance of these infrastructural developments in the broader context of Kuwait’s transformation into an oil-dependent nation. Incorporating these perspectives into this research enriches our analysis of the petroleumscape in Ahwaz, providing a broader comparative framework and nuanced understanding of the interplay between oil, space, and urban modernity.

²⁴ Alissa, Reem I. R. “Building for Oil : Corporate Colonialism, Nationalism and Urban Modernity in Ahmadi, 1946-1992.” 2012.

²⁵ Al-Nakib, Farah. *Kuwait Transformed : A History of Oil and Urban Life*. Stanford, California: Stanford University Press, 2016. doi:10.1515/9780804798570.

²⁶ Hindelang, Laura, and Nationalfonds Schweizerischer. *Iridescent Kuwait : Petro-Modernity and Urban Visual Culture since the Mid-Twentieth Century*. Berlin :: De Gruyter, 2021. doi:10.1515/9783110714739.

In “The Modernization of Poverty, a Study in the Political Economy of Growth in Nine Arab Countries, 1945-1970” (1974) ²⁷, Galal A. Amin delves into the intricate relationship between economic growth driven by oil revenue and the ensuing imbalances within traditional or underdeveloped societies. Amin’s work draws attention to the global influx of masses into oil-rich fields, characterising oil cities as simultaneously “under-industrialised” and “over-urbanised.” He underscores the dual nature of these cities as both consumers and producers and highlights the inherent conflict between modern Western urban development and traditional local forms. His conclusion, emphasising the strong similarities among different oil cities, underscores the broader trends in oil-driven urbanisation across Arab countries.

Together, these scholars contribute to a nuanced understanding of the multifaceted impacts of oil on urbanisation, architecture, and societal transformations within the Middle East, offering critical insights into the complexities of oil-driven modernity and its far-reaching consequences. Within these international case studies, the contributors collectively delve into the intricate role of the oil industry in shaping and organising the built environment, with a particular emphasis on local-scale dynamics. As Mortaheb aptly asserts, the core focus of these studies revolves around the exploration of socio-spatial characteristics specific to oil company towns and the unique ways of life that emerge within these distinctive urban landscapes.²⁸

Through their research, these scholars illuminate the profound influence of the oil sector on not only the physical infrastructure but also the social fabric of these localities. By examining the intricate interplay between oil, architecture, urban planning, and inhabitants’ daily lives, these studies provide invaluable insights into the multifaceted relationships that define these oil-dominated environments. The emphasis on local-scale dynamics underscores the need for a nuanced understanding of how global economic forces, such as the oil industry, manifest at the grassroots level. Collectively, these case studies contribute to a richer comprehension of the socio-spatial complexities that characterise oil-driven urbanisation and the diverse ways in which different regions respond to the transformative impacts of the oil industry.

²⁷ Amin, Galal A. *The Modernization of Poverty a Study in the Political Economy of Growth in Nine Arab Countries, 1945-1970*. Boston: BRILL, 2022.

²⁸ “These studies mainly examine the socio-spatial characteristics of oil company towns and the distinctive ways of life that they forge.” Source: “Building the petro-polis: oil capitalism, imperialism, and the making of Abadan, 1908-1933 ” by Reza Mortaheb. New Jersey Institute of Technology. 5-31-2020

In the realm of comprehending the intricate tapestry that interconnects various oil-related spaces and their nuanced cross-cultural exchanges, Carola Hein introduces the notion of a “global palimpsestic petroleumscape”.²⁹ This conceptual framework delineates a multifaceted physical and social landscape characterised by its stratified nature. It thrives on a perpetual cycle, perpetuating the expansion of oil-related domains by facilitating a continuous circulation that intertwines the interests of various stakeholders, the manifold layers of oil infrastructure within spatial practices, and the production of essential facets of modern existence, coupled with the responses generated by these facets. In essence, Hein forges a profound linkage between these spaces through the emblematic presence of petroleum-related infrastructure. She contends that while the diverse strata composing the spatial dimensions of oil production exhibit distinct characteristics pertaining to their respective locales, they encompass disparities in land usage, scale, functionality, typology, urban and architectural morphology, and financial ramifications, they remain integral components of a unified spatial system—the “petroleumscape.”

Hein posits a compelling assertion: “Petroleum has undergone a profound metamorphosis of spaces, impacting their portrayal and fundamentally altering our global way of life.” Her conceptualisation of the “petroleumscape” harmonises with Henri Lefebvre’s profound argument that space is not only a social construct but also a tool subject to political appropriation.³⁰ In his seminal work, “The Production of Space,” Lefebvre expounds upon the multifaceted nature of space, contending that it serves not only as a medium of production but also as a mechanism for control and, consequently, domination and the exercise of power.³¹ While Lefebvre weaves a complex tapestry of ideas, Hein’s focus narrows down to the realm of spatial practices intricately linked to petroleum, encompassing facets like production, administration, retail, and consumption. She delves into the representations of these spaces intrinsically tied to the oil industry. In her exploration, Hein traverses the intricate web of derivatives stemming from petroleum’s influence across global territories. Her objective is to elucidate how the labyrinthine oil industry has played a pivotal role in interconnecting various oil-related spaces and transcending national boundaries. Simultaneously, it has orchestrated transformative changes within the

²⁹ Hein, C. M.. “Between Oil and Water. The Logistical Petroleumscape.” *The Petropolis of Tomorrow*. 2013.

³⁰ Lefebvre, Henri, and Kanishka Goonewardena. *Space, Difference, Everyday Life : Reading Henri Lefebvre*. [in English] New York: Routledge, 2008.

³¹ Lefebvre, Henri. ‘*The Everyday and Everydayness*’. Julie Mehretu / Henri Lefebvre. *Afterall Central Saint Martins University of the Arts London*. [in English] Two Works Series 3. Köln: Walther König (Verlag), 2021.

built environment—transformations that often remain concealed from plain view or insufficiently acknowledged.³²

In her comprehensive analysis of the oil industry's influence on the built environment, Hein embarks on a journey that traverses cities worldwide, all interlinked by the profound impact of oil. The concept of the “petroleumscape” does not merely serve as a bridge between architecture and the built environment in the context of global cross-cultural exchanges. It also acts as a conduit connecting tangible locations where oil exerts its physical and financial presence. In varying epochs marked by distinct political landscapes, the actors within the oil industry strategically harnessed architectural and urban spaces to project a positive image within society. This involved substantial investments in a diverse array of structures encompassing healthcare, education, cultural institutions, and social welfare initiatives. Such investments were wielded as a means to secure social or political legitimacy. Hein astutely concludes that these endeavours facilitated societal transformations and laid the foundations for cultural modernity. This modernity was constructed through the physical spaces themselves and the meticulously crafted mental landscapes that resonated harmoniously with the ongoing oil-driven metamorphosis of cities and landscapes across the globe.

Hein's meticulous examination of the petroleum industry reveals a nuanced division into various intervention areas, namely the upstream, midstream, and downstream activities. Conventional approaches often dissect these spaces, studying them in isolation with a focus on their distinct functional contexts, typologies, and appearances. The upstream sector encompasses sites dedicated to prospecting and extraction. Typically situated in areas removed from urbanisation, these sites often lack pre-existing modern infrastructures. In contrast, the midstream sector revolves around transport infrastructures designed to facilitate the movement of both people and oil. Lastly, the downstream sector encompasses a wide array of functions, including refineries, marketing, and oil-related activities pertaining to its usage.

Hein advances the argument that while these interconnected sectors of the petroleum industry share standard functions and typologies on a global scale, their distinctive qualities emerge in how they interact with local requirements and customs. She underscores that collectively, these layers encompassing the industrial, administrative, retail, and infrastructural dimensions of the petroleumscape constitute a unified global landscape. She emphasises the crucial significance of oil flows in the development of the petroleumscape, offering a concrete framework for conducting a

³² *Oil Spaces, Exploring the Global Petroleumscape*, Edited By Carola Hein eBook20221 Edition. New York, NY : Routledge, 2022.

meticulous global historical analysis. Ultimately, through her examination of how oil has influenced the design and utilisation of our built environment, she underscores the need to comprehend the opportunities and obstacles of a post-oil era. The conceptualisation of oil spaces serves as a bridge that connects socio-political science with the fields of architecture and urban planning, using historical analysis as a foundation for future design considerations. In pursuit of enhanced productivity within the oil industry, the key players undertook the construction of an ancillary petroleumscape, encompassing a diverse array of structures, including housing, recreational amenities, and, in some instances, entire urban centres.³³

1.2.3 Oil and Global Policy of Urban Planning

The oil industry has maintained a substantial association with political strategies, which often lent support to its endeavours in environmental expansion. Scholars on a global scale have explored this phenomenon, often referred to as the “petro-state,” in various international contexts and the accompanying geopolitics related to oil. This concept encompasses two overarching policy dimensions: the global pursuit of oil resources and the subsequent national pride of oil-producing nations.³⁴

Li Hou conducts a comprehensive examination of Daqing’s state-backed industrialisation strategies during the 1960s and 1970s, underscoring the pivotal role played by governmental policies in shaping the development of the region. In the context of the Middle East, the initial phases of petroleumscape expansion witnessed the implementation of colonial and imperial approaches, followed by the emergence of postcolonial architectural practices as a response to colonial legacies.

³³ The city of Abadan in southern Iran is one example. When oil was found in southern Iran, the Anglo-Persian Oil Company (later BP) designed Abadan, a company town between 1910 and 1951.

³⁴ Hou, Li. *Building for Oil : Daqing and the Formation of the Chinese Socialist State*. [in English] Harvard-Yenching Institute Monograph Series; 110. Cambridge (Massachusetts): Harvard University Asia Centre, 2018. Moore-Gilbert, B. J., Gareth Stanton, and Willy Maley. *Postcolonial Criticism*. [in English] Longman Critical Readers. London :: Longman, 1997.

Beinart, William, and Lotte Hughes. *Environment and Empire*. Oxford :: Oxford University Press, 2007.

Vitalis, Robert. *America’s Kingdom: Mythmaking on the Saudi Oil Frontier*. [in English] Stanford Studies in Middle Eastern and Islamic Societies and Cultures. Stanford, Calif: Stanford University Press, 2007.

Michael Watts, “Oil Talk,” *Development and Change*, 44, Issue 4 (July 2013), p.1016

Mitchell, Timothy. *Carbon Democracy : Political Power in the Age of Oil*. [in English] First paperback edition ed. London: Verso, 2013.

Jones, Toby Craig. *Desert Kingdom: How Oil and Water Forged Modern Saudi Arabia*. Cambridge, Mass.: Harvard University Press, 2010.

Santiago, Myrna I. *The Ecology of Oil : Environment, Labor, and the Mexican Revolution, 1900-1938*. [in English] Studies in Environment and History. Cambridge :: Cambridge University Press, 2006.

³⁵ Moore Gilbert suggests that colonialism manifests in various degrees, forms, and intertwined histories, leading to diverse manifestations of post-coloniality.³⁶

In their work “Environment and Empire,” scholars Beinart, William, and Lotte Hughes delve into the profound impact of oil on the expansion of Imperialism and colonialism within local societies.³⁷ They argue that oil was instrumental in the transformation of arid landscapes into fertile regions, fundamentally shaping British interventionist strategies. British Imperialism’s turn to oil at the dawn of the twentieth century led to the establishment of new informal colonial territories, redefining the geopolitical landscape. The authors highlight the unique outcomes that arose in oil-rich regions, particularly in the Middle East, as a result of this complex interplay between oil and colonialism. They emphasise the conversion of previously perceived ‘wastelands’ into valuable national resources and conclude that oil and colonialism were pivotal drivers of exploitation in the Middle East.³⁸

Robert Vitalis, in his insightful work “America’s Kingdom: Mythmaking on the Saudi Oil Frontier” (2007), draws attention to the striking parallels between Aramco and AIOC, particularly in the realm of welfare policies. These parallels are most evident in areas such as housing, wage structures, and educational initiatives.³⁹ In “Carbon Democracy” (2011), Timothy Mitchell offers a compelling analysis of how transnational oil corporations played a pivotal role in advancing the cause of democracy on a global scale. At the same time, these corporations maintained a firm grip on the oil industry, ensuring their continued dominance in the production and distribution of petroleum resources worldwide.⁴⁰ In “Desert Kingdom” (2010), Toby Jones undertakes a comprehensive exploration of the role of oil in shaping nation-building efforts, blending elements of environmental history with political economy. This work sheds light on how the oil industry has been intricately woven into the fabric of nation-building initiatives.⁴¹ Myrna I. Santiago’s “The Ecology of Oil” (2006) offers a thought-provoking examination of oil development in Mexico through the

³⁵ Hou, Li. *Building for Oil : Daqing and the Formation of the Chinese Socialist State*. [in English] Harvard-Yenching Institute Monograph Series ; 110. Cambridge (Massachusetts): Harvard University Asia Centre, 2018.

³⁶ Moore-Gilbert, B. J., Gareth Stanton, and Willy Maley. *Postcolonial Criticism*. [in English] Longman Critical Readers. London : Longman, 1997.

³⁷ Beinart, William, and Lotte Hughes. *Environment and Empire*. Oxford : Oxford University Press, 2007.

³⁸ Ibid.

³⁹ Vitalis, Robert. *America's Kingdom : Mythmaking on the Saudi Oil Frontier*. [in English] Stanford Studies in Middle Eastern and Islamic Societies and Cultures. Stanford, Calif: Stanford University Press, 2007.

⁴⁰ Mitchell, Timothy. *Carbon Democracy : Political Power in the Age of Oil*. [in English] First paperback edition ed. London: Verso, 2013.

⁴¹ Jones, Toby Craig. *Desert Kingdom : How Oil and Water Forged Modern Saudi Arabia*. Cambridge, Mass.: Harvard University Press, 2010.

lens of ecological history. Santiago delves into how the forces of oil capitalism have wrought transformative changes in the environment and society of oil-producing regions, providing valuable insights into the intricate relationship between human activity and ecological systems.⁴²

These scholarly works collectively illuminate the multifaceted relationship between oil and politics, highlighting the far-reaching impacts of the oil industry on both a global and local scale. They emphasise the importance of understanding the geopolitical dimensions of oil, its role in shaping political strategies, and its consequences for the built environment and society.

1.2.4 Oil and Territory

In the realm of understanding the intricate dynamics of globalisation and its sociological implications, Michael Watts has illuminated the critical nexus between oil and the territories it encompasses. His work underscores the intrinsic relationship between oil resources and the geographical spaces in which they are situated.⁴³ Both public and private actors, whether at the national or international level, have often exhibited conflicting approaches when engaging with oil spaces. Their primary objective has been to bolster or safeguard their authority over oil fields. To achieve this, extensive infrastructural developments were imperative, including the establishment of roadways, railways, pipelines, bridges, dams, and port facilities. Remarkably, these infrastructures were typically situated on land not owned or controlled by the oil companies. This arrangement posed significant challenges as local authorities could pose threats to oil operations, and international competitors could potentially ignite confrontations, whether in the form of actual warfare or diplomatic standoffs. Furthermore, following the postcolonial movements in the host nations, colonial oil companies faced the looming spectre of complete expropriation as the oil industry shifted towards nationalisation.

This paradigm shift in perspective prompted a renewed exploration of land ownership. Timothy Mitchell underscores the critical nature of securing territories

⁴² Santiago, Myrna I. *The Ecology of Oil : Environment, Labor, and the Mexican Revolution, 1900-1938*. [in English] Studies in Environment and History. Cambridge :: Cambridge University Press, 2006.

⁴³ Michael J. Watts, "Crude Politics: Life and Death on the Nigerian Oil Fields", *Niger Delta Economies of Violence Working Papers* 25 (2009), https://geog.berkeley.edu/ProjectsResources/ND%20Website/NigerDelta/WP/Watts_25.pdf (accessed 10 July 2017); Janet Stewart, "Making Globalization Visible? The Oil Assemblage, the Work of Sociology and the Work of Art", *Cultural Sociology*, 7, no. 3 (2013), 363–384.

and oil facilities.⁴⁴ In “The Political Economy of Land: Urban Development in an Oil Economy” (1985)⁴⁵, authored by Alan Gilbert and Patsy Healy, the characteristics of urban development are dissected within the context of property and development interests, as well as the state’s active involvement in the evolution of a prosperous oil-based economy. The authors highlight the intricate interplay between these factors and their influence on various indicators of urban development in a rapidly expanding oil-centric city. Their work seeks to substantiate the connections between the economy, society, and the state in terms of redirecting the economic surplus from “oil into construction and real estate,” the role of planning in guiding the urban growth process, and the pivotal role of oil wealth in enabling the state to allocate land and services.

In a similar vein, Mortaheb⁴⁶ underscores the dual role played by the Company, acting both as an employer and a landlord. His examination delves into the fundamental underpinnings of Company towns, where the Company was initially tasked with creating and subsequently overseeing its labour force’s residential areas. As the landlord, it exercised authority over housing allocations, medical and sanitation facilities, commercial establishments, recreational and social venues for workers, transportation systems, as well as vital urban infrastructure services such as water and energy. This approach aligns with Allen’s concept of “company paternalism” as a defining feature of these settlements, characterised by the Company’s provision of living spaces for its labour force.⁴⁷

Carola Hein has dedicated an entire chapter in her book, titled “Oil Spaces: Exploring the Global Petroleumscape,” to delve into this theme. She and Alan Lessoff have jointly examined a significant instance of spatial expansion driven by petroleum in North America, shedding light on the emergence of novel practices spanning from the 1850s to the 1950s. Ben de Vries, in his analysis, has intricately dissected the complex intersection between a nation’s demand for petroleum and the colonial development of petroleum infrastructure, focusing on the case of Indonesia in the 1940s. Stephen Ramos, in his research, has delved into the interwoven and dynamic processes underlying British imperial ambitions and national territoriality

⁴⁴ Mitchell, Timothy. *Carbon Democracy : Political Power in the Age of Oil*. [in English] First paperback edition ed. London: Verso, 2013.

⁴⁵ The political economy of land : urban development in an oil economy, Alan Gilbert 1944-Patsy Healey, 1985. Aldershot, Hants ; Brookfield, Vt., U.S.A. : Gower, 1985.

⁴⁶ “Building the petro-polis: oil capitalism, imperialism, and the making of Abadan, 1908-1933 “ by Reza Mortaheb. New Jersey Institute of Technology. 5-31-2020.

⁴⁷ Allen, James B. *The Company Town in the American West*. [in English] [1st ed.]. ed. Norman: University of Oklahoma Press, 1966.

and sovereignty in the Persian Gulf region. This comprehensive examination spans from the pre-oil era through the stages of oil exploration, discovery, and consolidation of the oil industry, extending all the way to the 1970s. His argument centres on the multifaceted layering of territorial significance, which simultaneously gave rise to discrepancies between British imperial objectives and the local territorial and national legal frameworks. In another insightful analysis, Giulia Scotto investigates a facet of the global scope of the petroleumscape, specifically exploring how Italy's federal hydrocarbon agency⁴⁸ shaped territories and influenced the lived experiences in postcolonial Africa. Her research focuses on Ghana, Tanzania, and Zambia during the 1960s.

These research endeavours collectively illuminate the multifaceted interplay between oil, territory, and the built environment, providing valuable insights into the geopolitical, economic, and sociological dimensions of the petroleumscape's development on both local and global scales.

1.2.5 Oil and Global Modernity

At a broad and encompassing level, it is possible to argue that the construction of Western modernity finds expression and manifestation in the specific contexts of oil fields, each characterised by its unique approach to modernisation.⁴⁹ Ryszard Kapuściński's book "Shah of Shahs" (1982)⁵⁰ vividly portrays the cultural and spatial dynamics that unfolded during the Iranian oil boom era. Drawing inspiration from Kapuściński's pioneering work, other scholars have delved into the intricate landscape of oil and examined how the oil industry symbolises and propels modern developments.⁵¹ For instance, Miguel Tinker Salas, in his book "The Enduring Legacy" (2009), underscores the pivotal role played by oil companies as agents of

⁴⁸ ENI (Ente Nazionale Idrocarburi)

⁴⁹ Moore-Gilbert, B. J., Gareth Stanton, and Willy Maley. *Postcolonial Criticism*. [in English] Longman Critical Readers. London :: Longman, 1997.

⁵⁰ Kapuściński, Ryszard. *Shah of Shahs*. [in English] Modern Classics Series. London: Penguin, 2006.

⁵¹ Tinker Salas, Miguel. *The Enduring Legacy : Oil, Culture, and Society in Venezuela*. [in English] American Encounters/Global Interactions. Durham [NC]: Duke University Press, 2009.

Gartman, David. "Three Ages of the Automobile: The Cultural Logics of the Car." *Theory, Culture & Society* 21, no. 4/5 (2004): 169-95.

Apter, Andrew H. *The Pan-African Nation : Oil and the Spectacle of Culture in Nigeria*. Chicago: University of Chicago Press, 2005.

modernisation.⁵² Through their activities, these companies have not only shaped the economic and political landscapes but have also left an enduring imprint on the social and cultural fabric of the regions where they operate. This perspective highlights the interconnectedness between the global aspirations of Western modernity and the localised manifestations of modernisation in oil-rich areas.

In essence, these studies illuminate how the quest for oil resources and the development of the oil industry have been integral components of the broader narrative of modernity, with each oil field presenting a unique story of transformation and adaptation within the context of global modernisation.

1.2.6 Oil and Modern Culture

Another burgeoning field of research that has garnered increasing attention revolves around the sociocultural impacts of oil within oil-based cities, particularly within the realms of humanistic academia. These emerging scholarly endeavours within socio-spatial planning and the architectural characteristics of company towns extend beyond the formal analysis of spatial configurations and delve into the fundamental forces that shape these environments. These forces encompass social ideologies, contextual cultures, economic rationales, and the intricate web of multinational politics.⁵³

⁵² Tinker Salas, Miguel. *The Enduring Legacy : Oil, Culture, and Society in Venezuela*. [in English] American Encounters/Global Interactions. Durham [NC]: Duke University Press, 2009.

⁵³ Barrett, Ross, and Daniel Worden. *Oil Culture*. Minneapolis, MN: University of Minnesota Press, 2014. Porteous, J. Douglas. "Social Class in Atacama Company Towns*." *Annals of the Association of American Geographers* 64, no. 3 (1974): 409-17.

Dinius, Oliver J., and Angela Vergara. *Company Towns in the Americas : Landscape, Power, and Working-Class Communities*. Athens: University of Georgia Press, 2011.

Borges, Marcelo J., and Susana B. Torres. *Company Towns : Labor, Space, and Power Relations across Time and Continents*. New York: Palgrave Macmillan, 2012.

Szeman, Imre. *On Petrocultures : Globalization, Culture, and Energy*. [in English] Energy and Society. First edition. ed. Morgantown: West Virginia University Press, 2019.

Harvey, David. *Social Justice and the City*. [in English] London: Edward Arnold, 1973.

Kapuściński, Ryszard. *Shah of Shahs*. [in English] Modern Classics Series. London: Penguin, 2006.

Black, Brian. *Petrolia : The Landscape of America's First Oil Boom*. Baltimore: Johns Hopkins University Press, 2000.

Coronil, Fernando. *The Magical State : Nature, Money, and Modernity in Venezuela*. [in English] Chicago: University of Chicago Press, 1997.

Tinker Salas, Miguel. *The Enduring Legacy : Oil, Culture, and Society in Venezuela*. [in English] American Encounters/Global Interactions. Durham [NC]: Duke University Press, 2009.

Gartman, David. "Three Ages of the Automobile: The Cultural Logics of the Car." *Theory, Culture & Society* 21, no. 4/5 (2004): 169-95.

Imre Szeman introduces the concept of “Petrocultures” as a novel research cluster dedicated to the exploration of the sociocultural dimensions of oil and energy in our contemporary world.⁵⁴ Collaborating with Caleb Wellum, they delve into the critical role that energy, extending beyond petroleum alone, plays in our lives and everyday experiences. Their work underscores the importance of investigating the enigmatic spaces associated with oil and underscores the pervasive presence of petroleum in culture and aesthetics.⁵⁵

This burgeoning field of Petrocultures delves into the profound ways in which oil shapes not only the physical landscapes of oil-rich regions but also the cultural, social, and artistic landscapes, offering fresh perspectives on the intricate interplay between energy, culture, and human existence in the modern world.

1.2.7 Global Exchanges and Architecture

The intersection between oil-driven modernism and the broader phenomenon of globalisation has captivated the interest of scholars specialising in urban planning, architecture, and history. The initial phases of architectural exchanges propelled by the oil industry are traced back to Colonial and Imperial endeavours and their corresponding urban planning strategies. The expansion of colonial powers into foreign territories, driven by the pursuit of new oil resources, had a profound impact on the urban layouts of these regions, which played a pivotal role in advancing Imperialistic agendas. The body of literature dedicated to examining the context of British Imperialism and colonial developments, particularly their influence on urban forms and subsequent repercussions, is extensive and multifaceted. These studies engage in a critical revaluation of the constructed image of colonial cities, delving into both British representations and the societal and physical dimensions of modernisation. Additionally, a considerable body of historical research exists that explores architecture and urban planning through the lens of postcolonial theories.⁵⁶

⁵⁴ Szeman, I. “The Cultural Politics of Oil: On Lessons of Darkness and Black Sea Files.” 2010. Szeman, I. and D. Boyer. *Energy humanities : an anthology*. Baltimore :, Johns Hopkins University Press, 2017. Szeman, Imre. “System Failure: Oil, Futurity, and the Anticipation of Disaster.” *South Atlantic Quarterly* 106, no. 4 (2007): 805-23.

⁵⁵ Barrett, Ross, and Daniel Worden. *Oil Culture*. Minneapolis, MN: University of Minnesota Press, 2014.

⁵⁶ King, Anthony D. *Colonial Urban Development : Culture, Social Power and Environment*. London :; Routledge, 2007.
Hobsbawm, E. J. *The Age of Empire, 1875-1914*. [in English] 1st Vintage books ed. ed. New York: Vintage, 1989.
Harvey, David. *Social Justice and the City*. [in English] London: Edward Arnold, 1973.
Home, Robert. *Of Planting and Planning : The Making of British Colonial Cities*. Hoboken: Taylor and Francis, 2013.

In his seminal work “Colonial Urban Development” (1976)⁵⁷, Anthony D. King delves into the multifaceted impacts of British colonialism, namely culture, industry, and power organisation, on the process of Imperial urbanisation in overseas territories. King’s perspective revolves around the idea that the colonial urban form emerged from a dynamic interplay between the Western impetus toward industrialisation and the pre-industrial sociocultural fabric of local societies. The result was what he terms the “colonial city,” characterised by a metropolitan space marked by segregated communities with distinct physical divisions among ethnic and sociocultural groups.⁵⁸

In his later work, “The Bungalow” (1995)⁵⁹, King delves into one of the most significant global products of colonialism, the bungalow-style housing, which proliferated across the world while carrying the same socio-spatial message of ethnic division. Robert K. Home, in “Of Planting and Planning” (1997)⁶⁰, scrutinises the policies that underpinned the creation of colonial cities, shedding light on aspects such as zoning and racial segregation within the urban context. A. J. Christopher’s research, “Urban Segregation Levels in the British Overseas Empire and its Successors in the Twentieth Century” (1992)⁶¹, delves into extreme and intricate examples of rigid structural segregation through case studies in South Africa, offering a nuanced perspective on the complexities of urban segregation within the context of the British Empire and its postcolonial successors.

Chattopadhyay, Swati. *Representing Calcutta : Modernity, Nationalism, and the Colonial Uncanny*. [in English] Asia’s Great Cities. London :: Routledge, 2005.

Glover, William J. *Making Lahore Modern : Constructing and Imagining a Colonial City*. Minneapolis: University of Minnesota Press, 2008.

Legg, Stephen. *Spaces of Colonialism : Delhi’s Urban Governmentalities*. Oxford: John Wiley & Sons, 2008.

⁵⁷ King, Anthony D. *Colonial Urban Development : Culture, Social Power and Environment*. London :: Routledge, 2007.

Stebbins, H. Lyman, and University of Chicago. “British Consuls and “Local” Imperialism in Iran, 1889–1921.” 2009.

⁵⁸ Watenpugh, Keith David. *Being Modern in the Middle East: Revolution, Nationalism, Colonialism, and the Arab Middle Class*. Princeton, NJ: Princeton University Press, 2014. doi:10.1515/9781400866663.

<https://doi.org/10.1515/9781400866663>

<https://www.degruyter.com/doc/cover/9781400866663.jpg>

<http://www.degruyter.com/doc/cover/9781400866663.jpg>.

⁵⁹ King, Anthony D. *The Bungalow : The Production of a Global Culture*. [in English] London :: Routledge & Kegan Paul, 1984.

⁶⁰ Home, Robert. *Of Planting and Planning : The Making of British Colonial Cities*. Hoboken: Taylor and Francis, 2013.

⁶¹ Christopher, A. J. “Urban Segregation Levels in the British Overseas Empire and Its Successors, in the Twentieth Century.” *Transactions of the Institute of British Geographers* 17, no. 1. 1992, pp 95–107.

In Felipe Hernández's insightful work, "Bhabha for Architects" (2010)⁶², the focus is on the prominent Postcolonial theorist Homi K. Bhabha and his seminal book "The Location of Culture" (1994)⁶³. Hernández unveils how Bhabha's theories significantly contribute to the study of contemporary architecture within colonial, Postcolonial, and broader contexts. Bhabha's analysis, particularly his exploration of the concepts of hybridity and hybridisation, offers alternative methodologies for architectural research. These methodologies bridge the study of architectural structures with a more encompassing spectrum of cultural, political, and social dimensions inherent in their creation.⁶⁴

The notion of hybridity, as elucidated by Bhabha, serves as a crucial link between architecture and the political discourses and complexities of colonial actors. It defines the modes through which modern spaces are appropriated and constructed as cultural artefacts.⁶⁵ In essence, Bhabha's framework underscores how architects become deeply entwined with the structures of sociocultural and political hegemonies in their work.⁶⁶ This perspective becomes even more pertinent in response to the dynamic interplay of cultural and technological transformations. In "Architecture and Identity," Chris Abel dedicates an entire chapter titled "Living in a Hybrid World" to the examination of architectural hybridity. This underscores the significance of the concept within the realm of architectural discourse. Furthermore, in "A Global History of Architecture", Francis D. K. Ching delves into topics such as "The Bungalow" and the "Garden City Movement" as central typologies within the context of British colonial architecture. This comprehensive exploration further enriches our understanding of the architectural landscape shaped by colonial influences.⁶⁷

The concept of "formality" within the context of Imperialism and Colonialism has been a significant subject of discussion since as early as 1953 when scholars J. Gallagher and R. Robinson began to examine it.⁶⁸ Their work aimed to uncover the multifaceted informal mechanisms at play within the activities of imperialist nations

⁶² Hernández, Felipe. *Bhabha for Architects*. London :: Routledge, 2010.

⁶³ Bhabha, Homi K. *The Location of Culture*. [in English] London :: Routledge, 1994.

⁶⁴ Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, London: Routledge, 2010. P 23

⁶⁵ Ibid. P96

⁶⁶ Bhabha for Architects . Bhabha lays out his ideas about hybridity in an article entitled "Signs Taken for Wonders: Questions of Ambivalence and Authority under a tree outside Delhi, May 1817", which was first published in Critical Enquiry in 1985 and subsequently included as a chapter in the book " the Location of Culture .1994. p 60

⁶⁷ Ching, Francis D. K. *A Global History of Architecture*. Newark: John Wiley & Sons, Incorporated, 2017.

⁶⁸ Gallagher, J., Robinson, R., *The Imperialism of Free Trade* , The Economic History Review, 1953.

on a global scale.⁶⁹ This research shed light on the complex and often concealed instructions that governed the actions of these nations across diverse territories and regions.⁷⁰

1.2.8 Oil and Global Architectural Exchanges

A concurrent exploration of source materials pertaining to colonial interactions and modernisation within Middle Eastern societies is illuminated in Deniz Kandiyoti's body of work. Her writings delve into the intricate web of colonial encounters and modernisation, uncovering both substantial similarities and crucial distinctions across different Middle Eastern regions. Through her scholarship, Kandiyoti offers valuable insights into the complex dynamics of colonialism and modernisation that have shaped the Middle East.⁷¹ In her scholarly work, she has thoroughly examined the impacts of global markets and transnational forces within the context of postcolonial nationalism. Her analyses encompass the multifaceted struggles that unfold over resources and legitimacy, shedding light on the intricate interplay between local and global dynamics in postcolonial settings.⁷²

Marian Kent's book, titled "Oil and Empire: British Policy and Mesopotamian Oil 1900-1920" and published in 1976, offers a comprehensive exploration of the British Government's political endeavours aimed at securing and preserving oil supplies in Iran. The objective behind these efforts was twofold: to bolster the British economy and to ensure a reliable source of oil for military purposes. Kent's work delves into the complex political landscape of the early 20th century, shedding light on the strategic importance of oil in the geopolitical calculations of the British Empire during that era.⁷³

⁶⁹ The informal, indirect rule, could be less hazardous but also vulnerable and not permanent ; Webster, Anthony, *Business and Empire: A Reassessment of the British Conquest of Burma in 1885*, *The Historical Journal*, vol. 43, (Dec. 2000), pp. 1003-1025

⁷⁰ Mathieu Gotteland, *What Is Informal Imperialism? Project: L'Allemagne et l'Autriche-Hongrie en Chine, 1895-1918 : Un impérialisme informel*. 2017.

⁷¹ Cole, Juan Ricardo, and Deniz Kandiyoti. "Nationalism and the Colonial Legacy in the Middle East and Central Asia : Introduction." [In English]. *International journal of Middle East studies*. 2002.

⁷² Deniz Kandiyoti "POST-COLONIALISM COMPARED: POTENTIALS AND LIMITATIONS IN THE MIDDLE EAST AND CENTRAL ASIA"

⁷³ Kent, Marian, Economics London School of, and Science Political. *Oil and Empire : British Policy and Mesopotamian Oil, 1900-1920*. [in English] London [etc.]: Macmillan [for] the London School of Economics and Political Science, 1976.

In his book “Oil and Development in the Middle East,” published in 1979, David G. Edens delves into the intertwined topics of wealth and development in the Middle East. He comprehensively analyses how the region’s vast oil wealth has shaped social and structural changes while examining the aspects of continuity in the Middle East. This work provides valuable insights into the complex relationship between oil resources and the development of Middle Eastern societies, shedding light on the economic, social, and political dynamics at play in the region. ⁷⁴

In his book “Town and Country in the Middle East,” published in 1992⁷⁵, Mohammad A. Chaichian provides a detailed analysis of the urban political economy and the process of dependent urbanisation in Iran. He identifies three key factors that have shaped this urbanisation: colonial domination, capitalist-commercial domination, and imperialist-industrial and practical domination. Chaichian also outlines three distinct phases in the spatial structure of urbanisation under colonialism within Iran’s colonised territory. These phases include the pre-colonial structure, which existed before the 1880s, followed by colonial penetration, initial concentration, and the beginnings of internal expansion that occurred between the 1880s and the 1920s. The third phase, colonial organisation and continued development unfolded from the 1920s through the 1960s. He argues that by the 1920s, the primary focus of British colonial policy in Iran was twofold: first, to exert control over the extraction and export of crude oil, and second, to facilitate Iran’s gradual integration into the global capitalist system as a potential market for colonial goods and commodities. This book sheds light on the complex historical processes that shaped urbanisation and socio-economic dynamics in Iran during the colonial period.

1.2.9 Oil & the Iranian built environment

Research on Iranian oil cities, their planning, and architecture is on the rise. While some of these interconnected cities in southern Iran have received attention, many remain understudied. A number of books and papers have focused on Abadan and Masjed-Soleyman, offering historical insights into the urban development and social transformations of these two cities. These works critically examine the significant

⁷⁴ Edens, David G. *Oil and Development in the Middle East*. [in English] Praeger Special Studies. New York :: Praeger, 1979.

⁷⁵ Chaichian, Mohammad A. *Town and Country in the Middle East : Iran and Egypt in the Transition to Globalization, 1800-1970*. [in English] Lanham, MD: Lexington Books, 2009.

role of oil in shaping the expansion of these cities.⁷⁶ “The History of Masjed-Soleyman” by Danesh Abbas Shahnai comprehensively explains the city’s history from ancient to contemporary times.⁷⁷

Mark Crinson’s works, “Abadan: Planning and Architecture under the Anglo-Iranian Oil Company” (1997)⁷⁸ and “Oil and Architecture” (2003)⁷⁹, delve into the impact of the oil industry and urbanisation in southwest Iran, particularly in Abadan, during the early 20th century when significant oil reserves were discovered. He provides an extensive examination of Abadan’s development from its inception up to the 1950s, with a focus on the housing and planning strategies adopted by the Anglo-Iranian Oil Company, guided by architect James M. Wilson. Crinson characterises Abadan as a colonial company town, where early development featured spacious bungalow compounds for British expatriate employees, utilitarian hut-like accommodations for local or Indian labourers, and a rapidly overcrowded ‘native town’ under local administration. The Company enlisted Wilson’s expertise to address the physical challenges stemming from Abadan’s growth between the World Wars and to mitigate pressures from both Iranian nationalists and the British Government. In the context of garden suburbs, Crinson explores a model that employs planning and housing design to symbolise ethnic and social harmony, portraying a discreet form of paternal benevolence by the company. However, this model proved inadequate for addressing Abadan’s complex issues and was soon overshadowed by political events that culminated in the Company’s expulsion from Iran in 1951.

In his book “Modern Architecture and the End of Empire” (2003), Mark Crinson explores the architecture of oil cities and delves into the experiences of Iranian architects working in these oil fields. One notable figure he discusses is Manucher

⁷⁶ Crinson, Mark. “Abadan: Planning and Architecture under the Anglo-Iranian Oil Company.” *Planning Perspectives* 12, no. 3 (1997); Damluji, M. “Documenting the Modern Oil City: Cinematic Urbanism in Anglo-Iranian’s Persian Story.” *Ars Orientalis* 42 Touraj Atabaki, “From ‘Amaleh (Labor) to Kargar (Worker): Recruitment, Work Discipline and Making of the Working Class in the Persian/Iranian Oil Industry,” *International Labor and Working-Class History* (2013).; Ehsani, Kaveh. “Social Engineering and the Contradictions of Modernization in Khuzestan’s Company Towns: A Look at Abadan and Masjed-Soleyman.” *International Review of Social History* 48, no. 3 (2003): 361-99; Lahsa’izadeh, ‘Abdol’ali. “Jame’eh Shenasi-Ye Abadan [the Sociology of Abadan].” Tehran: Kiyanmehr, 2006.

⁷⁷ Matthewson, T. M. (1989). “THE ARCHITECTURE OF OIL: THE COLONIAL REVIVAL IN BEAUMONT, TEXAS, 1902-1914.”

Menore, P. (2014). *Joyriding in Riyadh: Oil, Urbanism and Road Revolt*, New York: Cambridge University Press, 2014.

⁷⁸ Crinson, Mark. “Abadan: Planning and Architecture Under the Anglo-Iranian Oil Company.” *Planning Perspectives* 12, no. 3 .1997. pp 341–59.

⁷⁹ Crinson, Mark. *Modern Architecture and the End of Empire*. [in English] British Art and Visual Culture since 1750, New Readings. Aldershot, Hants, England :: Ashgate, 2003.

Farmanfarmaian, a Persian aristocrat who served as an engineer for the Anglo-Iranian Oil Company in Abadan. Crinson paints a vivid picture that evokes the ambience of an imperial setting, underscoring the complex interplay between Imperialism and the modernism associated with the oil industry. Crinson's central argument revolves around the idea that architecture, functioning as a tool of representation, serves as a driver for cultural, economic, socio-political, and spatial ideologies of empire. It plays a pivotal role in asserting control and influence over these domains.⁸⁰

In her dissertation titled “An Empire within the Empire?: The Towns of the Anglo-Iranian Oil Company and the British Model of Oil Colony,”⁸¹ Pauline Lavagne d'Ortigue embark on a quest to uncover the British urban enclaves within Iran. Her research revolves around the intricate web of cross-cultural interactions that unfolded within these towns, spanning social, architectural, and urban dimensions. D'Ortigue contends that the rapid evolution of industrial oil development in these areas intertwined the tenets of industrial logic and colonial culture. It culminated in establishing comprehensive urban infrastructures catering to British, Indian, and, inadvertently, Iranian employees. Her dissertation meticulously scrutinises the processes involved in the design, construction, administration, and daily life within these towns—a narrative brimming with both complexity and inherent conflicts.

In recent years, a growing body of research has delved into the initial decades of oil development from an urban perspective, shedding light on questions of modernity. One such scholar is Pamela Karimi, whose book “Domesticity and Consumer Culture in Iran: Interior Revolutions of the Modern Era” (2013)⁸² meticulously examines Iran's modern history through a dual lens: domesticity and consumer culture. Her research underscores the pivotal role of private life in shaping the social, economic, and political landscape of modern Iran. By exploring the interplay between local aspirations, foreign influences, and consumer culture in domestic architecture and interior design, Karimi provides invaluable insights into the multifaceted tapestry of Iran's intricate system of oil modernity. In addition to Karimi's work, Ryszard Kapuściński's “Shah of Shahs” (1982)⁸³ offers a vivid portrayal of the cultural

⁸⁰ Stone, Jeffrey C., and Transactions of the Institute of British Geographers. “Imperialism, Colonialism and Cartography.” *Published By: The Royal Geographical Society (with the Institute of British Geographers)* Vol. 13, No. 1 (1988), pp. 57-64 (8 pages) (1988).

⁸¹ Lavagne d'Ortigue, Pauline, Jean-François Gournay, and Gaule Université Charles de. «Un Empire Dans L'empire? : Les Villes De L'anglo Iranian Oil Company Et Le ModèLe Britannique De Colonie PéTrolIèRe.» [s.n.], 2007.

⁸² Karimi, Z. Pamela. *Domesticity and Consumer Culture in Iran : Interior Revolutions of the Modern Era*. London :: Routledge, 2013.

⁸³ Kapuściński, Ryszard. *Shah of Shahs*. [in English] Modern Classics Series. London: Penguin, 2006.

and spatial flourishing that characterised the Iranian oil boom era. Meanwhile, Mona Damluji's "The Oil City in Focus" (2013) ⁸⁴ delves into the documentary film "Persian Story" to unravel how the oil company harnessed this propaganda medium to present Abadan's urban landscape as a symbol of modern everyday life in Iran. These works collectively contribute to our understanding of the multifaceted relationship between oil, architecture, urban planning, and social change in Iranian oil cities, offering a rich historical perspective on the complexities of oil-driven modernisation in the region.

1.2.10 Oil-related international industries

Some archives and historical documents shed light on the complex web of international interests, economic influences, and political manoeuvring surrounding the history of oil in Iran. They reveal how various global powers, including the United Kingdom, Germany, and the United States, sought to secure access to Iran's oil resources and influence its economic and political landscape. These documents provide valuable insights into the historical context and motivations behind these countries' involvement in Iran's oil industry. ⁸⁵

⁸⁴ Damluji, Mona. "The Oil City in Focus: The Cinematic Spaces of Abadan in the Anglo-Iranian Oil Company's Persian Story." *Comparative Studies of South Asia, Africa and the Middle East* 33, no. 1. 2013. pp 75-88.

⁸⁵ Marsh, Steve. *Anglo-American Relations and Cold War Oil : Crisis in Iran*. [in English] Cold War History Series. New York: Palgrave Macmillan, 2003.

Petersen, Tore T. *The Middle East between the Great Powers : Anglo-American Conflict and Cooperation, 1952-7*. [in English] Houndmills, Basingstoke, Hampshire. New York: Macmillan Press ;St. Martin's Press, 2000.

Wilsey, Gregory S. "U.S.-Iranian Relations, 1941-1954 : American Restraint, the Anglo-American Alliance, and the Anglo-Iranian Oil Crisis." Dissertation, publisher not identified, 1991.

Jones, Geoffrey. *The History of the British Bank of the Middle East. 1. Banking and Empire in Iran*. [in English] The History of the British Bank of the Middle East ; / Geoffrey Jones ; 1. Cambridge: Cambridge Univ. Press, 1986.

Koyagi, Mikiya. *Iran in Motion : Mobility, Space, and the Trans-Iranian Railway*. Stanford, California: Stanford University Press, 2021.

Baker, Robert L., and Collection Mazal Holocaust. *Oil, Blood and Sand*. [in English] New York: D. Appleton-Century Co., 1942.

Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia*. [in English] Library of International Relations ; 66. London: I.B. Tauris, 2013.

Geoffrey Jones's "Banking and Empiring in Iran, the History of the British Bank of the Middle East (1986)" ⁸⁶ explores the role of the British Bank of the Middle East in Iran's economic development, particularly in the context of the evolving oil economy. It underscores the financial aspects of British involvement in Iran. Koyagi, M.'s "A Review of Mobilizing Iran: Experiences of the Trans-Iranian Railway, 1850–1950 (2015)" delves into the construction of the Trans-Iranian Railway and its infrastructures, highlighting the collaboration between international companies and the Iranian government in this significant project.⁸⁷ Robert L. Baker's "Oil, Blood, and Sand (1942)" examines Persia's economic relations with Germany and its implications, especially in the context of World War II and the pursuit of oil resources.⁸⁸ Khatib-Shahidi, R. A.'s "German Foreign Policy towards Iran Before World War II: Political Relations, Economic Influence, and the National Bank of Persia (2013)" explores the historical ties between Iran and Germany and how German involvement in Iran evolved in the interwar period, including its interest in Iran's oil resources.⁸⁹ Wm. Roger Louis's "The British Empire in the Middle East 1945–1951 (1984)" discusses the concerns of American anti-colonialism and the need for the British Government and the Anglo-Iranian Oil Company to address social and economic issues in Iran to prevent potential unrest in the region.⁹⁰ This highlights the broader geopolitical implications of oil in the Middle East. These archival sources provide a comprehensive view of the economic, political, and strategic factors that shaped the history of oil in Iran and the involvement of various nations and entities in the region's oil industry. They help us understand the intricate relationships between oil, geopolitics, and economic development in Iran and the broader Middle East.

⁸⁶ Jones, Geoffrey. *The History of the British Bank of the Middle East. 1. Banking and Empire in Iran*. [in English] The History of the British Bank of the Middle East ; / Geoffrey Jones ; 1. Cambridge: Cambridge Univ. Press, 1986.

⁸⁷ Koyagi, Mikiya. *Iran in Motion : Mobility, Space, and the Trans-Iranian Railway*. Stanford, California: Stanford University Press, 2021.

⁸⁸ Baker, Robert L., and Collection Mazal Holocaust. *Oil, Blood and Sand*. [in English] New York: D. Appleton-Century Co., 1942.

⁸⁹ Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia*. [in English] Library of International Relations ; 66. London: I.B. Tauris, 2013.

⁹⁰ Louis, William Roger. *The British Empire in the Middle East, 1945–1951 : Arab Nationalism, the United States, and Postwar Imperialism*. [in English] Oxford. New York: Clarendon Press ; Oxford University Press, 1984.

Studies focusing on the social aspects of oil spaces in Iran and the everyday lives of their citizens have been conducted, with Abadan often serving as a central point of investigation.⁹¹ These studies provide valuable insights into the social and urban aspects of Iranian oil cities, particularly Abadan, and shed light on the experiences of the workers and residents who lived in these oil-centric environments. They highlight the multifaceted nature of oil cities, their impact on urban development, and the challenges faced by the industrial working class.

Kaveh Ehsani, in his 2014 dissertation titled “The Social History of Labour in the Iranian Oil Industry: The Built Environment and the Making of the Industrial Working Class (1908-1941),”⁹² offers a comprehensive narrative of the urban social history surrounding the formation of an industrial working and wage labouring class in the southwest province of Khuzestan during the early 20th century. He explores how the social dynamics and built environment of oil cities in this region, influenced by both global and national forces, played a pivotal role in ushering the entire country into the era of modernity through the gateways of these cities. Ehsani primarily focuses on two key urban areas: Abadan, known for its refinery and port city, and the oil mining town of Masjed-Soleyman. He delves into the distinctive features of these cities, marked by their modern yet authoritarian structures. In his influential work titled “Social Engineering and the Contradiction of Modernization in Khuzestan’s Company

⁹¹ Ehsani, Kaveh. “The Social History of Labor in the Iranian Oil Industry: The Built Environment and the Making of the Industrial Working Class (1908-1941).” Universiteit Leiden, 2014.

Atabaki, Touraj, Elisabetta Bini, and Kaveh Ehsani. *Working for Oil : Comparative Social Histories of Labor in the Global Oil Industry*. Cham: Springer International Publishing, 2018. doi:10.1007/978-3-319-56445-6.

Ehsani, Kaveh, and Rasmus Christian Elling. “Abadan: The Rise and Demise of an Oil Metropolis.” *Middle East Report*, no. 287. 2018. pp 29-32.

Ehsani, Kaveh. “Pipeline Politics in Iran: Power and Property, Dispossession and Distribution.” *South Atlantic Quarterly* 116, no. 2. 201. pp 432-39.

Ehsani, Kaveh. “Social Engineering and the Contradictions of Modernization in Khuzestan’s Company Towns: A Look at Abadan and Masjed-Soleyman.” *International Review of Social History* 48, no. 3 (2003): 361-99.

Ehsani, Kaveh. “Disappearing the Workers: How Labor in the Oil Complex Has Been Made Invisible.” In *Working for Oil : Comparative Social Histories of Labor in the Global Oil Industry*, 11-34: Cham : Springer International Publishing : Palgrave Macmillan, 2018.

Atabaki, Touraj, and Ehsani Kaveh. “Oil and Beyond Expanding British Imperial Aspirations, Emerging Oil Capitalism, and the Challenge of Social Questions in the First World War.” Klardtext, 2014.

Elling, Rasmus Christian, and Kaveh Ehsani. “Abadan.” 2018.

Haghighi, Saied. “Sociology of life and building in company town”, Science Arena Publications Specialty Journal of Architecture and Construction, Vol. 1 (1): 2015. Pp 32-40.

“Disappearing the Workers: How Labor in the Oil Complex Has Been Made Invisible” , by Kaveh Ehsani, In “Working for Oil Comparative Social Histories of Labor in the Global Oil Industry,” Edited by Touraj Atabaki, Elisabetta Bini, Kaveh Ehsani (New York: Palgrave, 2018).

⁹² Ehsani, Kaveh. “The Social History of Labor in the Iranian Oil Industry: The Built Environment and the Making of the Industrial Working Class (1908-1941).” Universiteit Leiden, 2014.

Towns” (2003)⁹³, Ehsani provides critical insights into the stark contrasts that emerged as a result of the oil-driven modernization, particularly in terms of social interactions within urban spaces. Furthermore, in collaboration with Touraj Atabaki in the book “Working for Oil: Comparative Social Histories of Labor in the Global Oil Industry” (2018), Ehsani explores the concept of “conditional modernity” in the urban cultures of oil cities. They highlight how these cultures developed in a hybrid manner due to inherent contradictions between colonial powers and the colonized. The authors argue that the oil industry necessitated the dismantling of existing social structures within oil cities and the establishment of new environments tailored to the demands of oil capitalism. This perspective sheds light on the complex social and urban transformations brought about by the oil industry in Iran and beyond.⁹⁴

Touraj Atabaki’s 2013 article, titled “From ‘Amaleh (Labor) to Kargar (Worker): Recruitment, Work Discipline and Making of the Working Class in the Persian/Iranian Oil Industry,”⁹⁵ represents a valuable reexamination of the labour conditions and living circumstances of workers employed by the Anglo-Persian Oil Company (APOC) during the first half of the 20th century. Atabaki’s study provides fresh insights into the experiences of these workers and their significant contributions to the growth and development of the Iranian oil industry. His research sheds light on the transformation of labour practices and work discipline over time, ultimately resulting in the emergence of a distinct working-class known as “Kargar.” This work contributes to our understanding of the social and labour history associated with Iran’s oil industry during this pivotal period.⁹⁶

Rasmus Christian Elling, a Danish scholar with a focus on cross-cultural studies, has conducted an in-depth examination of Abadan’s social history, particularly the dynamics of labour discontent, instances of public violence, spatial and security politics, and the struggle for control between the Oil Company and oil workers. His research is encapsulated in “The World’s Biggest Refinery and the Second World

⁹³ Ehsani, Kaveh. “Social Engineering and the Contradictions of Modernization in Khuzestan’s Company Towns: A Look at Abadan and Masjed-Soleyman.” *International Review of Social History* 48, no. 3 2003. pp 361-99.

⁹⁴ Atabaki, Touraj, Elisabetta Bini, and Kaveh Ehsani. *Working for Oil : Comparative Social Histories of Labor in the Global Oil Industry*. Cham: Springer International Publishing, 2018. doi:10.1007/978-3-319-56445-6.

⁹⁵ Atabaki, Touraj. “From ‘ Amaleh (Labor) to Kargar (Worker): Recruitment, Work Discipline and Making of the Working Class in the Persian/Iranian Oil Industry*.” *International Labor and Working-Class History* 84 .2013. pp 159-75.

⁹⁶ “from ‘Amale (labour) to Kargar (worker) requirement work discipline and making of the working class in the Persian/Iranian oil Industry”

War: Khuzestan, Oil, and Security” (2013).⁹⁷ Furthermore, his involvement in the historical project titled “On Lines and Fences: Labour, Community, and Violence in an Oil City” (2015)⁹⁸ has provided further insights into these themes. Elling’s work underscores a previously overlooked aspect of urban discontent, which manifested as expressions of labour relations and ethnic disparities within the working-class neighbourhoods neighbouring Abadan. He explores the intricate relationship between collective violence and the urban landscape within the context of the oil city of Abadan. By shedding light on these narratives, Elling emphasizes the significance of revisiting the stories of Khuzestan’s oil cities, which were shaped by oil, expanded by oil, and at times threatened by oil. These narratives remind us that oil is not just a commodity but a force that shapes places, dreams, and memories, giving life to cities and leaving a lasting imprint on their identities.⁹⁹

These studies collectively contribute to a deeper understanding of the social, cultural, and urban dynamics of Iranian oil cities, highlighting the complex interactions between oil, labour, urbanization, and identity formation in these unique environments. They also underscore the lasting impact of oil on the communities and individuals who were part of these oil-centric urban landscapes.

1.2.12 Oil and Iranian Policy of Urban Planning

Observations regarding the existing publications on the history of oil’s political and economic aspects in Iran, particularly those related to the Anglo-Persian Oil Company (APOC),¹⁰⁰ expand on the following limitations:

⁹⁷ Elling, Rasmus Christian. “The World’s Biggest Refinery and the Second World War: Khuzestan, Oil and Security.” 2013.

Elling, Rasmus Christian, and Rowena Abdul Razak. “Oil, Labour and Empire: Abadan in WWII Occupied Iran.” *British Journal of Middle Eastern Studies* 50, no. 1. 2023. pp 142-59.

Elling, Rasmus Christian. “Abadan: Oil City Dreams and the Nostalgia for Past Futures in Iran.” 2015.

⁹⁸ Freitag, Ulrike, Nelida Fuccaro, Claudia Ghawli, Nora Lafi, and Rasmus Christian Elling. “On Lines and Fences: Labour, Community and Violence in an Oil City.” Berghahn Books, 2015.

⁹⁹ Elling, Rasmus Christian. “*Abadan: Oil City Dreams and the Nostalgia for Past Futures in Iran*.” 2015.

¹⁰⁰ Rouhani, Fo’ad. “*San’at-e Naft-e Iran: Bist Sal Bas Az Melli Shodan [The Iranian Oil Industry: Twenty Years after Nationalization]*”. Tehran: Sherkat-e Sahami-ye Ketabha-ye Jibi, 2536/1977.

Elwell-Sutton, L. P. “*Abadan II. Modern Abadan*.” In *Encyclopaedia Iranica*, Online Edition, 1982.

Institute for Social Studies and Research. “*Takvin-e Shahr-e Abadan [Genesis of Abadan]*” Mottale’at-e Jame’eh Shenakhti, 1 Tir 1953 [22 June 1974], pp 50-56;

Heshmatzadeh, Mohammad Baqer. “*Iran Va Naft: Jame’e Shenasi-ye Siyasi Dar Iran*.” Tehran: Markaz Bazshenasi Eslam va Iran, 2000.

Elm, Mostafa. *Oil, Power, and Principle : Iran’s Oil Nationalization and Its Aftermath*. [in English]

Contemporary Issues in the Middle East. Syracuse, NY: Syracuse University Press, 1992.

- **Scarcity of Data:** As the study has highlighted, one of the primary challenges in researching the history of oil in Iran is the scarcity of data. This scarcity is attributed to various factors, including the confidential nature of many historical documents related to the oil industry and the challenges of accessing comprehensive and unbiased records.
- **Reliance on British Archives:** Many historical accounts of the Iranian oil industry have heavily relied on British records and archives. This reliance introduces a potential bias and limit the diversity of perspectives presented in the literature. Access to Iranian or more diverse international sources might provide a more balanced view of the historical events.
- **Company-Produced Histories:** The publication of histories by oil companies themselves, such as the British Petroleum Company, often serves their interests and

Williamson, John Woolfenden. *In a Persian Oil Field; a Study in Scientific and Industrial Development*. [in English] London: E. Benn Ltd., 1927.

Kent, M., et al. *Oil and empire : British policy and Mesopotamian oil, 1900-1920*. London [etc.] :, Macmillan [for] the London School of Economics and Political Science. 1976.

Ferrier, Ronald W., and James H. Bamberg. *The History of the British Petroleum Company*. [in English] Reprinted. ed. Cambridge: Cambridge University Press, 2000. Fatih, Mustafa, Panjāh sāl naft-i Īrān (50 Years of Iranian Oil). Kavosh Publication, Tehran, 1956.

Elwell-Sutton, Laurence Paul. *Persian Oil: A Study in Power Politics*. [in English] London: Lawrence and Wishart, 1955.

Maxwell, Donald. *A Dweller in Mesopotamia Being the Adventures of an Official Artist in the Garden of Eden*. Project Gutenberg, 2006.

Sackville-West, Vita. *Twelve Days in Persia : Across the Mountains with the Bakhtiari Tribe*. [in English] London: Tauris Parke Paperbacks, 2009.

Lockhart, Laurence. "The Emergence of the AngloPersian Oil Company, 1901-1914," chapter in Issawi, Charles Philip, and Studies University of Chicago. *The Economic History of Iran, 1800-1914*. [in English] Publications of the Center for Middle Eastern Studies ; No. 8. Chicago: University of Chicago Press, 1971.

Cronin, Stephanie. *Soldiers, Shahs and Subalterns in Iran : Opposition, Protest and Revolt, 1921-1941*. Basingstoke :: Palgrave Macmillan, 2010. doi:10.1057/9780230309036.

Dobe, Michael Edward, and Brunswick Rutgers University. Graduate School--New. "A Long Slow Tutelage in Western Ways of Work : Industrial Education and the Containment of Nationalism in Anglo-Iranian and Aramco, 1923-1963." 2008.

Abrahamian, Ervand. "The 1953 Coup in Iran." *Science & Society* 65, no. 2 .2001. pp182-215.

Kinzer, Stephen. *All the Shah's Men : An American Coup and the Roots of Middle East Terror*. [in English] [2008 ed. / ed. Hoboken, N.J.: Wiley, 2008.

Lockhart, Laurence. "The Causes of the Anglo-Persian Oil Dispute." [In English]. *Journal of the Royal Central Asian Society*, 1953.

Abdelrehim, Neveen. "Managerial Disclosures and Corporate Control." In *Communication and Language Analysis in the Corporate World*, 163-78: Information Science Reference, 2014.

Farmanfarmaian, Khodad, Plan Iran, Organization Budget, Studies Princeton University. Program in Near Eastern, and Tihrān Dānishgāh-i. *The Social Sciences and Problems of Development : Papers Presented at an International Conference in Persepolis, Iran, June 1-4, 1974, Sponsored by the Plan and Budget Organization of Iran, Tehran University [and] Princeton University*. [in English] Princeton, N.J: Princeton University Program in Near Eastern Studies, 1976.

may not provide an entirely objective or critical perspective on their operations and interactions with host countries like Iran. It's essential to approach such sources with a critical lens.

To address these limitations and contribute to a more comprehensive understanding of the history of oil in Iran, the research emphasizes the importance of accessing and analysing a wide range of primary sources, including those from Iranian archives, to provide a more balanced and nuanced perspective. The interdisciplinary approach and focus on architectural and urban aspects add a unique dimension to this exploration of Iran's oil history. This helps shed light on aspects that may have been overlooked in previous studies and offers a more holistic view of the oil industry's impact on Iran's urban development and modernization.

"The History of the British Petroleum Co" Volume I, authored by R.W. Ferrier (1982),¹⁰¹ and James Bamberg's Volume 2, offer profound insights into the intricate historical tapestry of Iran's early 20th-century political landscape and the pivotal role played by the Anglo-Persian Oil Company, subsequently known as British Petroleum (BP). Within these volumes, readers are immersed in the nuanced dynamics of Iran's political evolution during this period, marked notably by the transition from the Qajar dynasty to the ascent of the Pahlavi dynasty. This transformation held profound implications for the burgeoning oil industry.

At the heart of these accounts lies the fascinating narrative surrounding the famed D'Arcy's Contract — a landmark agreement between William D'Arcy and the Iranian government that laid the foundation for oil exploration within Iranian territory. These works meticulously explore the intricacies of this contractual negotiation, illuminating the terms that underpinned early oil exploration endeavours.

Delving further into the annals of history, these volumes meticulously trace the trajectory of oil exploration in Iran, chronicling the myriad challenges confronted by British explorers, the momentous discovery of substantial oil reserves, and the subsequent establishment of drilling operations — a pivotal juncture in the narrative. Equally compelling is the narrative thread devoted to the diplomatic intricacies of engaging with local tribal authorities and communities, which proved to be a defining factor in shaping the trajectory of early oil operations in Iran.¹⁰²

¹⁰¹ Ferrier, Ronald W., and James H. Bamberg. *The History of the British Petroleum Company*. [in English] Reprinted. ed. Cambridge: Cambridge University Press, 2000.

¹⁰² Williamson, John Woolfenden. *In a Persian Oil Field; a Study in Scientific and Industrial Development*. [in English] London: E. Benn Ltd., 1927.

Of paramount importance is the story of the Abadan refinery, a colossus among oil refineries in its era. The volumes meticulously unravel the narrative surrounding the construction of this industrial giant, offering profound insights into its strategic significance as one of the world's foremost oil refining facilities during that epoch, playing an instrumental role in the processing and global export of Iranian oil resources.

In the compelling book titled “Oil, Power, and Principle: Iran’s Oil Nationalization and Its Aftermath” (1992),¹⁰³ authored by Mostafa Elm, readers are invited on a scholarly journey that delves deep into the intricate web of Anglo-Iranian oil disputes. This historical exploration seeks to meticulously trace and analyze the transformative events that unfolded, ultimately leading to a pivotal moment in Iran’s history. At the heart of this narrative lies the seismic occurrence of oil nationalization in Iran, a watershed moment in 1951 that would forever alter the nation’s trajectory. Elm’s work rigorously dissects the factors, motivations, and key players that converged to catalyze this monumental shift in the Iranian oil landscape. As the story unfolds, readers are transported to the tumultuous aftermath of oil nationalization, where international geopolitical forces come into play. The book masterfully navigates through the complex web of Anglo-American-sponsored interventions, including a coup d’état in 1953, which had far-reaching consequences on Iran’s political landscape. The consequences of these interventions were profound, culminating in the reinstatement of the Shah to power. Furthermore, the narrative extends to the formation of an American-dominated oil consortium in 1954, marking yet another significant chapter in the complex history of Iran’s oil resources. Elm’s meticulous research and analysis shed light on the intricate geopolitical manoeuvring that led to the emergence of this consortium and its implications for Iran’s sovereignty and oil industry. In sum, “Oil, Power, and Principle” serves as a scholarly tour de force, offering a comprehensive examination of the multifaceted dynamics that defined Iran’s oil nationalization, the subsequent geopolitical interventions, and their enduring impact on the nation’s political landscape and oil industry.

In the historical tome titled “Black Gold or Iranian Disaster” (1950),¹⁰⁴ penned by the astute Abolfazl Lesani, readers are invited to embark on a profound exploration of the intricate political revolutions that swept through Iran, closely intertwined with the oil industry. This meticulously crafted narrative delves into the multifaceted dynamics that characterized the relationship between the oil company and the nation

¹⁰³ Elm, Mostafa. *Oil, Power, and Principle : Iran's Oil Nationalization and Its Aftermath*. [in English] Contemporary Issues in the Middle East. Syracuse, NY: Syracuse University Press, 1950.

¹⁰⁴ Lesani, Abolfazl. *Black Gold or Iranian Disaster*. [in Persian] [T . alā-yi siyāh yā balā-yi Īrān]. Tehran, Amir Kabir Publication, 1978.

of Iran, offering invaluable insights into the complexities of this pivotal era. One of the central themes of Lesani's work is the intricate dance between Iran and the British oil contracts, a topic of immense significance and consequence. Within the pages of this book, readers are offered a detailed examination of how these contracts were negotiated and structured and their subsequent impact on Iran's economic and political landscape. Moreover, "Black Gold or Iranian Disaster" delves into the contentious issue of compensation for these British oil contracts and how this factor played a pivotal role in shaping the course of Iranian history. Lesani's meticulous research and insightful analysis illuminate the various forces at play, shedding light on the challenges and opportunities that Iran faced as it navigated the complex terrain of its oil industry. Abolfazl Lesani's "Black Gold or Iranian Disaster" stands as a testament to his scholarly acumen, offering readers a profound and comprehensive exploration of the political revolutions in Iran, intricately intertwined with the oil industry. Through Lesani's keen lens, the book provides a window into the intricate web of interactions, negotiations, and consequences that defined this pivotal period in Iranian history.

In his insightful work "Great Britain & Reza Shah" (2001),¹⁰⁵ Mohammad Gholi Majd offers a thought-provoking analysis of the pivotal role played by the British in shaping both the political and economic landscape of Iran during a crucial period in its history. Within the pages of this meticulously researched book, Majd delves deep into the annals of Iranian state transformations, shedding light on the profound influence exerted by the British. One of the central themes explored by Majd is the intricate relationship between Westernization, modernization, and the quest for access to Iran's abundant and economically significant oil reserves. Through a critical lens, Majd raises important questions about the nature of these modernization efforts and their broader cultural implications. He posits that these endeavours resulted in what he describes as a significant cultural degradation, a phenomenon that extended to include the destruction of architectural and urban heritage in Iran.

Majd's work benefits significantly from his access to a wealth of solid documentary evidence, notably the confidential reports contained in the US Treasury Department files. These reports, focusing on the "Nationalization of the Iranian Oil Industry," were prepared by the World Bank and offer an invaluable source of data covering the period from 1911 to 1951.¹⁰⁶ One of the key assertions made by Majd is that despite its vast oil wealth, Iran derived minimal benefits from this valuable

¹⁰⁵ Majd, Mohammad Gholi. *Great Britain and Reza Shah*. Gainesville: UPF, 2001.

¹⁰⁶ The date of the documents, February 1952, suggests that it served as a background paper during the oil crisis of 1951—53, and its attention to detail intimates the American government's keen interest in Iran's oil.

resource, with the primary beneficiary being Great Britain. This assertion reflects his meticulous research and commitment to providing a nuanced perspective on the historical forces at play during this critical juncture in Iranian history. In summary, Mohammad Gholi Majd's "Great Britain & Reza Shah" stands as a compelling and well-documented exploration of the multifaceted relationship between Iran, Great Britain, and the global oil industry. Through his critical analysis and reliance on solid documentary sources, Majd offers readers a deeper understanding of the complex interplay of political, economic, and cultural factors that defined this transformative period in Iran's history.

In her extensive research, Katayoun Shafiee presents a comprehensive examination of the intricate interplay between politics and petroleum in her thesis, "Cracking Petroleum with Politics" (2010),¹⁰⁷ and her subsequent book, "Machineries of Oil: An Infrastructural History of BP in Iran" (2018)¹⁰⁸. Her work serves as a groundbreaking contribution to the understanding of the socio-technical processes that underpin the power dynamics surrounding the oil industry. Shafiee's central focus is on the complex series of disputes that emerged in the ongoing struggle for dominance between key stakeholders, including the oil company, the Iranian Government, and the United States. These disputes encompassed a wide range of critical issues, such as property rights, labour control, and the distribution of oil revenue. Through her research, Shafiee seeks to unravel the multifaceted ways in which oil revenue profoundly influenced the development and construction of oil infrastructure.¹⁰⁹

Moreover, Shafiee's work delves into the transformative impact of oil revenue on the national and local social, economic, and spatial politics within the oil region. By scrutinizing these dimensions, she endeavours to shed light on how the infusion of wealth from the oil industry had far-reaching consequences, reconfiguring the very fabric of society and the political landscape. In essence, Katayoun Shafiee's research represents a significant contribution to the understanding of the intricate and often contentious relationships between oil, politics, and society. Through her meticulous examination of the socio-technical processes at play, she uncovers the profound ways in which petroleum wealth has shaped the course of history, influencing not only economic aspects but also the social and spatial dimensions of regions tied to the oil industry.

¹⁰⁷ Shafiee, Katayoun. *Machineries of Oil : An Infrastructural History of Bp in Iran*. Cambridge, Massachusetts: The MIT Press, 2018.

¹⁰⁸ Shafiee, Katayoun. *Machineries of Oil : An Infrastructural History of Bp in Iran*. Cambridge, Massachusetts: The MIT Press, 2018.

¹⁰⁹ Shafiee, Katayoun. *Machineries of Oil: An Infrastructural History of Bp in Iran*. Cambridge, Massachusetts: The MIT Press, 2018.

These studies provide a comprehensive overview of the history of Iran's oil industry, its political and economic aspects, and the complex dynamics between various stakeholders, including the Anglo-Persian Oil Company (APOC), the Iranian government, and foreign powers. They offer valuable insights into the historical development of Iran's oil industry and the geopolitical struggles that have shaped it. In other words, these studies collectively offer a deep understanding of the historical, political, and economic dimensions of Iran's oil industry, making a significant contribution to the scholarship on this topic. They highlight the complex interplay of interests and power dynamics that have characterized Iran's relationship with its oil resources over the decades.

1.2.13 Oil and Iranian Territory

Various books have delved into the relationships between oil companies and local authorities in the oil fields.¹¹⁰ These books shed light on the interactions and relationships between oil companies, local authorities, and tribal communities in the context of oil exploration and development in Iran. They provide valuable insights into the historical dynamics and power struggles in the region. For instance, Arash Khazeni's "Tribes & Empire Iran; on the Margins of the Nineteenth Century" (2011)¹¹¹ explores the interactions among local tribes, the national state, and British imperial projects in developing oil-rich regions through infrastructure development, such as oil pipelines and road construction. Khazeni examines the encounters between the Anglo-Persian Oil Company and the Bakhtiari tribes during the early years of oil exploration, including the Bakhtiari Oil Agreement of 1905 and "The Land Purchase of 1911".

¹¹⁰ Ghorbani, Khodabakhsh. "Britain & Bakhtiari (1896-1925)", in Farsi. Institute of Contemporary History of Iran, 2011.

Ghorbani, Khodabakhsh. "Britain & Bakhtiari (1896-1925)", in Farsi. Institute of Contemporary History of Iran, 2011.

Cronin, Stephanie. *Tribal Politics in Iran : Rural Conflict and the New State, 1921-1941*. [in English] Royal Asiatic Society Books. London :: Routledge/Taylor & Francis Group, 2007.

Khazeni, Arash. *Tribes and Empire on the Margins of Nineteenth-Century Iran*. Seattle; London: University of Washington Press, 2011.

Ansari, Mostafa. "The History of Khuzistan, 1878-1925; a Study in Provincial Autonomy." 1974.

¹¹¹ Khazeni, Arash. *Tribes and Empire on the Margins of Nineteenth-Century Iran*. Seattle; London: University of Washington Press, 2011.

Shahbaz Shahnavaz's "Britain and Southwest Persia, 1880-1914" (2005)¹¹² examines the early dynamics of oil development in the context of British Imperial policies and their interactions with local autonomies in southwest Persia (modern-day Iran). It provides historical context for the role of British interests in the region and their impact on local communities and authorities during the late 19th and early 20th centuries.

These works contribute to our understanding of the historical and geopolitical factors that influenced the development of the oil industry in Iran and its impact on local communities and tribal authorities. They highlight the complexities of negotiations, agreements, and power dynamics that shaped the oil landscape in the region during this pivotal period.

1.3 Significance to Academic Discourse

This thesis, delving into the architectural and urban evolution of Ahwaz, holds profound significance within the realm of academic discourse. It addresses multifaceted aspects of urban development, geopolitics, culture, and societal transformation, illuminating a relatively understudied subject and filling notable gaps within existing literature. Ahwaz's architectural journey, intertwined with the larger tapestry of Iran's history, has been a relatively overlooked subject in academic scholarship. While extensive literature exists on urban development in major global cities, the story of Ahwaz provides a unique lens through which to explore how geopolitics, economic shifts, and cultural dynamics shape urban landscapes. By directing scholarly attention to Ahwaz, this thesis contributes to the broader conversation on urban studies and provides a fresh perspective on cities as living entities influenced by historical forces.

Within architectural studies, this thesis bridges critical gaps by examining the architectural transformation of Ahwaz in different historical periods. It uncovers the subtle nuances of architectural innovation and adaptation within the context of shifting political and economic landscapes. While existing architectural literature often focuses on individual architects or iconic structures, this work offers a holistic

¹¹² Shahnavaz, Shahbaz. *Britain and the Opening up of South-West Persia 1880-1914 : A Study in Imperialism and Economic Dependence*. London: RoutledgeCurzon, 2005.

exploration of urban development, considering the interplay of various architectural styles and philosophies over time. Ahwaz's journey from colonialism to post-World War II geopolitics provides a unique opportunity to understand the far-reaching implications of political decisions on urban environments. By contextualising the city's architectural changes within the larger framework of global power dynamics, this thesis adds depth to the discourse on how urban development is used as a tool of influence and control, offering insights that are applicable beyond Ahwaz's boundaries.

Ahwaz's transformation encapsulates the intricate dance between tradition and modernity. This theme holds significance within cultural studies, as it unravels the complexities of societal values, identity, and heritage preservation in the face of rapid modernisation. The thesis engages with the rich tapestry of worldviews and ideologies, shedding light on the tensions and dialogues between secularism, tradition, and Westernization. The lessons gleaned from Ahwaz's historical journey have contemporary relevance. In an era marked by urbanisation and globalisation, understanding how Ahwaz navigated the challenges of diversification, economic growth, and cultural preservation offers insights into modern urban planning. Planners and policymakers draw from Ahwaz's experiences to inform sustainable, culturally sensitive urban development strategies.

In conclusion, this thesis contributes to academic discourse by exploring the multifaceted layers of Ahwaz's architectural and urban development. It fills gaps in the literature, sheds light on underrepresented aspects of urban studies and architectural history, and provides valuable insights into the dynamic interplay of culture, geopolitics, and urban transformation. Beyond academia, this work offers lessons and perspectives that resonate with contemporary urban challenges and global contexts, making it a valuable contribution to both scholarly and practical discussions surrounding cities and their evolution.

1.4 Filling the Gap

The investigation of modern global exchanges has been a central focus for urban and architectural scholars, with numerous cities around the world subjected to in-depth research. However, certain cities in the Middle East have been comparatively neglected in this regard, despite their rich history of cross-cultural interactions. Furthermore, much of the existing scholarship on these Middle Eastern cities primarily delves into Colonial and Imperial aspects, often overlooking the intricate international developments that have shaped these urban centres. Evidently, there is a compelling need to move beyond the superficial historical narratives surrounding Middle Eastern cities and delve into the deeper layers of their complex histories. This approach enables us to uncover significant insights into the global flows that have shaped these cities, particularly in the context of modern living spaces during the twentieth century. In essence, this research seeks to reexamine the history of global exchanges by placing a strong emphasis on the role of oil—a paramount source of both financial and political influence—within the pivotal geography of oil-producing regions.

A comprehensive examination of architectural typologies and urban spaces shaped by the influence of oil entities, with a focus on the physical manifestation of petroleum flows, has the potential to address a notable gap in the existing global and multidisciplinary discourse. This research endeavours to utilize the realms of architecture and urban planning as tangible facets of exploration, unveiling not only the transformative role played by global flows in moulding contemporary built environments but also shedding light on the spatial experiences of residents within the dynamic backdrop of oil-related socio-political contexts. This study aims to illustrate how the built environment serves as a tangible outcome of the intricate interplay of global exchanges driven by diverse political motives and economic considerations. It adapts to the requirements of modern technology while remaining responsive to vernacular construction practices. The research positions physical-spatial forms within the context of worldwide interactions, highlighting their role in the restructuring of oil-based industries, the emergence of ethnic divisions within urban reforms, architectural design and aesthetics, and the evolution of lifestyles as influenced by local, national, and international exchanges.

While some scholars have made significant contributions to the study of the global petroleumscape, there is still much-uncharted territory when it comes to an understanding of the nuances of transnational oil modernity and how it interconnects with diverse vernacular spaces. This includes delving into the commonalities and

distinct characteristics of these spaces. The complexities of oil's impact on global landscapes and cultures continue to offer rich opportunities for further research and exploration.

The Middle Eastern petroleumscape stands out due to its distinct patterns of spatializing oil modernity, which differ significantly from other regions in the world. This uniqueness is characterized by Colonial-era political, economic, and social approaches, Imperial methods of development, the emergence of powerful oil corporations to manage newfound wealth, and the rapid construction of various spatial oil constellations, including industrial, administrative, retail, and ancillary structures, all in the name of modernization. What sets the Middle Eastern petroleumscape apart is its ability to adapt urban policies extensively according to local needs, interests, and cultural practices, evolving over time. The reception of modern transformations by local populations, experienced through social interactions within the emerging urban spaces, has given rise to a distinct form of “oil modernity” on a regional scale. As these cities have undergone significant changes in response to globalization, they have become compelling case studies for understanding this dynamic process.

Iran possesses a compelling and intricate oil history among all the Middle Eastern countries. Iranian oil cities have undergone a unique, complex, and rapid process of industrial modernization throughout the twentieth century. This process involves the initiation, transformation, localization, and solidification of transnational modernity, setting them apart as exceptional case studies within the broader narratives of the global petroleumscape. While there are notable studies, particularly focusing on Abadan and Masjed-Soleyman, delving into their individual socio-political, urban, and architectural aspects in their oil-based development, there exists a significant gap in the discussion of other oil-related cities and landscapes within the Iranian oil fields in the existing literature. To comprehensively understand various facets of Iranian oil modernity, it is imperative to consider all sister oil cities that form the intricate puzzle of Khuzestan. The architectural and urban spatial dimensions of oil-related structures, infrastructure, their interconnectedness, transformations over time, and their influence on the evolution of modernity have not been fully explored by scholars in the fields of architectural and urban history. Further in-depth research on other prominent oil cities and spaces is needed to achieve a more comprehensive understanding of Iranian oil modernity. This undoubtedly contributes to a richer and more nuanced understanding of the complex history of oil in Iran.¹¹³

¹¹³ Yavari, Manuchehr. “Shahr’e Man: Masjed Soleiman.” Tehran, Iran: Nashr’e Aknun, 2004.

The current research project began in 2016, initially encompassing the entire province of Khuzestan. However, after a year of study, the focus narrowed down to a significant yet often overlooked oil city: Ahwaz, which serves as the central hub of Khuzestan. Despite playing pivotal roles in the broader context of modernization and the global petroleumscape, the historical narrative of Ahwaz has largely been neglected by contemporary scholars. Ahwaz holds a unique historical significance due to its role in the discovery, storage, management, and exploitation of oil. It boasts distinctive oil-based infrastructures, the involvement of international actors and policymakers, and the resultant development of living spaces and architectural styles. However, there is a dearth of comprehensive research on this vital petroleumscape, and the archives and physical structures have not been fully explored. This gap in knowledge becomes particularly evident when considering the rapid transformation of rural Ahwaz into a modern city within a mere 70 years. Despite its significant presence on the international stage, no detailed written historical account of its socio-spatial evolution and environmental processes exists.

Exploring the urban histories of Ahwaz, especially within the context of its distinctive socio-cultural transformations catalysed by various international actors in the realm of oil, provides modern architectural and urban historians with a valuable opportunity. This research perspective allows for a comprehensive examination of both local and global contexts, offering insights into contemporary architectural issues. The interactions and coexistence of local and foreign populations within the physical spaces of the oil industry serve as a rich subject of study. This exploration sheds light on the intricate web of global cross-cultural exchanges that unfolded during the 20th century. Understanding how these exchanges shaped Ahwaz's urban landscape offers valuable perspectives on architectural developments and their impact on society.

Throughout various political and economic periods in Iran, both national and international actors played pivotal roles in shaping and manifesting modernity in Ahwaz. Their collective efforts left enduring imprints on the city's urban transformations, evident in several aspects such as modern architectural and building types, urban forms, lifestyles, social contacts, and engineering advancements. These combined efforts by national and international actors in Ahwaz reflect the multifaceted nature of modernity and its profound impact on the city's physical and social landscape. Understanding these transformations provides a nuanced perspective on Ahwaz's historical development in the context of global and local dynamics.

This research on Ahwaz and its role in the global petroleumscape offers valuable insights into the neglected history of this vital city and its transformation due to

the oil industry. Some key points to highlight are the neglected historical narrative, unique oil-based infrastructures, international actors, local and global contexts, resilient impacts, contemporary architectural concerns, and finally, a comprehensive study. The study has the potential to uncover a wealth of information about Ahwaz's history and its significance within the context of global oil developments. It promises to enrich the understanding of the city's urban evolution, socio-cultural transformations, and the enduring impacts of international actors on its development.

The case of Ahwaz offers a rich opportunity to explore multiple theoretical frameworks and lenses of modernity within the context of the oil industry. These frameworks shed light on various aspects of architectural production, international attitudes, and the economic and political perspectives associated with the region:

- **Land Ownership and Authority:** Investigating land ownership and authority in Ahwaz provides insights into the power dynamics between local communities, national governments, and international oil companies. Understanding how land was acquired, managed, and utilized reveals the complexities of property rights and their implications for urban planning and development. It provides valuable insights into how international oil actors sought to establish control over the land and its resources. This lens allows for an examination of power structures and decision-making processes.
- **Rivalries and Cross-Cultural Exchanges:** Ahwaz's history is marked by rivalries and cross-cultural exchanges among international oil actors. By examining these interactions, researchers explore how different stakeholders competed for influence and resources in the region. These exchanges may involve negotiations, conflicts, and collaborations that shaped the urban environment. It sheds light on the complex interactions that shaped Ahwaz's development. Understanding how these actors competed and cooperated helps unravel the multifaceted nature of the global petroleumscape.
- **Imperial, Colonial, and Post-Colonial Policies:** Ahwaz's evolution is closely tied to the shifting policies of imperialism, colonialism, and post-colonialism. Analysing these policy shifts illuminates how Ahwaz adapted to changing geopolitical landscapes and economic paradigms. It also allows for an exploration of how urban planning and architecture were used as tools of control, development, and resistance. The research delves into the broader historical context in which these developments occurred by analysing the impact of imperial, colonial, post-colonial, and other policies on Ahwaz's urban and architectural transformation. It reveals the evolving nature of international relationships and ideologies.

- **Capitalism and Welfare State Dynamics:** The interplay between capitalism and welfare state dynamics in Ahwaz offers insights into economic and social transformations. Researchers investigate how the pursuit of profit by international oil companies intersected with efforts to provide social welfare and infrastructure for local communities. This examination may reveal tensions and contradictions inherent in these approaches. This examination of capitalism and welfare state policies within Ahwaz's urban planning and architecture provides a lens through which to explore how these policies influenced infrastructure, housing, and social facilities and offer critical insights into the city's modernization.
- **Local Context in Global Scale:** The research's focus on the local context of Ahwaz within a global scale is a promising approach. It recognizes that local spaces are not isolated but influenced by international contexts, and it seeks to understand how oil modernity preferences were applied and experienced by residents.
- **Social and Physical Layers:** Identifying the oil industry as a generator of various social and physical layers that overlap and reinforce each other is a key concept. This layered approach allows for a more comprehensive understanding of the city's transformation and the interplay between different elements.

The research aims to use Ahwaz as a lens through which to explore the multifaceted dimensions of modernity within the oil industry. Applying various theoretical frameworks and lenses provides a comprehensive analysis of the city's history. The work promises to contribute significantly to understanding oil-related urban and architectural developments in a local and international context. Moreover, this dissertation serves as a crucial contribution to the need for in-depth examinations of Ahwaz's modernization process. By delving into the region's history within the framework of oil modernity, it offers a comprehensive perspective that encompasses both local and global dimensions. The key objectives of this dissertation are summarized as follows: local context, global impact (The dissertation seeks to unravel how preferences associated with oil modernity have left their imprint on Ahwaz's local spaces, all while resonating within the broader global context. It aims to elucidate the intricate interplay between international influences and local experiences, shedding light on the dynamic relationship between the two.), perceptions and lived experiences (By examining the ways in which oil modernity was perceived and lived by Ahwaz's residents, the dissertation provides a nuanced understanding of the social and cultural dimensions of modernization. It delves into the everyday lives of individuals within the context of evolving urban spaces, capturing their responses to the changes brought about by the oil industry.), layers of modernity (One of the central themes explored in the dissertation is the concept of modernity as a multi-layered phenomenon. It recognizes that the oil industry

generates various social and physical layers that coexist and mutually reinforce one another. This recognition allows for a more holistic analysis of the complex processes at play in Ahwaz's development.), and spatial analysis (The study employs spatial analysis as a tool to unravel the transformations that Ahwaz underwent as a result of oil modernity. Examining the architectural, urban, and infrastructural changes offers insights into how these physical manifestations of modernity shaped the cityscape.) In sum, this dissertation endeavours to provide a comprehensive narrative that intertwines the local and the global, the physical and the social, and the historical and the contemporary. It aims to enrich our understanding of how oil modernity unfolded in Ahwaz and how it continues to resonate in the city's fabric and collective memory.

1.5 Methodologies and techniques

As the central case study of this research, the endeavour to uncover the urban history of Ahwaz is beset with numerous challenges. Chief among these challenges is the absence of primary literature and historical documentation about the city. This lack of source material poses a significant hurdle, particularly when considering the parts of Ahwaz that were ravaged during the Iran-Iraq war, leaving few surviving structures. Additionally, the existing source materials for many buildings in Ahwaz exhibit irregularities, uncertainties, and questionable reliability, often lacking essential confirming details. Furthermore, the research process is further complicated by the scarcity of valid sources, the dispersion of archival materials across various repositories, limited accessibility to original archives, the shortage of records, and the existence of conflicts and constraints on sharing information with the public. These challenges are particularly pronounced when dealing with archives held by entities such as the Iranian National Oil Company, the British oil company that managed the industry before nationalization, or the American companies involved post-nationalization.

To bolster the validity of this study, a rigorous approach is adopted, entailing the cross-referencing of evidence from multiple sources. This practice is deemed essential when tackling a subject that lacks comprehensive coverage or includes data that may contradict information from other sources.

The research methodology embraced a high degree of flexibility, drawing from various disciplines to compose the dissertation. Employing a multidisciplinary approach, this research uncovers a discernible pattern in Ahwaz's development, one tailored to meet the demands of oil management, extraction, transportation, refining, and shipment. The study undertakes a mixed-method approach, employing diverse techniques and parallel procedures, which overlap in analysing the various facets of architectural practice. This approach aligns with Donald T. Campbell's assertion that every method possesses limitations, necessitating the use of multiple strategies.

Consequently, the research combines archival research with cartography, on-site observations, interviews, and comparative analysis. This multifaceted approach ensures that the weaknesses of one method are partially mitigated by the strengths of another, as articulated by Friedmann and Zimring (1978). Finally, the study underscores the need for an interdisciplinary approach to comprehensively grasp the history of oil-based development. This entails integrating various theoretical frameworks and associated methodologies. In essence, it involves merging knowledge of archival materials with architectural and urban modernity theories, enabling a multifaceted understanding of Ahwaz's complex Petroleumscape from diverse disciplinary vantage points.

1.5.1 Archival research

The primary method employed for data collection in this research study involves an exhaustive review of documentation by visiting various archives. The research endeavours to extract a wealth of data from a diverse range of sources located in archives in Iran and the United Kingdom. These archives include the Naft Museum in Tehran and Abadan, Iranian National Archives in Tehran, National Library in Tehran, BP Archive at the University of Warwick in Coventry, British Library in London, British National Archives in London, Royal Institute of British Architects (RIBA) in London, Cambridge University Library in Cambridge, Qatar Digital Library's online platform.

The research adopts a comprehensive approach, drawing from multiple archival centres, which often complements or corroborates the data gathered from other sources. These archives yield a trove of valuable information encompassing various forms of concrete and obscure evidence, including Images, Contracts, Letters, Reports, Urban plans, Magazines and newspapers, Diaries and travel notebooks, and Old maps. Particular emphasis is placed on examining maps, which offer intricate cartographic details regarding the early phases of oil-driven urban development. These maps shed light on aspects such as land ownership, the

dynamics of interaction among different stakeholders as landowners, and the city's spatial organization in relation to other elements of its urban fabric, such as the Karun River. While it is acknowledged that other scholars have previously accessed these archives, a distinguishing feature of this research lies in its meticulous examination of materials with a dedicated focus on architectural and urban aspects. Additionally, beyond the conventional sources found in British archival records, this research draws from a broader archive of historical information not previously available in English. This archive, housed in the Iranian National Library and Archives, encompasses travel narratives, personal interviews, cultural and historical memories, and narratives dispersed among local residents. Despite their significance, these sources have yet to be comprehensively documented and recorded in a cohesive manner.

1.5.2 Comparison with Earlier Studies

This study represents a natural progression in the ongoing scholarly exploration of global oil fields, with a particular focus on the Iranian context. While this research acknowledges and builds upon prior investigations into the Iranian petroleumscape, it should be noted that its intent is not to disprove or invalidate earlier findings. Instead, this study seeks to critically engage with the existing body of knowledge and expand upon it through a more refined analysis. The contributions made by previous scholars in this field have laid valuable foundations, and this research serves as an extension of their work. By examining the data found in various archives and cross-referencing it with previous research, this study enhances the validity of its findings. Many scholars have already scrutinized these earlier studies, and this research benefits from their collective efforts. However, it introduces a fresh perspective and analytical approach that aims to unearth deeper meanings and challenge existing paradigms. Doing so enriches our understanding of the subject matter and offers a more comprehensive view of the Iranian petroleumscape.

1.5.3 Illustrative Examples

The utilization of illustrative case examples in this research serves as a methodological framework that facilitates a comprehensive and detailed analysis of the intricate spatial transformations associated with oil-based modern urban development. It allows the research to delve deeply into the specifics of each case while maintaining a holistic view of the broader context in which these

transformations occurred. This approach also integrates theoretical foundations to guide the interpretation of data. ¹¹⁴

By adopting this methodology, this research aligns with the fundamental principles of qualitative research methods, including describing, understanding, and explaining phenomena. ¹¹⁵ Each individual case example has been carefully selected to serve as a lens through which to examine the practice of architectural and urban planning within the broader context of the policies and decisions made by various actors. This deliberate selection of case examples ensures that the research effectively addresses the “contextual conditions” that underlie the decision-making processes and sheds light on the “why” and “how” behind these decisions. In essence, this approach enables a nuanced exploration of the subject matter, allowing for a rich and multifaceted analysis.

1.5.4 Map-making

This thesis employs a novel approach in the form of chronological maps to both illustrate and analyse the dynamic process of spatial transformations driven by the oil industry. In its initial phase, this research meticulously traces the city’s physical expansion through examining historical maps. By layering these old maps chronologically on top of each other, the thesis provides compelling visual evidence of how various actors have reshaped land ownership and land use, thereby contributing to constructing a spatial modernity deeply rooted in the multifaceted evolution of urban phenomena. ¹¹⁶ The city’s description, facilitated by historical maps, offers a platform for cross-city comparisons, exploring the relationships between the city, the oil industry, and the diverse stakeholders who have exerted influence over these spaces. The maps utilized in this dissertation serve as visual representations of the city’s diverse territories, spaces, and interconnections. These maps vividly illustrate various aspects, such as industrial zones, green spaces, residential densities, multifunctional areas, military installations, urban infrastructure, and social activities.

¹¹⁴ Creswell, John W. *Research Design : Qualitative, Quantitative, and Mixed Methods Approaches*. [in English] Fourth edition, international student edition. ed. Los Angeles, Calif.: SAGE, 2014.

¹¹⁵ Tellis, Winston M. “Information Technology in a University : An Institutional Case Study of Instructional and Research Computing in a Client/Server Environment.” 1997.

¹¹⁶ Boeri, Tito, and Christopher J Flinn. *Returns to Mobility in the Transition to a Market Economy*. Economic Research Reports / C.v. Starr Center for Applied Economics. 1997, 0041. New York: New York University, 1997.

Furthermore, in the second phase of the research, aerial images are integrated to complement the map-based analysis. Aerial perspectives offer valuable insights into the spatial interactions and connections among different metropolitan areas, shedding light on the intricate relationships among the various actors involved in shaping the urban landscape. This multi-faceted approach, combining historical maps and aerial imagery, enhances the depth and breadth of the research, enabling a more comprehensive understanding of the complex dynamics of spatial transformation in the context of oil modernity.

1.5.5 Interviews and surveys

This research includes a relatively small but crucial component focused on the collection of primary data through interviews with key stakeholders such as museum managers, administrative officers, and architects. While the majority of data is gathered through extensive document review, interviews serve as a valuable means to further enhance the research's depth and accuracy. As the primary research method, document review enables the researcher to uncover historical events, trends, and contextual information. It serves as a foundational source of data that forms the basis for various inferences and conclusions throughout the study. However, the interview process plays a pivotal role in validating and confirming the information acquired through document review. The research benefits from firsthand accounts and insights by engaging in interviews with individuals closely associated with the subject matter, such as museum managers, administrative officers, and architects. These interviews serve as a critical source of comparative explanations, allowing the research to cross-reference and corroborate the data obtained through document review. This combination of interviews and documentation review strengthens the research's validity and aligns with ethical considerations, ensuring that the findings are reliable and well-supported.¹¹⁷

1.5.6 Literature Review

The writing process for this chapter primarily focuses on conducting comprehensive literature reviews. These literature reviews aim to identify critical issues and recent research that are relevant or significant to the research topic. In order to

¹¹⁷ Tellis, Winston M. "Information Technology in a University : An Institutional Case Study of Instructional and Research Computing in a Client/Server Environment." 1997.

accomplish this, the researcher gathers data and information from various credible and relevant sources. These sources encompass a wide range of materials, including books, theses, scholarly journals, conference proceedings, reports, and Internet websites. An extensive review of the existing literature gives the researcher a deeper understanding of the nature and scope of prior research conducted in the field. This review highlights the historical and contemporary context of the research topic and provides valuable insights into the background of the theories and concepts that are utilized in the current investigation. Overall, the literature review process serves as a foundation for the research, offering a comprehensive overview of the existing body of knowledge and guiding the subsequent phases of data collection, analysis, and interpretation.

1.5.7 Data Reduction

The data collection methods of documentation review are strategically employed to facilitate the research process. However, it is essential to recognize that merely gathering data is insufficient. To extract meaningful conclusions and ensure the research's validity, the collected data must be meticulously organized and utilized. The categorization process plays a pivotal role in this regard. It involves sorting and structuring the acquired data to enable practical analysis and interpretation. This process is instrumental in eliminating irrelevant or extraneous information, thus streamlining the dataset for more focused examination. Throughout the research's content analysis, a continuous data reduction process occurs. This involves several key steps, including selecting (identifying the most relevant and pertinent pieces of data that align with the research objectives), focusing (concentrating on the specific aspects or elements within the data that are of particular interest or significance), simplifying (streamlining complex or convoluted data to make it more digestible and comprehensible), abstracting (extracting core concepts, themes, or patterns from the data to distil essential insights), and transforming (adapting the data to suit the research's analytical framework and objectives, which may involve converting data into visual representations or quantifying qualitative information).

This process of data reduction ultimately leads to a refined and condensed dataset that is conducive to rigorous analysis. It allows the researcher to draw meaningful conclusions, validate findings, and contribute substantively to the research's objectives.

This research's whole process of analysis was a back-and-forth movement, iterative and cyclical rather than sequential. Each set of documents had to be analysed and compared with the corresponding fundamental theories of research before coming up with a conclusion. Nevertheless, the meanings emerging from the data had to be tested for their validity. The study was conducted in several stages until the conclusion of the overall research was completed.

The process of analysis employed in this research was characterized by its iterative and cyclical nature, emphasizing a dynamic and adaptive approach rather than a strictly sequential one. This iterative methodology allowed for a comprehensive and thorough exploration of the research topic. Here's how the process unfolded: document collection (The initial step involved the collection of a diverse range of documents, including historical records, reports, maps, images, and other primary and secondary sources relevant to the research's objectives.), data organization (Once the documents were gathered, they were organized systematically to ensure accessibility and efficient retrieval during the analysis phase.), theory integration (The collected data were then juxtaposed with the fundamental theories and concepts underpinning the research. This process involved aligning the empirical findings with the theoretical framework to establish connections and identify meaningful patterns.), initial analysis (Initial rounds of analysis were conducted to extract preliminary insights and identify potential themes, trends, or anomalies within the data. This stage involved identifying key information, categorizing data, and noting any significant observations.), hypothesis formation (As patterns and themes began to emerge, hypotheses or research questions were formulated based on the observed data. These hypotheses served as guiding principles for subsequent analyses.), in-depth examination (The data were subjected to rigorous examination, with a focus on exploring the research questions and hypotheses in greater depth. This phase involved more detailed scrutiny of individual documents and patterns within the dataset.), validation (Throughout the analysis, the emerging meanings and interpretations were continually tested for validity. This validation process ensured that the conclusions drawn from the data were robust and reliable.), iterative process (The analysis process was not a one-time endeavour but rather an iterative one. Findings from each stage informed subsequent rounds of analysis, enabling a refined understanding of the research topic.), synthesis (The iterative process culminated in the synthesis of findings. This involved weaving together the validated insights from various stages of analysis to form a cohesive and comprehensive narrative.), and finally the conclusion (The research's overall conclusion was drawn based on the collective insights gained from the iterative analysis process. This conclusion was founded on the synthesis of data, theoretical integration, and validation.).

By embracing this iterative and cyclical approach, the research ensured a thorough and nuanced exploration of the complex subject matter. It allowed for a deeper understanding of the dynamics and complexities associated with the research topic while maintaining rigour and validity in the analysis process.

1.5.9 Defining the theoretical lenses of research

This thesis employs a multidisciplinary approach to analyse distinctive spatial aspects of Ahwaz, focusing on its built environment, architectural forms, and urban characteristics. Three key lenses guide the analysis:

The “Petroleumscape” Lens:

This lens acknowledges the existence of a global “petroleumscape” and views oil as a central element driving environmental changes. It forms the foundational framework of the research, exploring the multifaceted layers of oil’s impact on Ahwaz. This lens delves into the city’s architectural and urban features, encompassing aspects such as oil extraction, transformation, administration, infrastructure, and retail. Furthermore, it examines the intricate relationships between international, national, and local players in the oil industry. By adopting this lens, the research seeks to unveil how oil has shaped the physical and social landscape of Ahwaz.

1.5.9.1 The “Transnational Oil Modernity” Lens:

Building upon the concept of “transnational oil modernity,” this framework explores how Ahwaz interacted with and adapted to the global modernization process facilitated by oil. It scrutinizes the city’s response to imported global modernization, considering how Ahwaz integrated these modernizing influences into its local and national context. In particular, this lens investigates the pivotal role played by urban planning, architecture, and infrastructure projects in addressing urban challenges and modernizing early oil societies. It also examines the relational processes that transformed imported architectural movements and cultural elements into local realities. By drawing on transnational and cross-cultural urbanism studies, this research elucidates the gradual localization of global influences and their integration into the city’s fabric. It explores how Ahwaz coped with new urban and architectural spaces in its daily life, ultimately shaping the notion of “oil modernity” as a lived

experience. This lens underscores the vibrancy of oil-based urban spaces that emerged during Ahwaz's transformation into a modern industrial hub.

1.5.9.2 The "Civilization and Progress" Lens:

In the final stages of Ahwaz's development, the research examines how state administrations presented the city and its urban life as symbols of a new wave of civilization and progress driven by oil. This lens sheds light on how Ahwaz was portrayed as a beacon of advancement within the region, fuelled by the wealth generated by the oil industry. It underscores the role of urban, architectural, infrastructural, and social facilities as key features in the emergence of modernity. This lens allows for an exploration of the narratives and imagery constructed around Ahwaz as a showcase of modernity.

By utilizing these three lenses, this research aims to provide a comprehensive and nuanced understanding of Ahwaz's transformation within the context of oil-driven modernization. It considers this transformation's physical, social, and cultural dimensions, emphasizing the dynamic interplay between global and local forces that shaped the city's identity and urban fabric.

The research finally delves into the intricate nexus of "authority and territory" within the context of Ahwaz's architectural and urban policies and practices. It investigates the complex interplay of multiple actors with varying degrees of power and their contributions to reshaping the city while domesticating its spaces. The study recognizes oil life as a critical determinant of relationships among global oil actors, who became stakeholders in Ahwaz's lands, oil resources, and the built environment. Ahwaz's development system serves as evidence of the unequal power dynamics inherent in the projects of oil modernity.¹¹⁸ The study underscores that an oil city's urban affairs are deeply entwined with political and social tensions stemming from interactions among the oil company, British, German, American, and Iranian governments, local tribes, municipal administrations, and labour activists. The layered urban development of Ahwaz encapsulates a transition from informal colonial practices to imperial and post-colonial approaches, reflecting the evolving power dynamics. This evolution is evident in the establishment of separated Company towns for oil employees and labourers, which originated from colonial patterns. British colonial practices paved the way for post-colonial strategies representing the increasing

¹¹⁸ Mafela, Lily. "Hegemony and Accommodation in the History Curriculum in Colonial Botswana." *Journal of Educational Administration and History* 46, no. 4. 2014. pp 424-42.

influence of the national government in competition with spatial oil operations. Subsequently, the impact of welfare-state ideologies, shaped by anti-communism, is manifested in urban spatial and social projects. Finally, the spatialization of capitalist preferences becomes intertwined with the discourse of oil modernity.

By focusing on the spatial presence of petroleum structures, this research illuminates a lesser-explored dimension of the interrelationship between land ownership, architecture, urban planning, and the oil industry's actors involved in shaping the built environment. It bridges the history of modern architecture in the developing world with geopolitical considerations among nations. A comprehensive examination of these frameworks is essential to uncover new insights and lessons from Ahwaz's transformations, contributing to the fields of modern architecture and urban planning history. The study identifies a historical process of hybridization across three primary layers and delineates their diverse impacts on the city's architectural fabric.¹¹⁹

1.5.10 Conclusions

In the final phase of this research, conclusions were drawn by synthesizing the findings from data analysis and literature review. As per Miles and Huberman (1997), the process of drawing conclusions involves identifying regularities, patterns, explanations, potential configurations, causal relationships, and propositions based on the collected information. These conclusions serve to address the research questions and provide a comprehensive understanding of the phenomena under investigation. The primary objective of this research is to uncover the intricate urban experiences associated with oil development in Ahwaz, experiences shared by both local residents and expatriates.

This study contributes to the burgeoning interdisciplinary field of research on global oil modernity. While it is challenging to encompass the entirety of transnational oil modernity within the scope of a single city study and equally challenging to provide an exhaustive examination of architectural transformations throughout the extensive process of global oil modernization, this research serves as a catalyst for future investigations. By shedding light on the multifaceted layers of oil's impact on Ahwaz's architectural and urban characteristics, this study seeks to generate interest in further research endeavours. It is a step towards a more comprehensive understanding of the narratives of oil in the Khuzestan province and the broader context of global oil modernity.

¹¹⁹ *The Bungalow : The Production of a Global Culture*. [in English] London: Routledge & Kegan Paul, 1984.

1.6 Thesis Structure and Overview

After the introduction chapter, this thesis begins with a brief introduction outlining Ahwaz's identity and character to clarify why its petroleumscape is essential to study. It then proceeds to present its findings in four distinct stages, offering valuable insights into Ahwaz's petroleumscape, transnational oil modernity, territorial dynamics, and the roles of global actors with their cross-cultural practices. By leveraging previously unpublished primary sources and addressing questions related to land ownership and cross-cultural exchanges, this research bridges the fields of architecture and urbanism with scholarly discourse. The thesis employs a chronological structure that reflects the successive transnational oil actors, each contributing to different socio-political stages of development and sparking a protracted series of land ownership disputes within the city. This structured approach allows for a comprehensive examination of Ahwaz's complex history and the multifaceted interplay of local and global forces in shaping its urban landscape.

The third chapter, covering the period from 1901 to 1925, serves as the initial stage in the development of Ahwaz's petroleumscape. Its primary objective is to address the following question: How did the struggle for control over oil territories play a pivotal role in initiating processes of environmental change? This chapter contends that land ownership was a driving force behind the informal colonial spatial transformation in Ahwaz. The pursuit of access to oil resources drove British oil investigators to reshape the landscape of land ownership, management, and utilization. During this period, they grappled with asserting control over the wealth generated by oil and the lands containing mineral resources, positioning themselves as central actors in shaping spatial policies. The ownership of oil lands conferred significant advantages upon them, granting them authority over both the local population and the national state. The chapter digs into Ahwaz's early informal colonial phase, characterized by the transformation of ownership of oil fields from local entities to properties controlled by the Anglo-Persian Oil Company (APOC) in order to establish oil authority.¹²⁰ Key themes explored in this chapter include questions related to boundaries, oil territoriality, land ownership, and land use transformations, all of which represent the initial informal colonial activities and policies that laid the groundwork for subsequent architectural, urban, and infrastructural changes in the city over time.

¹²⁰ Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, London: Routledge, 2010. P 54

The fourth chapter investigates the second stage of petroleumscape development, covering the period from 1926 to 1953. It seeks to address the question of how territorial control around the oil industry led to conflicts among various actors and played a pivotal role in producing hybridity across urban, financial, cultural, and social infrastructures. The central argument revolves around the concept of “post-colonial ambivalence”¹²¹ and the complexities within the context of the oil fields, which posed challenges to national and local autonomy conditions in the face of British domination, hegemony, and their political implications in oil administration. During this period, the emerging Iranian national state under the Pahlavi dynasty played a crucial role in the political landscape. The introduction of Reza Shah Pahlavi¹²² marked a significant shift in Iran’s political context, effectively positioning the nation as a formidable power in the struggle against the influence of Russia and Britain, ultimately reclaiming its sovereignty.¹²³ Consequently, the balance of power in the oil fields underwent a transformation, initiating the gradual weakening of British informal colonialism within the APOC’s industrial activities and the emergence of a new form of nationalism, marking a “post-colonial stage” in the oil fields. The chapter discusses the post-colonial activities of the national government, with Reza Shah’s national infrastructural projects, undertaken with the assistance of German and American experts, running in parallel with oil-related urban initiatives spearheaded by the British. It also highlights the significance of the new oil concession established in 1933, which prompted the APOC to recognize the importance of respecting national values in the development of the oil environment. This shift in perspective led to a transformation in the APOC’s activities, evolving from colonial endeavours to post-colonial development. Consequently, the Oil Company’s initiatives no longer solely catered to British employees but also considered the requirements of Iranian oil labourers, resulting in housing projects and social facilities designed to benefit Iranians.

The fifth chapter searches the third stage of development, covering the period from 1945 to 1973. Its primary question revolves around the architectural exchanges within the broader context of Anglo-American relations in the Iranian oil fields, aligned with their political objectives of the time.

¹²¹ Ibid., p 42

¹²² (1878–1944) as a soldier, statesman, and ruler.

¹²³ New monarch as an absolute dictator changed the country’s global position from being a passive victim by foreign Russian and British plunders, to an active force for its own national ambitions.

Essad Bay Mohammad, Maerker-Branden Paul, and Branden Elsa. *Reza Shah*. London: Hutchinson, 1938.

The chapter delves into the dynamics of Anglo-American post-war relations, American socialism, consumerism, and anti-communism culture, as well as their welfare system's influence on urban planning and architectural projects, all within the framework of the oil industry's interventions. Furthermore, the chapter explores the roles played by American, British, and Iranian architects and urban planners who had received British training in shaping the city during the post-war era. In the aftermath of World War II, the Soviet Union and the United States emerged as the new global superpowers, ushering in a significant shift in global power dynamics.¹²⁴ This geopolitical transformation, coupled with the rise of nationalist sentiments within Iran, led to a profound shift in the constellation of actors. The weakening control of the new monarch, Mohammad Reza Shah Pahlavi, over the country created opportunities for increased American access to Iranian wealth, as well as the growth of Iranian nationalists who sought to reclaim Iran's lost legacies. These developments occurred within the framework of the Shah's government, which faced challenges from both American and nationalist influences, shaping the trajectory of urban development in Ahwaz during this period.

The sixth chapter of the thesis marks the fourth and final stage of petroleumscape development, spanning from 1973 to 1979. Its central question revolves around the strategies employed by Iranian architects and planners to explore a national form of modernism. This chapter delves into the capitalist¹²⁵ and countercultural¹²⁶ activities of the Iranian National State, which emerged as the ultimate authority in its oil fields,

¹²⁴ *Architecture and Capitalism : 1845 to the Present*, edited by Peggy Deamer, Taylor & Francis Group, 2013. ProQuest eBook Central, <http://ebookcentral.proquest.com/lib/delft/detail.action?docID=1318977>.

¹²⁵ Glyn, Andrew. *Capitalism Unleashed : Finance Globalization and Welfare*. [in English] Oxford :: Oxford University Press, 2006.

Stretton, Hugh. *Capitalism, Socialism and the Environment*. [in English] Cambridge: Cambridge University Press, 1976.

Wright, Ian. *The Social Architecture of Capitalism*. St. Louis: Federal Reserve Bank of St Louis, 2004.

Aureli, Pier Vittorio, and Architecture Temple Hoyne Buell Center for the Study of American. *The Project of Autonomy : Politics and Architecture within and against Capitalism*. [in English] Forum Project. New York: Temple Hoyne Buell Center for the Study of American Architecture, 2008.

Deamer, Peggy. *Architecture and Capitalism : 1845 to the Present*. Hoboken: Taylor and Francis, 2013.

http://www.123library.org/book_details/?id=103647

<http://www.mylibrary.com?id=505638>

<https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=1318977>.

¹²⁶ Spencer, Douglas. *The Architecture of Neoliberalism : How Contemporary Architecture Became an Instrument of Control and Compliance*. New York: Bloomsbury Academic, 2016. <http://site.ebrary.com/id/11252235>

<https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1341998>

<https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=4659171>

<http://www.vlebooks.com/vleweb/product/openreader?id=Liverpool&isbn=9781472581549>

<http://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781472581549>

<http://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781472581532>.

ushering in the fourth generation of the Petroleumscape. During the oil boom of the 1970s, Iran underwent a new phase of development characterized by newfound independence. With complete ownership of the oil industry and vast revenues, Iran emerged as a major national state with significant global influence, altering global power dynamics. The presence of powerful national corporations accentuated the impact of petroleum on the built environment.¹²⁷ The chapter delves into the specific coordination that emerged between the construction of infrastructures and prestigious projects, highlighting the government's political dominance and the pivotal role played by talented Iranian architects and urban planners in shaping the urban landscape during this era. This stage marked a crucial phase in the evolution of Ahwaz's petroleumscape, characterized by the assertion of national authority and the manifestation of a unique form of Iranian modernism.

The seventh and final chapter of the thesis brings the investigation to a close by asserting that the history of Ahwaz would have unfolded in profoundly different ways had it not been for the advent of the oil industry. While the oil companies stood to benefit from the oil itself, the city of Ahwaz reaped the advantages of infrastructure development designed to cater to the oil industry, resulting in substantial progress. The journey that began with the discovery of oil in 1908 set off a series of transformative ripples that absorbed various global flows, creating a unique globalized atmosphere for exchanges. These exchanges culminated in the flourishing of a distinct Iranian form of modernity by the 1970s. Recognizing the significance of interactions between global flows in shaping diverse facets of modernity, this chapter underscores how the presence of oil, with its connotations of wealth and power, attracted global actors who, in turn, reshaped urban spaces that had a profound impact on the lives of the city's residents. The oil industry's growth played a pivotal role in both the direct and indirect influences on the built environment, leading to changes and continuities. It stimulated innovation, intensified the circulation and exchange of people, goods, lifestyles, and social values, and profoundly shaped the experiences of the city's inhabitants in their journey towards progress and modernity. This chapter highlights the globalizing process that Ahwaz underwent, similar to that experienced by many other local cities worldwide. While they all achieved similar modern developments, they could not ignore the importance of preserving vernacular values in their urban districts, social interactions, and private lives within their living spaces. The lens of oil's impact on environmental expansions, cities, and living spaces underscores the critical importance of understanding how globalization intersects with vernacularism, influencing specific lifestyles in the twentieth century.

¹²⁷ Hein, C. M. "Space, Time, and Oil: The Global Petroleumscape." Routledge - Taylor & Francis Group, 2021.

2 Ahwaz, A Microcosm of Global Change

Main question

- What makes the exploration of Ahwaz's petroleumscape crucial, and why is it significant for scholarly inquiry?

2.1 Introduction to the chapter

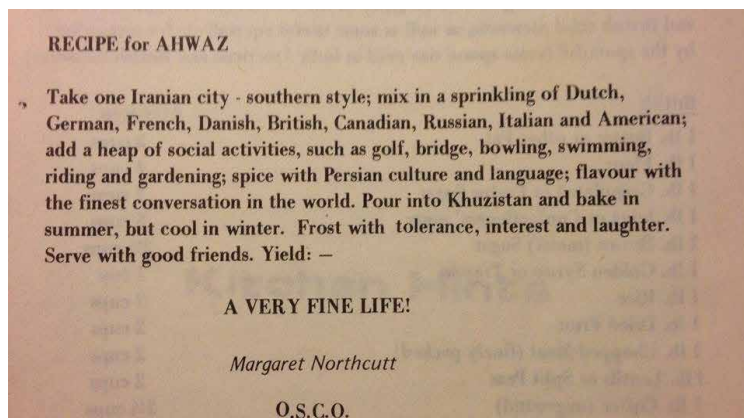


FIG. 2.1 A Description of Ahwaz.

Source: unknown

Date: unknown

The history of Ahwaz is closely tied to the presence and activities of various international oil companies and actors. The initial oil exploration activities in Iran began with the efforts of William Knox Darcy, a British entrepreneur. His exploration efforts laid the foundation for developing Iran's oil industry since 1901. Anglo-Persian Oil Company (APOC, 1908-1933) was established to explore and develop Iran's oil resources further. It secured a concession from the Iranian Government and played a significant role in early oil activities in Ahwaz and other parts of Iran. Anglo-Iranian Oil Company (AIOC, 1933-1951) continued to develop Iran's oil industry. During this period, Ahwaz saw significant growth and urban development to support the expanding oil operations. Following the nationalisation of Iran's oil industry in 1951, AIOC was renamed British Petroleum (BP, 1951 to present). BP continued its presence in Iran until the Islamic Revolution in 1979. After the nationalisation of the oil industry, the National Iranian Oil Company (NIOC, 1951 to present) took control of Iran's oil resources. It became the primary state-owned entity responsible for oil production and management. Apart from APOC, AIOC, and BP, various other international oil companies, including American Standard and Shell,

also had interests and activities in Iran's oil industry. These companies contributed to the development of Ahwaz and its built environment.¹²⁸

The development of oil cities in Iran, including Ahwaz, was a comprehensive process extending beyond industrial infrastructure. It encompassed various aspects of the petroleumscape, including economic, political, social, and environmental elements. The oil industry necessitated the creation of extensive urban infrastructure in and around oil cities. This infrastructure included housing for workers, administrative buildings, hospitals, schools, roads, railways, and port facilities. The construction of these facilities aimed to support the needs of the oil workforce and the industry as a whole. The presence of international oil companies and the growth of the oil industry had a significant economic impact on the regions where oil was extracted. It brought investments, job opportunities, and economic development. This economic transformation affected not only the oil industry but also various sectors of the local economy. The history of Iranian oil cities is intertwined with political shifts, including colonisation, nationalisation, and decolonisation. These political changes had territorial consequences and influenced the dynamics of the oil industry. The nationalisation of Iran's oil industry in 1951, for instance, marked a significant turning point in the country's history. The oil industry brought about social changes in the regions it operated in. It attracted a diverse workforce, including Iranians and expatriates from various countries. This multicultural workforce influenced the social fabric of oil cities and contributed to the development of a unique social environment. The oil industry has environmental implications, both in terms of resource extraction and environmental management. The petroleumscape includes the environmental aspects related to oil exploration, drilling, refining, and transportation. Managing the environmental impact of oil activities has been an ongoing concern. The enhancement of oil cities in Iran was part of global petroleum chains and flows. The production and export of oil from Iran had far-reaching consequences on the global energy market and geopolitics.

The development of interconnected cities and infrastructure networks in oil-rich regions was a defining characteristic of the petroleumscape. It ushered in a new era of infrastructure connections and landscape transformation, fundamentally reshaping not only the economic and social fabric of these regions but also influencing global architectural and urban theoretical and practical dynamics. The expansion of infrastructure, such as pipelines, transportation networks, and urban centres, allowed for efficient oil extraction and distribution while concurrently sparking substantial urbanisation and economic growth. This transformation

¹²⁸ Wright, Denis. *The Persians Amongst the English: Episodes in Anglo-Persian History*. London : I.B. Tauris, 1985.

redefined the way societies interacted with their environments, accelerating economic development and contributing to the global energy landscape's evolution.

The establishment of these cities and facilities within the global oil industry was not merely a matter of infrastructure; it carried profound significance on multiple fronts –spatial, economic, and political–. This importance was multifaceted, influencing a wide array of stakeholders and areas of interest. First and foremost, the spatial significance of these cities and facilities lies in their role as pivotal nodes in the global oil supply chain. They functioned as critical hubs for extracting, producing, transporting, and distributing oil resources. This spatial web not only facilitated the efficient movement of oil but also shaped the geography of energy production and consumption on a global scale.

Economically, these centres were instrumental in driving economic growth, not only within the regions where they were situated but also at the national and international levels. The oil industry's expansion fostered trade and investment, spurring economic development and prosperity in both producer and consumer nations. Moreover, the economic significance extended to multinational corporations, governments, and investors, all relying on the oil industry's infrastructure for revenue and stability. Politically, the establishment of these cities and facilities had far-reaching implications. They often became focal points of international diplomacy and geopolitical tension, with countries vying for control over valuable oil resources. Additionally, the development of these oil-rich regions had the power to shape the political landscape within the host country, as the influx of capital and the allure of jobs and economic opportunities could influence government policies, stability, and power structures. In sum, the spatial, economic, and political implications of these cities and facilities within the global oil industry have far-reaching consequences, impacting a wide array of individuals, organisations, and nations. Understanding this significance is crucial for policymakers, scholars, industry professionals, and the broader public, as it sheds light on the intricate web of interconnections that shape our world.

The discovery of oil in Masjed-Soleyman marked the beginning of Iran's journey into the global oil industry. This initial find triggered a chain reaction of developments as it became evident that the region held vast oil reserves.

With the recognition of significant oil reserves in the area, industrialisation and modernisation efforts were accelerated. Oil infrastructure, including drilling operations, refineries, and transportation networks, began to take shape. As the oil industry grew, it attracted a diverse population of professionals, labourers, and support staff. This influx of people led to the rapid urbanisation of previously rural

areas. Cities like Abadan, Ahwaz, and others saw significant expansion as they became focal points for oil-related activities. The development of the petroleumscape in this region was not isolated but rather interconnected with the global oil network. The oil extracted and processed here was part of the international oil trade, contributing to global energy supplies.

- **Masjed-Soleyman (MIS):** Masjed-Soleyman emerged as the first oil exploration and extraction field in Iran in 1908, and the first oil headquarters was established in this city. This city in southwestern Iran is often considered the birthplace of Iran's oil industry. It was the site of the first oil well drilled in Iran in the early 20th century. Masjed-Soleyman played a crucial role in kickstarting Iran's oil production.
- **Abadan:** Abadan is one of the most well-known oil cities in Iran. It housed the world's largest oil refinery for several decades. The city was a central hub for the Anglo-Iranian Oil Company (later BP) and played a vital role in the global oil supply chain.
- **Ahwaz:** Ahwaz played a significant role in Iran's oil industry. It became an essential industrial and urban centre, hosting oil-related infrastructure, professionals, and labour forces.
- **Khorramshahr:** Located near the Shatt al-Arab waterway, Khorramshahr was strategically important for oil exports. It also became a focal point during the Iran-Iraq War in the 1980s. Khorramshahr was an old port next to the Abadan, which had a better climate, more green lands being far enough from the refinery's pollution to host the administrative houses and was a vital indirect oil-based developed port in Khuzestan.
- **Bandar Shahpur:** This city was another crucial location for oil-related activities and infrastructure. Its development was intertwined with the growth of the petroleumscape. Shahpur port was a significant port that ultimately emerged to fulfil the needs of oil exports.
- **Mahshahr:** Mahshahr is known for its industrial port and petrochemical facilities. It was one of the most significant ports in the region for oil export.
- **Khark Island:** Located in the Persian Gulf, Khark Island became a key export terminal for Iran's oil. It played a vital role in facilitating the flow of oil to international markets. It was the world's largest port to ship refined oil in its time of construction.

These cities¹²⁹ and facilities were not only centres of industrial activity but also sites of political and economic significance. They were nodes within the global oil network, connecting oil-producing regions with international markets. The development of these cities transformed the region's physical and social landscapes, attracting a diverse population and shaping local cultures.



FIG. 2.2 Map of Khuzestan, Iran.

Source: Printed in Great Britain by Edward Standard, Ltd. London. BP Archives.

Date: Unknown. Accessed: February 2018.

A cartographic analysis is essential for understanding how the spatial configuration of these cities evolved over time in response to the demands of the oil industry and global flows. It provides valuable insights into the intricate relationship between oil, architecture, and urban planning in developing the petroleumscape. The maps depicting the expansion of industrial and functional modernity in the region, starting with the initial oil discovery in Masjed-Soleyman, indeed illustrate a transformative process that had profound implications for the entire petroleumscape.

¹²⁹ and other less essential oil fields as Lali, Haft-Gel, Naft-e-Sefid, Bibian, Aghajary, Bid-e-Boland, Dar-Khovein, Kut-e-Abdollah, Gachsaran, etc.

The maps chronicle the evolution of the petroleumscape in response to the discovery and development of oil resources in the region. This process had profound and multifaceted effects on the physical landscapes, both locally and within the broader global context. It underscores the intricate relationship between oil, industrialisation, urbanisation, and the modernisation of the region.



FIG. 2.3 Mo'in-o-Tojjar Commercial Complex, Ahwaz.

Dr. Young's photographs: Persia Miscellaneous, ArcRef: 36144. BP Archive.

Date: 1907-1913. Accessed: February 2018.

2.2 Background: Pre-Oil Endeavours in Khuzestan

Before the first oil footprints appeared in Iran, Ahwaz was a small port that relied on international trade through the Karun River and its connection to the Persian Gulf. The city, located far away (about 800 kilometers) from Tehran, was mainly neglected by the fragile national state of the Qajar dynasty. The local construction practices were oriented towards creating introverted houses with inner courtyards, which offered cultural privacy and helped regulate micro-climates within the enclosures. The solid urban facades typically lacked windows facing the streets, reflecting the architectural style of the time. There was no formal urban planning system in place, and people from different social classes lived in close proximity to each other in densely populated neighbourhoods without significant social divisions. The earliest known urban planning efforts for Ahwaz can be traced back to Nezamosaltane, the governor of Ahwaz during the Qajar period. However, it is important to note that these planning efforts were limited in scope, and Ahwaz lacked a comprehensive urban development strategy. Regarding the specific period we are discussing, it is difficult to determine the exact timeframe based on the information provided. The particular timeframe we are referring to regarding the conditions of Ahwaz prior to oil discovery and subsequent urban transformations can be generally situated in the late 19th century, leading up to the initial stages of oil exploration and the subsequent development of the oil industry in the region.¹³⁰

¹³⁰ Iraj Afshar Naderi, *Negahi be Khuzestan (A Perspective to Khuzestan)* (Tehran, 1366/1987)
Mojtahed zade, R. & NamAvar,Z. *In search of urban identity of Ahvaz: Dar Jost-ejooye hovviatie shahri e Ahwaz*. Road, Housing and Urban Development Research Center. 1394/2015.

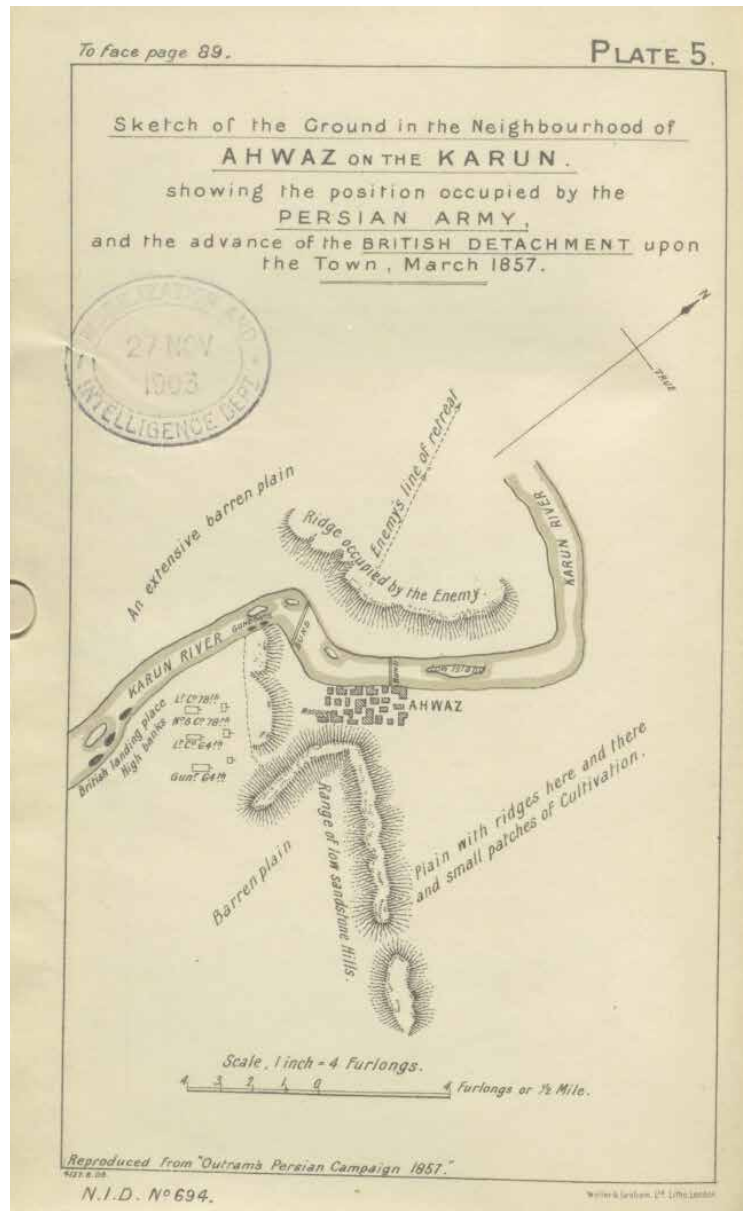


FIG. 2.4 Fields and Facilities Map.

Source: Middle East Oil Development. ArcRef: 134844C. Barcode: Z01622274. 1956. BP Archives.

Date: 1956. Accessed: February 2018.



FIG. 2.5 Map of the Tribes Adjoining the Oilfields by the Area Liaison Officer, Ahwaz.

Source: Arc Ref: 129282, BP Archive.

Date: 1946. Accessed: February 2018.

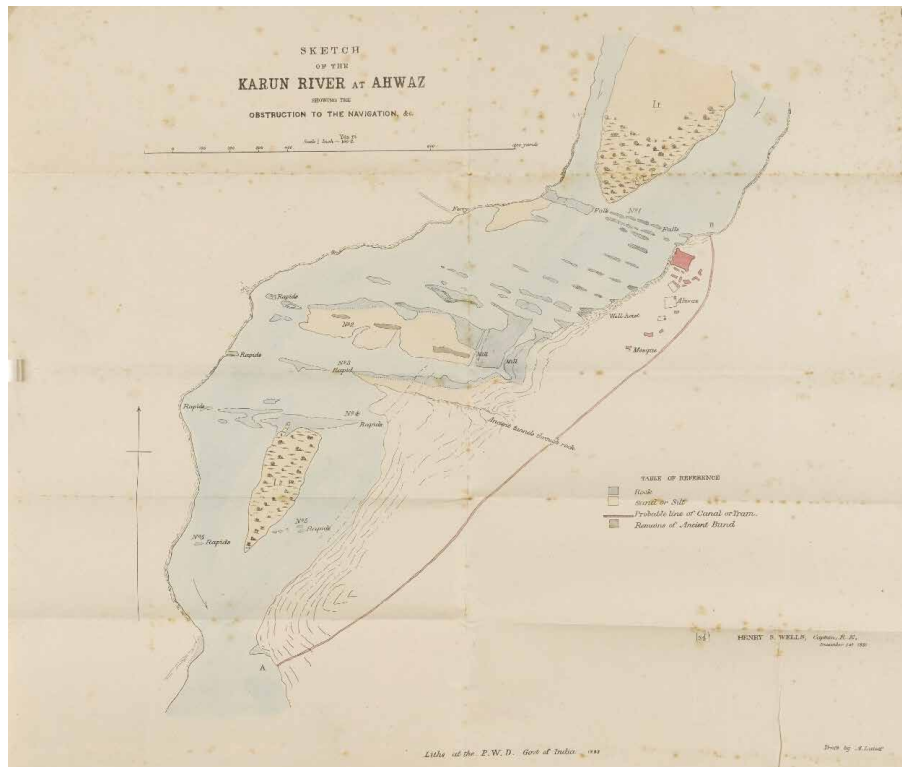


FIG. 2.6 Sketch of the Karun River at Ahwaz Showing the Obstruction to Navigation, etc.

Source: British Library: India Office Records and Private Papers, Mss Eur F112/613, f 711, in Qatar Digital Library https://www.qdl.qa/archive/81055/vdc_100139603308.0x000018

Date: 1881. Accessed: March 2023.

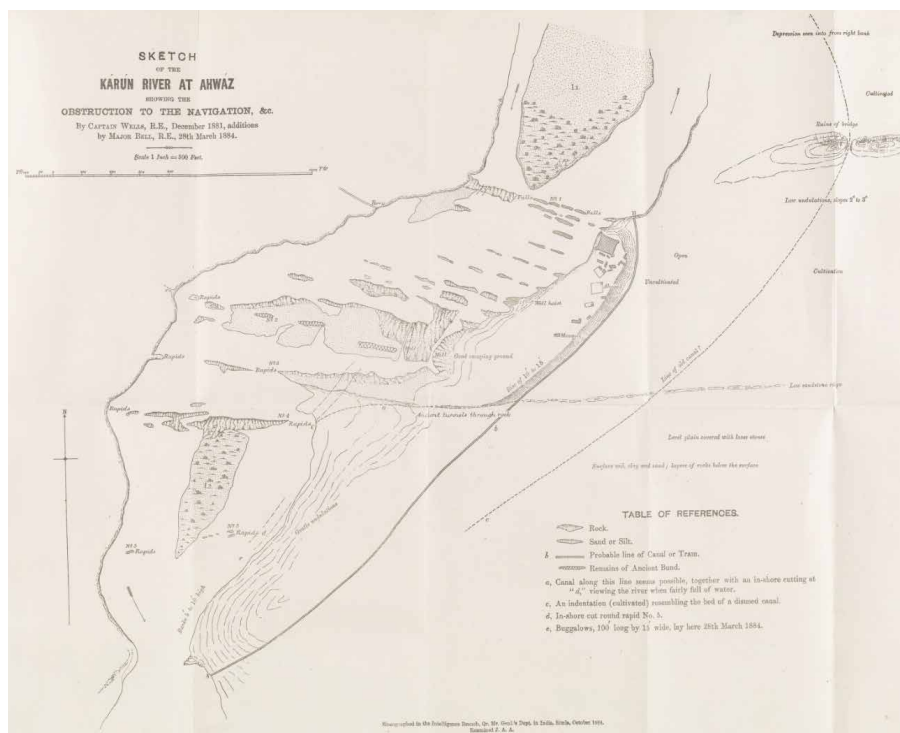


FIG. 2.7 'Sketch of the Kárún River at Ahwaz Showing the Obstruction to the Navigation, &c.'

Source: British Library: India Office Records and Private Papers, IOR/L/MIL/17/15/9, f 89, in Qatar Digital Library https://www.qdl.qa/archive/81055/vdc_100048990082.0x0000b7

Date: 1881-1884. Accessed: March 2023.

Following the opening of the Suez Canal in 1869, Iran seized the opportunity to enhance its international sea trade and expand its connections to the global economy through the Persian Gulf. Due to the command of Qajar kingship in 1888,¹³¹ Iran's only navigable river from Persian Gulf, the Karun, located in Khuzestan with access to the open seas, was re-opened to the global commercial traffic which passed through Ahwaz, connecting the inner lands of Iran to the global fields and the international trade.¹³² In other words, the inauguration of the Suez Canal made international trade open a way into the country, and the development allowed Ahwaz, situated along the Karun, to serve as a vital link connecting Iran's inland regions to global trade routes.



FIG. 2.8 Ahwaz Vernacular Architecture.

Source: Dr. Young's photographs: *Persia Miscellaneous*, ArcRef: 36144. BP Archive.

Date: 1907-1913. Accessed: February 2018.

¹³¹ Davenport-Hines, R. P. T, and Geoffrey Jones. *British Business in Asia Since 1860*. Cambridge: Cambridge University Press. 1989. P34

¹³² Brockway, Thomas P. "Britain and the Persian Bubble, 1888-92." *The Journal of Modern History* 13, no.1 (1941): 36-47. <http://www.jstor.org/stable/1906109>. pp. 37-8.

In 1896, the establishment of Lynch Brothers' Shipping Company in Ahwaz (developing imports to and exports from Iran) marked Ahwaz's first significant encounter with international engagement. After three years of residing in local houses, the company's agent obtained permission to construct a house in Ahwaz. Nezmosaltaneh sought authorisation from the royal state to allocate a substantial plot of land adjacent to the Karun River for this purpose. This period coincided with the emergence of functionalism in European architecture during the 1890s. Consequently, the British-designed structure in Ahwaz embraced a functional and simplistic architectural style, catering to the practical needs of the British presence in a Middle Eastern city situated far from their homeland.¹³³ The urban facades of the building were modest and devoid of ornate embellishments, with a primary focus on the riverside view. The design prominently featured entrances defined by stairs and traces. Construction materials, such as bricks, were imported from London, and the interior elements, like wooden stairs and a fireplace - with an engraved address of London on it- served as distinctive British touches. Surrounding the building was a garden adorned with imported Indian flowers and various indigenous trees, including palms and citrus. Over time, the ownership of the property transitioned to become the British consulate in the city.¹³⁴

¹³³ Mojtahed zade, R. & NamAvar,Z. *In search of urban identity of Ahvaz: Dar Jost-ejooye hovviatie shahri e Ahwaz*. Road, Housing and Urban Development Research Center. 1394/2015.

¹³⁴ Nichols, Herbert Edward. *Khuzistan - Political.:* the Anglo-Persian Oil Company, Limited, 1924.



FIG. 2.9 The Stern-wheeler "Chardine" Beside the Nasiri Seif (Ahwaz Port), Ahwaz Riverfront, and Transport Through Karun.

Source: Dr. Young's photographs: *Persia Miscellaneous*, ArcRef: 36144. BP Archive.

Date: 1907-1913. Accessed: February 2018.

In addition to its role in international trade, the Lynch Company also had plans to improve transportation infrastructure within Iran. Recognising the need for efficient connections between Ahwaz and other major cities, the company proposed the construction of a road linking Ahwaz and Isfahan. This road would facilitate access to Iran's hinterlands and enhance commercial traffic. Subsequently, in 1899, the British constructed the Ahwaz-Isfahan road, traversing the challenging terrain of the Zagros Mountains.¹³⁵

One of the other prominent Ahwaz buildings in Nezamossaltane activities in the 1980s was Mo'in-o-Tojjar commercial building as a monumental trademark. After granting the privilege of shipping in the Karun River to the international market, one of the Iranian merchants, Mo'in-o-Tojjar, entered the city of Ahwaz at the beginning of establishing the city's port. He also found a public bath, bazaar and garden for his international trade company and created the Mo'in-o-Tojjar complex. This building started a strong point for traditional neighbourhoods in the city in its future expansions. Local constructors made it out of a wooden roof and thick brick walls to remain as cold as possible in the hot climate of Ahwaz. From the architectural

¹³⁵ Shahnavaaz, Shahbaz. *Britain and the Opening up of South-West Persia 1880-1914: A Study in Imperialism and Economic Dependence*. London: RoutledgeCurzon, 2005.

<https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=115240>

<https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=200292>

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<http://books.eclibrary.ca/isbn/9786610150748>

<http://www.taylorfrancis.com/books/9780203407813>

<https://ebookcentral.proquest.com/lib/sfu-ebooks/detail.action?docID=200292>.

point of view, the existence of a balcony on the main façade made it different from traditional introvert architecture with solid exterior walls. It was the second garden built in the city, located next to the river after the Lynch garden, filled more with local plants (Konar and Palm), useful for their shadow and the fruits they provided.¹³⁶ Overall, these projects contributed to the city's growth and facilitated more excellent connectivity within Iran's economic landscape, driven by the need for improved transportation infrastructure and the establishment of Ahwaz as a commercial centre, demonstrating the impact of international trade and British influence on the growth and connectivity of the city during the late 19th century.

2.2.1 Transcending Pre-Oil Boundaries: Global Colonial Financial Interests and the Web of Concessions in Iran

By the late nineteenth century, Iran possessed abundant untapped mineral resources, yet it faced economic vulnerability, industrial underdevelopment, and military defencelessness.¹³⁷ The country lacked the financial and technical capabilities to harness its natural wealth, creating an enticing opportunity for colonial financiers and explorers.¹³⁸ As a strategically important region, it caught geopolitical rivalries' attention—various Russian, French, Belgian and Austrian made offers for developing infrastructures in the country-. On the one hand, Iran's administrative and governance structures were often weak and inefficient in that period. The lack of effective governance mechanisms, bureaucracy, and corruption hindered the implementation and successful execution of infrastructure development initiatives. Inadequate institutional capacity and administrative hurdles further impeded the progress and effectiveness of foreign-led infrastructure projects. On the other hand, developing infrastructure in a vast, diverse country like Iran required advanced technological capabilities and expertise. Iran's technical capacity and know-how were limited then, making implementing and managing large-scale infrastructure projects

¹³⁶ Ibid.

¹³⁷ Ferrier, R.W. *The History of the British Petroleum Company*. Vol. Vol. 1, the Developing Years 1901-1932 /. Cambridge etc.: Cambridge University Press. 1982.

¹³⁸ Various unsuccessful concessions as Russian, French, Belgian and Austrian offers as Julius de Reuter concession in 1872 and 1889 had been made before the genesis of oil history in Iran. Kent, Marian, and London School of Economics and Political Science. 1976. *Oil and Empire : British Policy and Mesopotamian Oil, 1900-1920*. London etc.: Macmillan for the London School of Economics and Political Science. P. 3.

challenging. These factors created significant obstacles and hindered the successful realisation of infrastructure plans in Iran during that period.¹³⁹

For all the reasons of political interference, limited financial resources, technological and expertise gaps, socio-cultural challenges, and administrative and governance issues, all various foreign powers attempted infrastructural development initiatives and ultimately fell short of contributing to the country's overall progress. These powers often sought to advance their own interests in Iran, leading to conflicting agendas and competition for influence. The interference and conflicting interests among these foreign powers resulted in a lack of cohesive planning and coordination, hindering the overall progress of infrastructure development initiatives. Of particular significance were the infamous concessions involving British actors, notably the Reuter Concession which witnessed both successes and failures in the pursuit of exploiting Iran's vast resources.¹⁴⁰ Julius de Reuter secured a concession in 1872 to develop Iran by building railways, canals, and exploiting resources but faced conflicts and protests, leading to the concession's cancellation. In 1889, a more limited concession was granted, which established the Imperial Bank of Persia and the Persian Bank Mining Rights Corporation, but challenges in southern Iran, particularly in Khuzestan, hindered their ability to fully exploit mineral resources, resulting in their voluntary liquidation in 1894.¹⁴¹

The pre-oil activities in Khuzestan during the late nineteenth century exemplify the colonial financial interests and infrastructural development initiatives that shaped Iran's economic landscape. While foreign concessions, including the Reuter Concession, initially held promise for exploiting Iran's abundant resources, challenges and limitations impeded their long-term success. Nonetheless, these activities laid the foundation for subsequent developments in Iran's mining and banking sectors, contributing to the country's evolving relationship with foreign powers and shaping its economic trajectory in the years to come.¹⁴²

¹³⁹ Ferrier, R.W. *The History of the British Petroleum Company*. Vol. Vol. 1, the Developing Years 1901-1932 /. Cambridge etc.: Cambridge University Press. 1982. P 6.

¹⁴⁰ Jones, Geoffrey. *Banking and Empire in Iran*. The History of the British Bank of the Middle East, Vol. 1. Cambridge etc.: Cambridge University Press. 1986.

¹⁴¹ T., Davenport-Hines R. P., and Geoffrey Jones. *British Business in Asia since 1860*. [in English] Cambridge; New York: Cambridge University Press, 2002.

¹⁴² Vali Zadeh, Iraj. *Anglo & Banglo in Abadan*. Simia Honar Publications, 2010.



FIG. 2.10 Architecture of Ahwaz Before Oil.

Source: British Library: India Office Records and Private Papers, Photo 496/6/43-45, in Qatar Digital Library https://www.qdl.qa/archive/81055/vdc_100023803156.0x000029

Date: 1917. Accessed: February 2023.

2.3 Importance of Ahwaz

Among the interconnected oil cities of Iran, each of which played a unique role within the oil industry's grand tapestry, Ahwaz stands out as a paragon of "transnational oil modernity." This distinctive identity was cultivated in tandem with the province's burgeoning growth. Situated at the nexus of the Iranian oil landscape, Ahwaz found itself endowed with a strategic location. Nestled alongside the Karun River, the only navigable waterway connecting the Persian Gulf and the vast interior of Iran, Ahwaz enjoyed a pivotal position within the industrial web of Khuzestan. It occupied a central role, nestled amidst the primary oil wells in places like Masjed-Soleyman and the bustling ports of Abadan as the sprawling oil refinery. From the earliest days of oil exploration in Iran, Ahwaz emerged as an indispensable hub of the country's oil industry. While Ahwaz's association with oil ignited a frenzy of activity in the heart of the oil fields, its transformation was not a sudden phenomenon. Instead, it followed a gradual trajectory, evolving from a rural expanse into a modern oil city shaped by the contours of diverse political epochs. Over time, it assumed an increasingly pivotal role, emerging as a vital centre for transporting, pumping, storing, and controlling the province's oil resources. Ahwaz's journey epitomises the dynamic interplay between industrialisation, urbanisation, and the enduring presence of oil.

Ahwaz's evolution from a rural area to a modern oil city was a fascinating aspect of the region's history. Its strategic location at the confluence of several key elements, including the Karun River, primary oil wells, and the oil refinery and ports, contributed significantly to its development within the Iranian oil industry. Here are some key points about Ahwaz's transformation:

- **Early Pioneer Days:** Ahwaz's role in the oil industry dates back to the early pioneer days of oil exploration in Iran. As oil was discovered in the region, Ahwaz began to see the development of infrastructure and facilities to support the growing industry.
- **Strategic Location:** Ahwaz's location at the heart of the industrial web in Khuzestan and its proximity to the Karun River made it a strategic point for the oil industry. The navigable Karun River provided a natural route for transporting oil and other goods to and from the Persian Gulf, facilitating trade and transportation.
- **Infrastructure and Modernisation:** The development of Ahwaz involved the creation of modern infrastructure, including roads, industrial facilities, housing, and administrative buildings. These aspects of urbanisation played a pivotal role in the city's transformation.

- **Multi-Functional Hub:** Ahwaz served multiple functions within the oil industry. It became a centre for transport, pumping, storage, and control. This multifaceted role highlighted its importance within the province's oil operations.
- **Diverse Political Periods:** Ahwaz's development occurred across different political periods in Iran's history. This context likely influenced the city's growth, urban planning, and governance structures. Understanding Ahwaz's historical and political context is crucial for comprehending its transformation.
- **Progressive Development:** Unlike sudden oil boomtowns, Ahwaz's development into an oil city was a gradual process. It evolved over time from a rural area to an urban centre with the oil industry's expansion. This progressive development allowed for more deliberate planning and infrastructure growth.
- **Impact on the Province:** As Ahwaz evolved into a modern oil city, it had a significant impact on the entire province of Khuzestan. The growth of the city was closely tied to the expansion of the oil industry, which, in turn, influenced the province's economic and social dynamics.

Studying the history of Ahwaz provides valuable insights into the interconnectedness of oil, industry, and urbanisation in the Middle East. It illustrates how strategic locations and the gradual growth of urban centres contributed to the development of oil-related cities and their roles within the broader oil landscape. Additionally, Ahwaz's history sheds light on the dynamic relationship between local and global factors in shaping oil cities in the region. The instrumental role that architecture and urban planning played in shaping the oil industry's built environment impacted the lives of those involved. Architecture and urban planning were indispensable tools for oil actors to achieve their goals, whether related to oil extraction, workforce management, or the overall development of oil cities. These disciplines were integral to shaping the physical and social landscapes of the petroleumscape. Here's a more detailed exploration of how architecture and planning served as tools for oil actors:

- **Land Use and Transformation:** Oil companies and governments acquired vast tracts of land for oil exploration and production. Urban planning determined how these lands were allocated for various purposes, such as drilling sites, refineries, storage facilities, and residential areas. This transformation of land use was critical to the success of the oil industry.
- **Infrastructure Development:** The construction of roads, railways, pipelines, and ports was essential for transporting oil and supporting industrial operations. Urban

planners and architects played a pivotal role in designing and implementing these infrastructures, which facilitated the movement of oil and workers.

- **Housing Projects:** To accommodate the workforce, especially in remote oil-rich regions, housing projects were initiated. Architects designed company towns and residential complexes that provided housing for employees and their families. These housing projects often included amenities like schools, hospitals, and recreational areas.
- **Urban Spaces:** Urban planning defined the layout and organisation of oil cities. This included the design of streets, public spaces, and commercial districts. The arrangement of these spaces influenced social interactions and the overall quality of life in oil cities.
- **Control and Supervision:** The layout of industrial facilities, such as refineries and processing plants, was carefully planned to ensure efficient production and safety. Architects and planners worked to create spaces that allowed for effective supervision and control of industrial processes.
- **Socialisation:** Oil companies recognised the importance of fostering a sense of community among their employees. Social spaces, such as clubs, theatres, and community centres, were designed to promote interaction and recreation among workers.
- **Representations:** Architecture also played a role in representing the power and authority of oil companies. Grand corporate headquarters, iconic buildings, and architectural symbols conveyed the industry's significance and influence.
- **Lifestyles:** The design of residential areas and housing influenced the daily lives of oil workers and their families. Architects considered the needs and preferences of residents, contributing to creating specific lifestyles within oil cities.

The process of industrialisation and urbanisation had far-reaching socio-economic and environmental effects. It transformed local economies, created employment opportunities, and reshaped the environment. However, it also posed challenges related to resource management, infrastructure development, and environmental sustainability. The region's oil resources became a focal point of political and geopolitical struggles. Control over oil reserves and access to these resources played a significant role in shaping national and international politics. As previously mentioned, architecture and urban planning were essential tools in shaping the built environment of oil cities. The construction of housing, industrial facilities,

administrative buildings, and urban infrastructure was intricately linked to the demands of the oil industry and the needs of the growing population. The expansion of functional modernity refers to the development of critical infrastructure and facilities required for oil production and processing. This includes oil wells, pipelines, refineries, storage tanks, and transportation systems. These elements were essential for the extraction and export of oil.

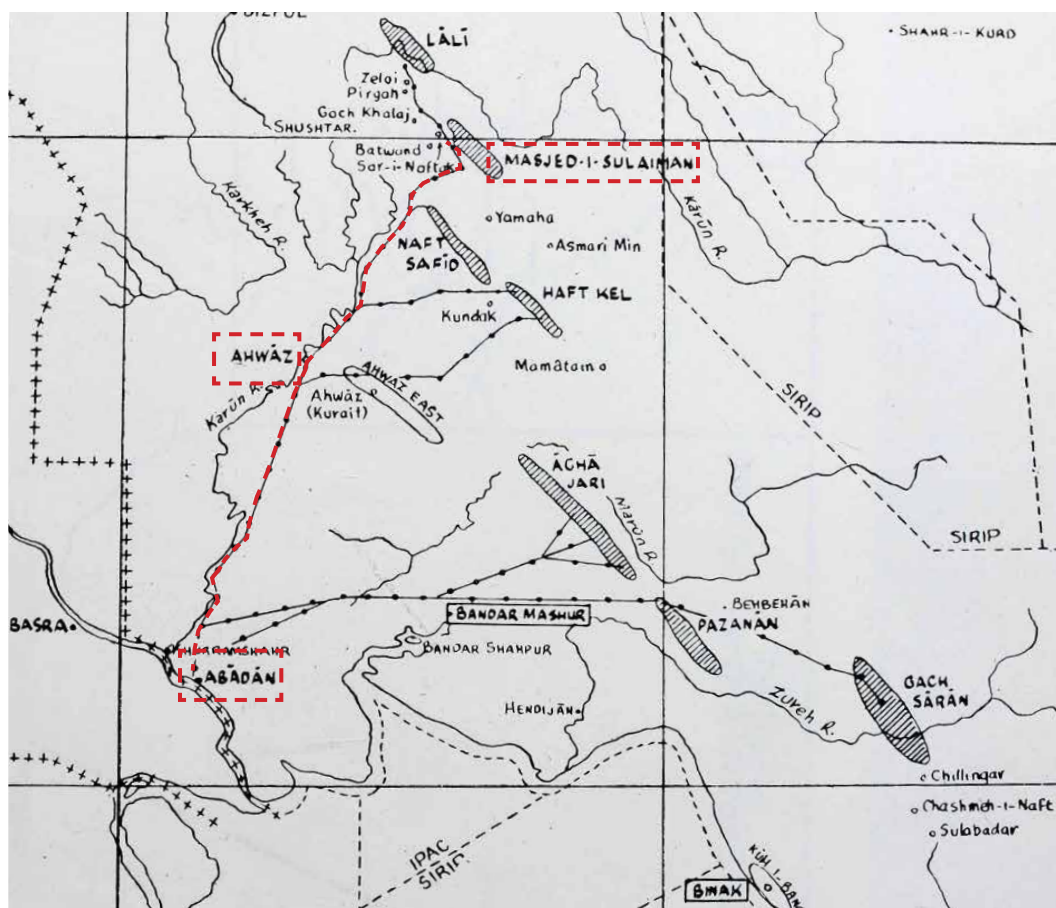


FIG. 2.11 Displaying How Oil Was Collected in Ahwaz and Then Transferred to the Abadan Refinery.

Source: *Nashrieh Naft-e-Iran* (Iran's Oil Magazine). Iranian National Library Archives.

Date: Unknown. Accessed: February 2017.

Gradually, Ahwaz took on a historic role as the primary headquarters for numerous oil concessionaires, solidifying its position as the central nerve centre of the oil province. This pivotal role within the oil industry cemented its significance in the unfolding narrative of Iran's modernisation. As the oil exploration drew to a close, Ahwaz underwent a remarkable transformation. It emerged as an oil boomtown, brimming with vibrant economic activities and boasting a unique character shaped by the convergence of diverse nationalities and languages. At the heart of its identity lay its indispensable role in the control and management of the vast oil fields. When considering Ahwaz in the broader context of interconnected oil spaces worldwide, one encounters a landscape replete with multiple layers and dimensions. The evolution of this landscape was a product of the multifaceted contributions of various oil players, each leaving their distinctive imprint upon its terrain. This intricate tapestry of influences has bestowed upon Ahwaz a unique and complex identity within the global spectrum of oil-driven urbanisation.¹⁴³

Ahwaz's historical significance as the main headquarters of the oil province and its transformation into an oil boomtown during the late 1970s highlight the dynamic and multi-layered nature of the oil landscape in the region. Here are some key points regarding Ahwaz's historical importance and its role in the oil industry:

- **Headquarters of the Oil Province:** Ahwaz served as the primary headquarters for the oil province, emphasising its administrative and logistical importance in overseeing oil-related activities in the region. This centralisation of operations contributed to the city's growth and development.
- **Diverse Nationalities and Languages:** Ahwaz's role as an oil hub attracted a diverse population of various nationalities and languages. This diversity likely resulted from the influx of people seeking employment opportunities and the city's position as a centre for oil-related activities.
- **Economic Activities:** The oil industry's presence in Ahwaz stimulated economic activities in the city and the surrounding region. This included not only the extraction and production of oil but also ancillary industries and services that supported the oil sector.
- **Control and Management:** Ahwaz played a crucial role in controlling and managing the oil fields in the province. This included monitoring production,

¹⁴³ *Oil Spaces, Exploring the Global Petroleumscape*, Edited By Carola Hein eBook20221 Edition. New York, NY : Routledge, 2022.

maintaining infrastructure, and ensuring the efficient flow of oil to domestic and international markets.

- **The Complexity of the Oil Landscape:** Like other interconnected oil spaces worldwide, Ahwaz's oil landscape comprised multiple layers and aspects. It was shaped by various oil players, each with its own interests, strategies, and contributions to the city's development.
- **Uneven Promotion:** The development of Ahwaz as an oil city was not uniform and was influenced by the activities of different oil companies and actors. This variable promotion and development created a complex urban fabric with diverse architectural, social, and economic characteristics.
- **Historical Context:** Understanding Ahwaz's historical context is essential for comprehending its transformation over time. It reflects the broader historical dynamics of Iran and the Middle East, including periods of colonialism, nationalism, industrialisation, and global economic shifts.

The history of Ahwaz as an oil city exemplifies the intricate relationship between oil, urbanisation, and socio-cultural diversity. It underscores the pivotal role of certain cities in the global oil industry and how they became focal points for economic activities, technological advancements, and cultural interactions. Moreover, Ahwaz's history reflects the broader trends and complexities of oil landscapes in the Middle East and their impact on urban development and social dynamics.



FIG. 2.12 A view of Ahwaz Showing Traditional Handmade Architecture of the City.

Source: Reference: Dr. Young's photographs: *Persia Miscellaneous*, ArcRef: 36144. BP Archive.
Date: 1907-1913. Accessed: February 2018.

2.4 Fuelling Modernity: The Global Flow's Impact on Ahwaz

Throughout the annals of Ahwaz's transformation, development, and modernisation, an intricate dance unfolded between global flows and the city itself. This symbiotic relationship propelled Ahwaz into the spotlight, elevating it to the esteemed status of Iran's modern oil capital. In this newfound role, Ahwaz assumed a pivotal position as a mediator and negotiator, not only within Iran but also on the international stage. Ahwaz, an established port city with historical ties to global flows, underwent a profound metamorphosis with the advent of the oil industry. This transformative epoch ushered in a dramatic influx of national and international populations, forever altering the city's fabric and character. The oil boom brought forth a myriad of global alliances—British, German, American, and more—each intimately entwined with Iran's political, economic, and cultural spheres. Within this dynamic tapestry of international relations, a unique network emerged, comprising stakeholders, officials, experts, engineers, architects, and urban planners. Their collective efforts were channelled towards the radical transformation of Ahwaz's urban and architectural landscapes. As a result, Ahwaz became not only a physical embodiment of oil modernity but also a crucible where diverse global perspectives converged and intermingled, shaping the city's destiny and forging its enduring legacy.

Ahwaz emerged as a captivating theatre of encounters—a place where individuals hailing from diverse origins converged, interacted, and fostered new economies in the wake of the oil boom. The city's unique attributes, intrinsically linked to the allure of black gold, gave birth to the myths of cross-cultural exchanges. These myths transcended the realm of folklore to become a tangible spatial reality—a social, political, and cultural instrument carefully wielded by international oil actors. Indeed, Ahwaz is often perceived as not merely a geographical entity but a spatial and physical manifestation of oil modernity. It served as a crucible where new social paradigms and modern practices were forged in the furnace of modernisation. The city embodies a multifaceted prototype and paradigm of a modern industrial oil city, a testament to the transformative power of the oil industry. The narrative of Ahwaz's growth is commonly framed within the context of the oil economy that underpinned international markets. Throughout history, there has been a consistent pattern of leveraging oil income to fuel far-reaching environmental transformations. Consequently, the historical evolution of Ahwaz's urban landscape, its intricate social fabric, and its vibrant cultural tapestry bear visible testimony to the symbiotic relationship between the city and its oil wealth. Ahwaz has served as both a symbol

of power and a manifestation of the oil economy, leaving an indelible mark on the twentieth century's annals.

Ahwaz's transformation, development, and modernisation were intricately linked to global flows, particularly those associated with the oil industry. This relationship between global dynamics and Ahwaz's evolution played a pivotal role in making Ahwaz the modern capital of Iran's oil sector and a significant mediator and negotiator on the international stage. Ahwaz was already connected to global flows due to its history as a port city. However, the advent of the oil industry marked a profound shift in the nature and scale of global interactions in the city. The oil industry brought about a dramatic influx of both national and international populations into Ahwaz. The development of Ahwaz was shaped by diverse global alliances involving various countries, including Britain, Germany, the United States, and others. These alliances were formed in the context of Iran's political, economic, and cultural connections and contributed to the creation of an extensive international network of stakeholders. This network included officials, experts, engineers, architects, and urban planners who played crucial roles in urban and architectural transformations. Ahwaz emerged as a space where people from different origins met, interacted, and established various economic activities in the wake of the oil industry. It became a theatre of encounters where cross-cultural exchanges took place, fostering new social and economic dynamics. The city became an instrument in the hands of international oil actors, allowing them to enact a range of modern practices as part of the modernisation experience. Ahwaz's urban and architectural developments were closely aligned with the interests and objectives of the oil industry. Ahwaz is recognised as a spatial and physical embodiment of oil modernity and the new social life it brought about. The city's growth and urban changes were framed within the context of the global oil economy and its links to international markets. There was a historical trend of using oil income to fund environmental transformations and urban development in Ahwaz. The city's urban, social, and cultural changes were directly related to the oil wealth it generated, making Ahwaz a symbol of power and a manifestation of the oil economy in the twentieth century.

Ahwaz's journey from a port city to a modern capital of the oil industry was deeply intertwined with global flows, international alliances, and the transformative impact of the oil sector. The city's development reflected the broader dynamics of the worldwide oil economy and its implications for urbanisation and modernisation in Iran. The progression through various stages of modernity in Ahwaz was an intricate dance driven by the imperatives of industry, social demands, and the compelling vision of a utopia emerging from the heart of the desert. Oil emerged as the primary protagonist in the narrative of transnational oil modernity, wielding profound

influence over the city's built environment and the very fabric of its inhabitants' lifestyles as they adapted to global paradigms. The modernisation of Ahwaz was an inexorable force, imposing its will upon the city's residents, whether they embraced it willingly or not. Despite its rich history spanning over two millennia, Ahwaz preserved only one neighbourhood in its heart as a bastion of traditional urban development—the venerable old town. Meanwhile, other prominent districts, evolving in tandem with the oil industry's relentless march, were meticulously tailored to cater to the multifaceted requirements of companies—spaces for residence, commerce, cultural endeavours, industry, and governance. In this mosaic, strict boundaries demarcated the dwellings of diverse nationalities, each inhabiting its distinct sphere. Beyond these planned precincts, an array of unplanned urban neighbourhoods sprouted organically, an extraneous outgrowth of the city's conventional development blueprint. Ahwaz became a canvas where architectural elements engaged in a perpetual dance of reshaping and reconstruction in a symphony reverberating within a hegemonic framework of authority. When we scrutinise architecture within this intricate tapestry of international relations, a poignant connection surfaces—a tangible link between architectural production, representation, and the wielders of power. Thus, The city of Ahwaz emerges as a testament to the enduring interplay between nations, where architecture embodies their collaborative and contentious relationship and the edifice upon which their aspirations and influence are etched.

Ahwaz emerged as a crucible of architectural innovation, a fertile ground where the synthesis of diverse influences yielded a unique and captivating architectural tapestry. It was a realm where architectural productivity transcended the boundaries of various policies, giving rise to a distinctive urban landscape that bore the indelible imprints of both corporate and governmental designs. In this grand amalgamation of architectural elements, Ahwaz's physical and social fabric bore the unmistakable stamp of ambition, guided by the desires of entities with little regard for the conventional contours of urban development. The architecture of Ahwaz, characterised by its remarkable hybridity, bore witness to the convergence of materials, forms, construction techniques, and ornamentation—a testament to the city's rich cultural tapestry woven from diverse threads. The resulting urban milieu was a testament to the city's impurity, where the fusion of disparate elements manifested as a wellspring of cultural productivity. Within these urban spaces, intricate patterns of social behaviour unfurled as the city's society and its social structures found their reflection in the very sinews of its built environment. Ahwaz transformed into a captivating collage of urban elements, an assemblage of discordant architectural styles and urban spaces that coalesced to create a city teeming with conflict and contrast. Here, amidst the kaleidoscope of architectural diversity, the city of Ahwaz forged its unique identity, a living testament to the dynamic interplay of forces, ideas, and aspirations that converged within its bounds.

The process of modernisation in Ahwaz, driven by the oil industry, evolved through various stages, each responding to industrial and social needs while aligning with global urban planning concepts. Oil played a central role in shaping transnational oil modernity by influencing the built environment and lifestyles, even if it was a process that local residents may not have necessarily wished for. Here are some key points to elaborate on Ahwaz's transformation and its architectural and urban implications:

- **Forced Modernisation:** The modernisation of Ahwaz was a forced process driven by the demands of the oil industry. It brought significant changes to the way of life and work for local residents, whether they desired it or not.
- **Traditional and Planned Neighbourhoods:** While Ahwaz was an ancient city with a history spanning over 2,000 years, only one neighbourhood of the town had a traditional, old-town character. Other areas went through various stages of development to meet the needs of companies, including residences, commerce, cultural activities, industry, and management. These neighbourhoods often had distinct boundaries for different nationalities.
- **Unplanned Labor Neighbourhoods:** Some urban neighbourhoods developed organically as a result of labour migration, expanding beyond the city's usual development plan. These neighbourhoods often lacked the planning and infrastructure seen in planned areas.
- **Ever-Changing Architectural Elements:** Ahwaz witnessed continual reshaping and reconstruction of architectural elements, driven by the hegemonic authority of companies and states involved in the oil industry. The architecture in Ahwaz was a product of complex relations between nations, reflecting links between architectural production, representation, and power.
- **Hybridity in Architecture:** Ahwaz's architecture reflected hybridity, combining various materials, forms, construction techniques, and ornamentation. This hybridity was a sign of cultural productivity resulting from the combination of diverse elements.
- **Complex Urban Patterns:** Urban spaces in Ahwaz created intricate patterns of social behaviour, where society and social structures were reproduced within the city's built environment. This complexity led to a collage of disharmonic urban elements, with various architectural styles and urban spaces coexisting in a city marked by conflicts.

Ahwaz's transformation into a modern city was marked by the influence of the oil industry, which shaped the built environment and urban planning. This process

resulted in a city characterised by a blend of architectural styles, a mix of planned and unplanned neighbourhoods, and a complex social fabric influenced by the evolving urban spaces. Ahwaz's urban history is a testament to the power dynamics and global influences that have shaped the city's physical and social environment over time.

The growth of Ahwaz required the expertise of engineers, architects, and urban planners who designed and built the infrastructure, housing, and facilities necessary to support the oil industry and its workforce. Ahwaz's transformation into a modern city with the essential infrastructure and services to support the oil industry was a collaborative effort involving international oil companies, Iranian authorities, and a range of professionals. The desires and goals of these actors, as well as the socio-economic changes brought about by the oil industry, played a significant role in shaping Ahwaz's urban landscape and lifestyle. This collaborative effort had several significant impacts, especially in the areas of architectural and urban development, infrastructure expansion, housing and residential areas, social and cultural changes, and economic opportunities.

The ever-evolving petroleumscape of the city of Ahwaz, as examined in this thesis, provides a fertile ground for contemplating various facets of territorialities and spaces. Some of the key aspects to explore include Geopolitical Dynamics, Urbanisation and Infrastructure, Cultural and Social Transformations, Economic Landscapes, Environmental Impacts, Spatial Planning and Governance. The research not only offers valuable insights into the Middle East but also provides an excellent foundation to examine the global framework of the petroleumscape. By delving into Ahwaz's complex history and its transformation into a modern oil city, this research can shed light on broader patterns and dynamics of urban development driven by the oil industry, both regionally and globally.

The observations about political shifts and their effects on the petroleumscape highlight the complexity of the relationship between oil and its spatial, economic, and political contexts. It underscores the need to consider oil cities' historical and geopolitical dimensions when studying their development and transformation. As Hein explains: "Political shifts with territorial consequences, such as colonisation, nationalisation, or decolonisation, have often involved profound disruptions. They have transformed global petroleum chains and flows to adapt to specific local contexts, but they have not necessarily transformed the petroleumscape itself." The manipulation of oil revenue played a crucial role in shaping the architecture, urban planning, and overall development of oil cities. The influx of oil wealth had both direct and indirect effects on the physical and social landscapes of these regions. Oil revenue often led to rapid urban growth in and around oil cities. The influx of funds

allowed for the construction of modern infrastructure, including roads, buildings, and utilities. This growth was essential to support the expanding oil industry and accommodate the growing workforce. As urbanisation and industrialisation took hold, agricultural sites in the vicinity of oil fields were often abandoned. This shift from agrarian to industrial landscapes transformed the land use patterns and contributed to the development of a distinct petroleumscape. The oil industry attracted a diverse labour force from various regions and countries. This population circulation had several effects, including establishing multicultural communities in oil cities and exchanging cultural practices.

Oil companies and local authorities played significant roles in shaping oil cities' architectural and urban planning aspects. They often invested in modern urban infrastructure and designed residential areas, schools, hospitals, and recreational facilities for the workforce. The manipulation of oil revenue not only fuelled urban growth but also supported economic development in the regions where oil was extracted. This economic prosperity had cascading effects on various sectors, including construction, trade, and services. The changes brought about by the oil industry had social and cultural repercussions. Oil cities became melting pots of cultures, with diverse populations coexisting. This cultural exchange enriched the social fabric of these cities. The rapid industrialisation associated with the oil industry also had environmental consequences. It led to changes in land use, deforestation, and sometimes environmental degradation. Managing these environmental challenges became a critical concern. An essential aspect of the petroleumscape's development was the complex interplay between cooperation and conflict among states and oil actors. Let's delve further into these dynamics:

Conflicts

- **Geopolitical Rivalries:** Oil's strategic importance led to geopolitical rivalries among states vying for control of oil-rich regions. These rivalries often resulted in overt and covert conflicts as nations sought to secure their interests.
- **Nationalisation and Expropriation:** In some cases, host countries sought greater control over their oil resources, leading to conflicts with foreign Oil Companies. Nationalisation and expropriation of oil assets became contentious issues that sometimes resulted in diplomatic tensions and legal disputes.
- **Regional Conflicts:** The presence of oil exacerbated regional conflicts as competing groups and nations sought control over oil-producing areas. These conflicts significantly impacted the development and stability of the petroleumscape.

- **Environmental Concerns:** Environmental issues related to oil extraction and production occasionally led to conflicts between local communities, the national Government, and the Oil Company.
- **Land Competition:** Companies from different nations often competed for access to oil fields and well-located urban lands. This competition sometimes resulted in aggressive tactics and bidding wars.

Cooperations mainly after the nationalisation

- **State & Oil Company Collaboration:** In some situations, Ahwaz witnessed close collaboration between governments and the oil company. The national Government granted concessions, provided infrastructure support, and established legal frameworks to facilitate oil exploration and production. In return, they received revenue and economic development.
- **Infrastructure Development:** The Government and the Oil Company worked together to develop essential infrastructure, such as transportation networks and ports, to support the oil industry. This cooperation was crucial for efficiently moving oil from production sites to markets.
- **Resource Management:** Governments and oil companies collaborated on resource management, including reservoir assessment, production techniques, and environmental safeguards. These efforts aimed to maximise the extraction of oil while minimising negative impacts.
- **Economic Benefits:** The petroleum's growth brought economic benefits to both states and the Oil Company. The Government received substantial revenue through royalties and taxes, while the Oil Company secured access to valuable resources.

The petroleum's growth, therefore, emerged as a complex arena where cooperation and conflict intertwined, shaping the spatial developments and geopolitical landscape of oil-rich regions.

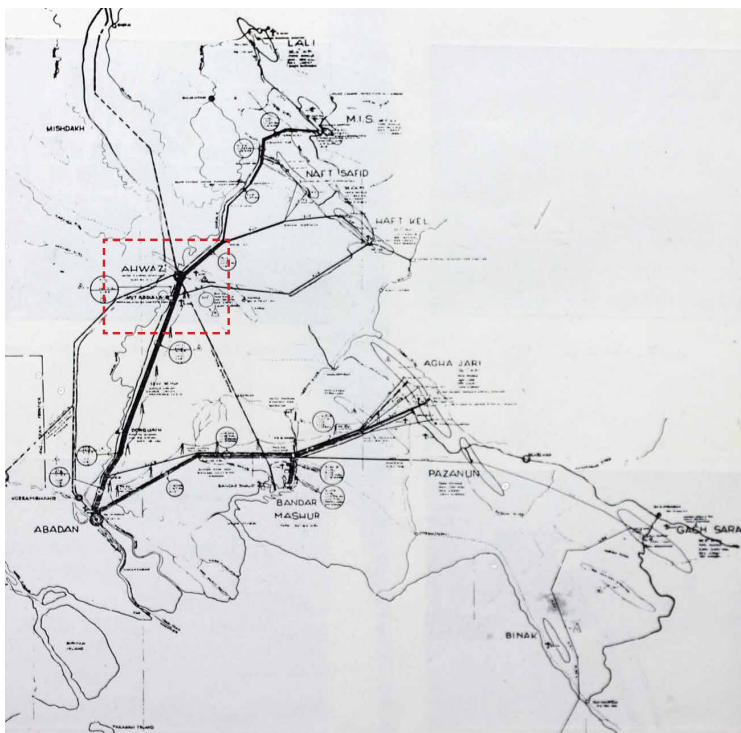
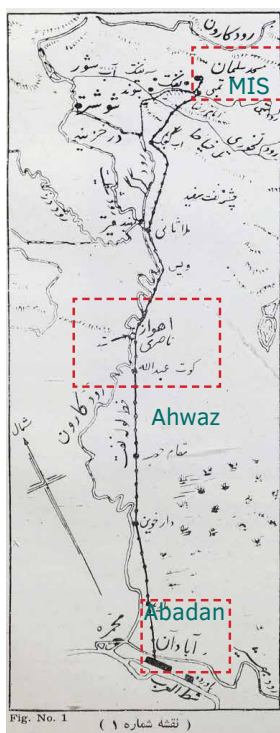


FIG. 2.13 Oil Fields & Pipeline Maps.

Source: *Nashrieh Naft-e-Iran* (Iran's Oil Magazine). Iranian National Library Archives.

Date: Unknown. Accessed: February 2017.

2.5 Conclusion to the Chapter

In the grand tapestry of global oil modernity, Ahwaz emerges as a compelling case study, offering lessons and insights for future research in the interdisciplinary field of oil studies. The city's journey from a relatively unknown place to a thriving hub of oil-related activities mirrors the broader transformations that occurred in the 20th century. As we reflect on Ahwaz's petroleumscape, we gain a deeper understanding of how the nexus of oil, architecture, urban planning, and culture contributed to the making of a modern city and a globalised world. This research sets the stage for further exploration and invites scholars to delve deeper into the multifaceted narratives of oil-driven development in diverse contexts worldwide. Ahwaz, once a relatively obscure city, became a microcosm of the profound changes that swept across the globe during the 20th century. Its transformation into a thriving hub of oil-related activities resonates with the larger narrative of how oil, often referred to as "black gold," redefined societies, economies, and landscapes. Ahwaz's journey reflects the broader global shifts as countries and regions grappled with newfound wealth and power brought by oil.

Ahwaz stands as a city whose development was intrinsically tied to the imperatives of the oil industry rather than being shaped by a prevailing cultural narrative that dictated distinctive patterns of social integration within its urban spaces. Its origins, however, trace back to an ancient lineage that extends for more than two millennia. In the annals of history, Ahwaz was not merely a city; it served as a bustling international commercial port, a vibrant hub that bore witness to the passage of time and the ebb and flow of diverse cultures. Nestled within the province of Khuzestan, it was primarily inhabited and governed by Iranian Arab tribes and residents. The city's modern trajectory, one that propelled it into the ranks of vital metropolises within Iran, is intrinsically tied to its profound relationship with industries rooted in the realm of oil. This deep-seated connection to the oil-related sectors ushered in a new era for Ahwaz, propelling it onto the stage of the 20th century as a dynamic and indispensable metropolis within the nation.

Ahwaz's historical background as an old international commercial port/city and its predominantly Iranian Arab population provide a critical context for understanding its transformation into a modern oil city. Ahwaz's development as an oil city was a result of its deep relationship with the oil-related industries, which propelled its modernisation and growth. However, this transformation did not erase the city's historical and cultural roots, and Ahwaz continues to reflect its rich heritage even as it plays a vital role in Iran's contemporary oil landscape.

The advent of oil marked a pivotal moment in Ahwaz's urban evolution—a transformative phase that catapulted the city into the realms of industrialisation and modernity. Prior to the arrival of oil prospectors in Persia (the historic name of Iran), the vast expanses surrounding the oil fields lay largely bare desert terrain. However, the landscape underwent a profound metamorphosis following the commencement of oil exploitation. Ahwaz underwent a remarkable transformation, shedding its rural identity to become a bustling industrial hub, all within the span of a single century. This era witnessed a construction frenzy that swept through the city, reshaping its urban fabric. The cityscape was redefined as old houses gave way to the creation of new streets, and the sturdiness of concrete and steel structures supplanted the mud dwellings of yesteryears. While traditional neighbourhoods had previously been characterised by a harmonious coexistence of residents from diverse socio-economic backgrounds, the advent of the oil industry heralded a shift towards segregated residential company towns. This segregation introduced colonial patterns of social stratification, creating rifts among the city's denizens. Despite the escalating value of urban lands, the reins of power remained firmly in the hands of landowners. Oil extraction across the cityscape fuelled intense rivalries, particularly in transforming once-barren wastelands into coveted real estate.¹⁴⁴

Oil companies, such as the Anglo-Persian Oil Company (APOC) and later the Anglo-Iranian Oil Company (AIOC) and National Iranian Oil Company (NIOC), played a central role in the industrialisation and modernisation of Ahwaz. They were responsible for oil exploration, extraction, and the establishment of oil-related infrastructure. The Government of Iran also played a significant role in facilitating the development of Ahwaz as an industrial city. It was through government agreements and policies that foreign oil companies, including Khuzestan, were granted concessions to operate in Iran. Before the arrival of oil companies, the area around the oil fields, including Ahwaz, was primarily desert. Oil exploration and exploitation led to a dramatic change in land use, with previously barren lands becoming sites of industrial activity, infrastructure development, and urban expansion. The presence of oil companies and the influx of labour and expertise resulted in a construction boom in Ahwaz. Old houses were demolished to make way for new streets, modern shops, and contemporary housing built using concrete and steel. The oil industry also introduced the concept of company towns in Ahwaz. These towns were developed to house oil company employees and their families, contributing to the separation of residential areas and the emergence of colonial patterns of social stratification within the city. The increasing value of urban lands in Ahwaz, driven by the oil industry's growth, created competition and rivalries among landowners and authorities. The

¹⁴⁴ <https://epdf.pub/environment-and-empire-oxford-history-of-the-british-empire-companion.html>

transformation of previously undeveloped wastelands into valuable urban properties was a significant factor in these rivalries. It was the combination of oil companies, government policies, and urban development initiatives that propelled Ahwaz from a rural desert area into a rapidly industrialising and modernising city. The changes in land use, construction, and urban planning were closely tied to the presence of the oil industry and its impact on the city's socio-economic landscape.

The selection of Ahwaz's petroleumscape as a focal point serves a crucial purpose in elucidating the broader implications of this captivating concept on a global scale. By delving into the unique petroleumscape of Ahwaz, the chapter aimed to offer a representative and insightful case study that can be extrapolated to enhance the understanding of similar landscapes worldwide. With its rich history and profound connection to the oil industry, Ahwaz encapsulates the complexities, challenges, and transformative impacts associated with petroleumscape.

Firstly, Ahwaz stands as a microcosm of the intricate interplay between urban development, architecture, and the oil industry. The city's evolution, from its early interactions with oil exploration to the later phases of comprehensive planning, mirrors the dynamic relationship between urban spaces and petroleum landscapes. By choosing Ahwaz, the second chapter provides a tangible and contextualized narrative that facilitates a nuanced exploration of the petroleumscape concept.

Secondly, Ahwaz's petroleumscape is emblematic of the broader issues inherent in oil-centric urban environments. The chapter elucidates how the petroleumscape extends beyond mere physical manifestations to encompass social, economic, and political dimensions. Ahwaz's experience becomes a lens through which to examine the impact of oil on landownership, socio-economic structures, and the intricate dynamics between local and global forces.

Furthermore, by focusing on Ahwaz, the chapter aimed to contribute to the discourse surrounding the petroleumscape concept, shedding light on its significance in understanding the global dynamics of oil-infused urban environments. The lessons drawn from Ahwaz's petroleumscape resonate with other oil cities worldwide, providing a valuable framework for analyzing the interconnectedness of oil, space, and modernity.

In essence, the choice of Ahwaz's petroleumscape serves as a gateway to a broader exploration of the concept's universal relevance. It invites readers to consider the parallels between Ahwaz and other oil-centric cities, fostering a more comprehensive understanding of the intricate relationships between modern planning, environmental changes, and social developments within the context of the global "macro-politics" of oil.

3 Unveiling the Metamorphosis

Landownership's Hidden Role in Informal Colonial Canvas of Spatial Transformation

Time frame

1901 (the start of oil exploration activities)-1925 (designating Ahwaz as the official capital of the province)

Main questions

- In what way did disputes over oil territories contribute significantly to the onset of environmental transformation?
- What control measures did the British employ in governing the Iranian oil territories in opposition to local and national authorities during their informal colonial times?
- How did the Oil Company's presence as a newly established landowner in the Iranian oil fields support Britain's informal colonial endeavours in the Middle East?

3.1 Introduction to the Chapter

As the global industrial revolution took hold at the dawn of the twentieth century, access to oil resources became paramount in gaining an edge over international economic rivals. In this regard, global flows driven by the pursuit of oil sought to reshape the structure of land ownership, management, and utilization, exerting significant influence over spatial policies. In the meantime, although Iran maintained its status as a self-governing country outside the formal reach of any Empire, the possibility of oil discovery led various countries, such as Great Britain, to perceive Iran as a potential vital interest within its imperial domain.¹⁴⁵ The search and drilling for oil in 1901 marked the inception of the petroleumscape, setting the stage for intense struggles over land ownership in Iran. After oil discovery in 1908, Britain treasured the Iranian oil region as a wealth source for creating a dominant imperial power and established its presence in the region of the Middle East. The emergence of WWI motivated Britain to expand its colonial and imperial activities through the fields containing oil, while still, Britain didn't have any formal governmental statute over Iran. In particular, oil-powered navies pushed for further oil drilling. Soon, APOC became the image of economic support for the British military and had to control British properties in Iranian oil spaces located beyond national borders.

To grasp the distinctive nature of British oil-based development in Iran compared to other global endeavours, it is imperative to outline the overarching concept of imperialism briefly. Imperialism, characterized by the imposition of dominance over countries, territories, and natural resources, often involved colonialism in supporting invaders to facilitate control over their claimed properties.¹⁴⁶ Various imperialist nations such as Great Britain, Germany and France employed formal

¹⁴⁵ Louis, William Roger, A. N. Porter, and Elaine M. Low. *The Oxford History of the British Empire*. Vol. Volume III, the Nineteenth Century /. The Oxford History of the British Empire, Vol. 3. Oxford: Oxford University Press. 1999.

Yapp, Malcolm Edward. *The Making of the Modern Near East : 1792-1923*. A History of the Near East. London: Longman. 1987.

¹⁴⁶ SHAW, A. G. L. "A Revision of the Meaning of Imperialism." *Australian Journal of Politics & History* 7 (2): 198-213. <https://doi.org/10.1111/j.1467-8497.1961.tb01071.x>. 2008.

HARRISON M. WRIGHT, "IMPERIALISM": THE WORD AND ITS MEANING. *Social Research*. Vol. 34, No. 4 (WINTER 1967), pp. 660-674.

Lake, David A. "The New American Empire?" *International Studies Perspectives* 9, no. 3 (2008): 281-89. <http://www.jstor.org/stable/44218551>.

Matthew D. Stephen *Imperialism*. In *The Encyclopedia of Global Studies*, edited by Helmut Anheier, Mark Juergensmeyer, and Victor Faessel, pp. 884-886. Los Angeles: Sage. 2012.

Horowitz, David. *Imperialism and Revolution*. London: Allan Lane The Penguin Press. 1969.

Fieldhouse, D. K. *Colonialism, 1870-1945 : An Introduction*. London: Weidenfeld and Nicolson. 1981.

and “informal rules”¹⁴⁷ in Latin America, the Ottoman Empire, China, etc.¹⁴⁸, often exerting control over territories, lands, resources, and peoples through military force. The imperialistic pursuits of nations in history have shaped the course of nations’ and cultures’ interactions, profoundly impacting the societies subjected to this domination.

The formality of colonialism is a crucial concept and a relatively recent topic in modern architecture and urban planning literature, which has been discussed since 1953 by J. Gallagher and R. Robinson.¹⁴⁹ As mentioned earlier, while Iran was not officially a colonial territory, its oil fields were subjected to a form of colonization akin to other British colonial domains. Scrutinising the prominent role of British oil involvement in Iran’s local territories as an independent nation unveils a pivotal chapter of informal colonialism and imperialism, driven primarily by the pursuit of oil. This era of early oil exploration in Iran, having a formal contract with the Iranian state, hides the underlying British informal colonial activities that exerted control over the land while representing the economic interests of the Empire.

Land ownership and informal colonial practices are closely intertwined and interconnected. In the case of informal colonial practices, which often occurred in situations where the formal colonial rule was absent or less explicit, land ownership played a crucial role as a fundamental mechanism through which colonial powers exerted control, influence, and dominance over a territory or region. In the circumstances of British oil-based development in Iran, the principles and practices of land ownership dynamics played a central role.¹⁵⁰ The British Empire, driven by its quest for strategic resources, sought to exploit the vast oil reserves and land supremacy. Land ownership became a tool for establishing and maintaining colonial control, allowing exploitation and influence over the region and facilitating

Turner, Victor. *Colonialism in Africa, 1870-1960*. Vol. Vol. 3, Profiles of Change: African Society and Colonial Rule / Ed. by Victor Turner. Hoover Institution Publications. Cambridge: Cambridge University Press. 1971. British Library of Information (New York, N.Y.). *What Is British Imperialism?* New York: British Library of Information. 1940.

¹⁴⁷ The informal, indirect rule, could be less hazardous but also vulnerable and not permanent; Webster, Anthony. “Business and Empire: A Reassessment of the British Conquest of Burma in 1885.” *The Historical Journal* 43 (4): 1003–25. 2000.

¹⁴⁸ Gotteland, Mathieu. “What Is Informal Imperialism? Project: L’Allemagne et l’Autriche-Hongrie en Chine, 1895-1918 : Un impérialisme informel.” *The Middle Ground Journal*. https://www.academia.edu/25286083/What_Is_Informal_Imperialism . 2017.

¹⁴⁹ Gallagher, J, and R Robinson. “The Imperialism of Free Trade.” *The South African Journal of Economic History* 7 (1): 27–44. 1992.

¹⁵⁰ A perspective regarding the significance of landownership can be a novel lenses to review informal colonial urban development which has been overlooked and neglected in historiography of modern architecture and urban planning.

the implementation of colonial policies, infrastructure development, and economic exploitation.¹⁵¹

The imperialistic endeavour not only involved the extraction and commercialization of oil but also encompassed a comprehensive restructuring of the country's authority. The extractive activities of the oil industry necessitated the British military and governmental support to own and later control the lands. Land ownership was not solely a tool of domination. It also served as a means to resist colonial encroachment and maintain their authority and traditional practices. The rising political importance of oil properties in Ahwaz gave rise to complex ownership disputes involving local proprietors, British oil explorers, and Iran's national government, intensifying as urban expansion accelerated. Land ownership served as a means for indigenous actors to empower local communities to defend their rights and assert their authority and traditional practices in the face of British informal colonialism and encroachment by the national government. The conversion of land for industrial and urban development was met with resistance from indigenous actors and local elites who were reluctant to see their land transformed for industrial use, mainly when they had no stake in the industry's future profits. For the national state, landownership became a winning card to counter British informal colonialism and a legal mechanism to uphold its political power in the region. This struggle over territory consistently played a significant role, from British oil concessions and subsequent wars with locals to the national military invasion of oil cities and land purchases from the federal state or locals.¹⁵²

In this way, territorial domination formed the bedrock of industrial, infrastructural, and urban development. Land urbanisation became an essential prerequisite for the oil industry through its complex web of relationships. The interplay among actors directed the environmental impact of oil in creating the necessary infrastructure to sustain an oil-based society. The city's rapid expansion, paralleling the oil industry's growth, offers valuable insights into the increasingly sophisticated nexus of interactions between landowners, oil actors, states, architects and planners, the construction sector, and the users. It entails significant transformations in landowners' rights and land functions, with multiple actors gradually participating to varying degrees in this development process based on their relative power to provide labour and financial support.¹⁵³

¹⁵¹ Yapp, Malcolm Edward. *The Making of the Modern Near East: 1792-1923*. [in English] A History of the Near East. London: Longman, 1987.

¹⁵² Beinart, William, and Lotte Hughes. *Environment and Empire*. Oxford History of the British Empire Companion Series. Oxford: Oxford University Press. 2007.

¹⁵³ Stewart, Richard A. "Sunrise at Abadan: The British and Soviet Invasion of Iran, 1941." (1988).

By delving into the dynamics of imperialism and its specific manifestation within the British oil industry in Iran, we can gain a deeper understanding of the distinctive features and implications of modern international transactions in particular forms of development. This chapter examines British unique informal colonial practices of landownership in Iran as a valuable case study for comprehending the basis of global exchanges in the region. Discussions on boundaries, oil territoriality, land ownership, and land-use transformations as foundational colonial activities and policies are novel lenses for analysing informal colonial urban development and interpreting the built heritage associated with oil – a subject often overlooked and neglected in modern architecture and urban planning historiography. Exploring the interplay between imperialism and the shift in land rights from local elites to international oil-related colonial agents to consolidate the Company's authority provides valuable insights into the complexities and dynamics of colonial power dynamics and their enduring legacies in reshaping geographies over space and time.¹⁵⁴

By examining the interplay between colonial influences, land ownership dynamics, and social hierarchies, we can gain a deeper understanding of the physical and social fabric that defines Ahwaz's unique urban landscape. Initiated from the British oil concessions with both the national state and later the local elites, making bloody wars with locals to remove them from their possessions, the national state military invasion of the city, finally purchasing lands from the federal state or locals, the issue of territory played a significant role. As we will discuss, the informal imperialism in Iran initiated from a specifically designated oil territory continued with the administration of the oil resources and ended with political, military, and cultural colonialism and hegemony.

Inspired by Hernández Felipe,¹⁵⁵ the chapter explores the initial stage of Ahwaz's informal colonization and the relations between the spatial development of oil and land ownership structures between 1901 and 1925. Bringing together sources from the archives of the Oil Company, oil contracts and concessions and analysing the built legacies of oil in Ahwaz, the primary aim of this chapter is to demonstrate how land ownership facilitated British oil agents' informal imperial and colonial activities, modernization, and industrialization. It explores how the operations of the British Oil Company as a new major landowner in the Iranian oil fields served Britain's social and political dominance in the Middle East, focusing on the specific complex case of Ahwaz. This chapter explores landowners' concerns as the main actors to impact types, styles, and functions of the built oil spaces; it also examines the role of land

¹⁵⁴ Stebbins, H. Lyman, and University of Chicago. "British Consuls and "Local" Imperialism in Iran, 1889-1921." 2009.

¹⁵⁵ Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, 04. London: Routledge. 2010.

ownership in the Oil Company activities and its impacts on future unplanned spatial development that emerged during the following stages of urban development which will be discussed in subsequent chapters.

This analysis explores the multifaceted dimensions of the petroleumscape, emphasizing how land ownership, informal colonialism, and imperialism play integral roles within this theoretical framework. It demonstrates how the petroleumscape concept encapsulates not only the physical and industrial aspects of the oil industry but also its far-reaching influence on land use, urban development, and societal dynamics within oil-rich regions. The petroleumscape becomes a comprehensive lens through which to analyze the complex interplay of factors that shape the landscapes and societies of these areas over time.

The main characteristics of this chapter are to establish the foundational elements, hidden designers, legal frameworks, and landownership dynamics that laid the groundwork for oil exploration in Ahwaz. The chapter delves into the complexities of informal colonialism and imperialism, highlighting how the quest for oil drove significant changes in land ownership, social hierarchies, and urban development. It underscores the interplay between various actors, including British oil agents, local elites, and the national state, in shaping the petroleumscape. The analysis explores the multifaceted dimensions of this petroleumscape, emphasizing the critical role of land ownership as a tool for exerting control, facilitating industrialization, and establishing colonial dominance. Overall, the chapter provides a comprehensive understanding of the conditions and actors that paved the way for oil exploration and its enduring impact on the urban landscape of Ahwaz.¹⁵⁶

¹⁵⁶ Wagoner, Harless D. *Anglo-Persian Relations 1914-1921*. M.A. University of Wisconsin—Madison, 1942.

3.2 Background: The Geological Prelude: Fuelling British Informal Colonial Activities through Land Allocation for Oil Ventures

During the late 19th century -Between 1889 and 1897- mining researcher Jacques de Morgan, on a French scientific mission, introduced a groundbreaking perspective on Iran's vast potential for abundant oil reserves.¹⁵⁷ Through their investigations into the geography and geology of the Zagros Mountains and Bakhtiyari hills, de Morgan postulated that southwestern Iran held significant oil deposits. However, due to the limited scope of his survey, further geological studies were required to pinpoint the precise locations of oil reservoirs. Nevertheless, de Morgan's report ignited both international and national interest, recognizing the immense potential for wealth and revenue that lay beneath Iran's terrain. Consequently, this laid the groundwork for the British imperial missions at the turn of the 20th century, as they sought to gain control over Iran's natural environments and exploit its mineral resources, with a specific focus on oil exploration.¹⁵⁸

The beginning of Iran's oil history can be traced back to the signing of a momentous concession agreement between British mining entrepreneur William Knox D'Arcy¹⁵⁹, and the Iranian monarch Mozaffar-din-Shah Qajar,¹⁶⁰ in 1901.¹⁶¹ This concession granted D'Arcy exclusive permission to explore oil within a vast territory of 480,000 square miles in southwestern Iran for 60 years. It effectively barred any other national or international entities from undertaking oil-related activities in the concession lands. In return for this privilege, a small percentage (sixteen per cent) of

¹⁵⁷ Bavar, Syrus. *Naft, tamaddon e Sanati va memari (Oil, industrial urbanization and architecture)* Art of Architecture of the Century (affiliated with the Cultural Institute of Art and Architecture of the Century) 2018.

¹⁵⁸ Khazeni, Arash. *Tribes & Empire on the Margins of Nineteenth-Century Iran*. Publications on the near East. Seattle: University of Washington Press. 2009. P 116

¹⁵⁹ an Englishman, fortunate from mining in Australia and motivated by Persian General Antonie Kitabgi, in connection with British minister in Persia, Sir Henry Drummond Wolff Ferrier, R.W. *The History of the British Petroleum Company*. Vol. Vol. 1, the Developing Years 1901-1932 /. Cambridge etc.: Cambridge University Press. 1982. P 5.

¹⁶⁰ Mozaffar-din-Shah Qajar. reigning from 1896 until his death in 1907

¹⁶¹ Shafiee, Katayoun. *Machineries of Oil : An Infrastructural History of Bp in Iran*. Infrastructures Series. Cambridge, Massachusetts: MIT Press. 2018.

future oil exploration profits was supposed to be allocated to the Qajar royal family to support their extravagant lifestyle.

At the time of signing the concession, the Iranian national state held a pessimistic outlook on the likelihood of success, given the previously failed mineral explorations conducted by European entities within the country. However, this Imperial and Colonial endeavour reached deep into Iran's interior and hinterlands, reshaping the environment and society of various cities. The D'Arcy concession not only granted the British a dominant position in the Iranian oil fields but also facilitated the integration of tribal territories into international commercial networks and the global economy. As a result, it brought about profound transformations, both economically and socially, in the cities and regions involved, such as Ahwaz.¹⁶²

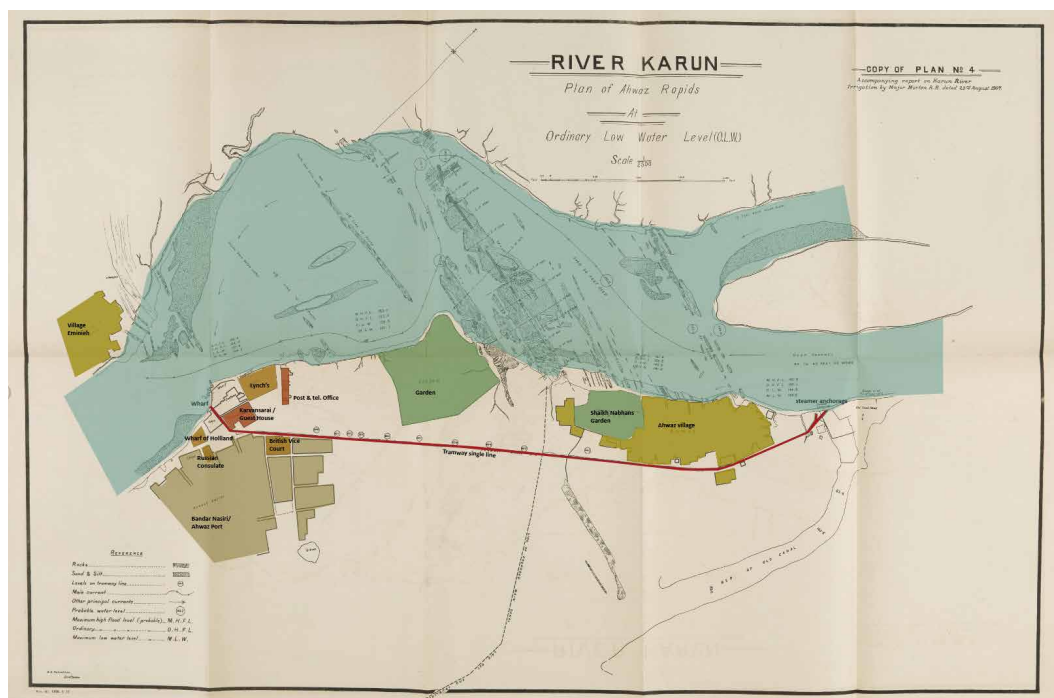


FIG. 3.1 River Karun: Plan of Ahwaz Rapids at Ordinary Low water Level.

Source: British Library: India Office Records and Private Papers, IOR/L/MIL/17/15/15, f 11, in Qatar Digital Library https://www.qdl.qa/archive/81055/vdc_100043712108.0x000001
Date: 1917. Accessed: February 2023.

¹⁶² Kazemzadeh, Firuz. *Russia and Britain in Persia : Imperial Ambitions in Qajar Iran* New ed. London: I.B. Tauris. 2013.

3.3 Ownership of Oil Resources: Contestations and Conflicting Claims in Balancing Private, National, and International Interests

Following the commencement of oil drilling activities, a complex triangular situation emerged concerning the ownership of the oil-rich territories. Despite the contractual provisions explicitly prohibiting other national or international explorers from engaging in oil-related activities within the concession lands, D'Arcy's exploration team and subsequent Oil Company encountered numerous challenges from local, national, and international competitors during the transformative process of the oil fields.

D'Arcy's concession clearly granted him and his affiliated entities exclusive ownership rights of any potential mineral resources discovered within the concession area. In contrast to his rights, on the one hand, the fact of being legally owned all-natural resources in Iran by the ruling monarchy since the 16th century was an essential rule to remove Darcy's access to oil. The subsequent Constitutional Revolution of Iran, which unfolded from 1905 to 1911, marked a significant turning point, leading to the establishment of a parliament and introducing further complexity to the situation. The shifting political climate and the emergence of a parliamentary system created ambiguity and uncertainty surrounding the terms and validity of their concession agreement with the monarchy. At the time of granting the concession, the national state harboured doubts regarding the existence of any mineral resources within its territories, perceiving it as yet another unsuccessful concession from international

Foreign Office, and Adam Matthew Digital (Firm). *Confidential (4277.) Correspondence Respecting Russian Proceedings in Central Asia (in Continuation of Confidential Paper No. 4100)*. Marlborough, Wiltshire: Adam Matthew Digital. 2021. https://www.archivesdirect.amdigital.co.uk/documents/details/TNA_FO_539_17.

Arfa' Rizā. *Memories of a Bygone Age : Qajar Persia and Imperial Russia 1853-1902*. Edited by Noël-Clarke Michael. London: Gingko Library. 2016.

Foreign Office, and Adam Matthew Digital (Firm). *Proceedings in Central Asia, Volume 173 (Jul-Sep 1894)*. Marlborough, Wiltshire: Adam Matthew Digital. 2021. https://www.archivesdirect.amdigital.co.uk/documents/details/TNA_FO_65_1487.

Sabir, Farah. "The History of the Foreign Concessions in Iran Qajar Period As a Sample." *Route Educational and Social Science Journal* 8 (59): 28–60. 2021. <https://doi.org/10.17121/ressjournal.2925>.

Foreign Office, and Adam Matthew Digital (Firm). *Central Asia : Various, 1904 Volume 1*. Marlborough, Wiltshire: Adam Matthew Digital. 2021. https://www.archivesdirect.amdigital.co.uk/documents/details/TNA_FO_106_8.

investors in Iran. However, in the event that wealth was discovered through foreign investment, the national government retained the ability to alter its political stance towards these informal colonizers.¹⁶³

On the other hand, this British involvement in Iran's oil industry coincided not only with a period of central authority weakness but also the dominant control of tribal autonomies. The revolutionary changes dramatically altered the balance of power between the state and the peripheral regions encompassing the oil fields.¹⁶⁴ Within this evolving political landscape, D'Arcy's team, having obtained their exploration rights from the federal state to initiate oil extraction efforts, found themselves in a perplexing situation and faced significant insecurity in the area, adding another layer of ambiguity to their endeavours.¹⁶⁵ The areas specified in the concession were primarily divided among two prominent authorities: Sheikh Khaz'al¹⁶⁶ led the Arab tribes claiming the region bordering the Persian Gulf, while Sardar Asad Bakhtiari, the leader of the Bakhtiyari tribes, asserted dominion over the lands between the Gulf coasts and the inner mountains.¹⁶⁷ These tribal communities viewed these lands as their rightful inheritance, and the power of their rulers was derived from the extent of their territories and the number of people under their leadership. British colonial invasions into the oil fields faced resistance from these unconquered tribes on the periphery of Iran, engaging in constant conflicts. The legal rights concerning "private" or "public wealth" of mineral resources within non-state-owned lands remained uncertain for these local tribes, leading them to resist any drilling into their territories and disregarding the authority of the weak central government.¹⁶⁸

This complex interplay between political forces, the weakened central authority, and the changing nature of governance due to the Constitutional Revolution profoundly

¹⁶³ Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power* Free Press trade paperback ed. New York: Free Press. 2008.

Khazeni, Arash. *Tribes & Empire on the Margins of Nineteenth-Century Iran*. Publications on the near East. Seattle: University of Washington Press. 2009.

Shafiee, Katayoun. *Machineries of Oil : An Infrastructural History of Bp in Iran*. Infrastructures Series. Cambridge, Massachusetts: MIT Press. 2018.

Abtahi, Alireza . *Naft va Bakhtiraryha: Oil & Bakhtiaries*. Institute of Contemporary History of Iran. 2005.

¹⁶⁴ Amanat, Abbas.. "CONSTITUTIONAL REVOLUTION. Intellectual background". 1992. pp. 163–176.

¹⁶⁵ Baker, Robert L, and Mazal Holocaust Collection. *Oil, Blood and Sand*. New York: D. Appleton-Century. 1942. p.182

¹⁶⁶ Sheikh was hereditary ruler of Mohammerah.

¹⁶⁷ Khazeni, Arash. *Tribes & Empire on the Margins of Nineteenth-Century Iran*. Publications on the near East. Seattle: University of Washington Press. 2009.

Abtahi, Alireza . *Naft va Bakhtiraryha: Oil & Bakhtiaries*. Institute of Contemporary History of Iran. 2005.

¹⁶⁸ traditional and Islamic religious beliefs asserted that any wealth found within a particular land belonged to the landowner.

impacted the trajectory of oil activities in Iran. It introduced a range of challenges and uncertainties for D'Arcy's team, necessitating careful navigation through the evolving political and social dynamics to secure their position and ensure the success of their oil operations.¹⁶⁹ This conflicting situation led to a situation in which the legal rights to mineral resources in public and private lands became increasingly ambiguous. The federal government aimed to keep the oil resources as national wealth or even as the private wealth of the monarchy. On the other hand, local authorities asserted their ownership of the lands, and the British mining agents invoked their concession agreement with the national government. Consequently, amidst these uncertain circumstances, all parties claimed and sought a share of the potential wealth for themselves, leading to deep political conflicts among them.¹⁷⁰

3.3.1 The Genesis of Environmental Oil-Based Activities in Ahwaz

British colonial powers' exploration of oil in the southern regions of Iran during the late 19th and early 20th centuries marked a significant milestone in their imperial activities in the region.

During the initial stages of oil exploration in Iran, D'Arcy had no specific company or organisation to occupy definite lands to build for its necessities. He hired *George Reynolds*, a seasoned civil engineer with expertise in oil drilling. Reynolds, who had previously conducted oil investigations in Sumatra, Indonesia, possessed the requisite education and experience, along with a resilient character suited for overcoming the challenges inherent to the job.¹⁷¹ However, he encountered difficulties securing specific lands to establish the necessary infrastructure. To address this, he enlisted the services of an oil exploration team comprised of individuals of various nationalities.¹⁷²

The working conditions encountered in the projected oil fields proved to be extremely challenging. Scorching temperatures, cicadas infestations, limited drinking water

¹⁶⁹ Although these facilities could be removed from the lands easily, but due to the existing conflicts among local elites and national state, the oil explorers faced a severe unacceptance by locals.

¹⁷⁰ Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power* Free Press trade paperback ed. New York: Free Press. 2008. p. 123

¹⁷¹ Ibid. pp. 122-23.

¹⁷² including Canadian and Polish oil explorers, an American engineer, an Indian doctor, local labourers, and support staff such as a cook and a housekeeper responsible for tending to the team's tents.

Bavar, Syrus. *Naft, tamaddon e Sanati va memari* (Oil, industrial urbanization and architecture) Art of Architecture of the Century (affiliated with the Cultural Institute of Art and Architecture of the Century) 2018.

availability, and a lack of proper communication channels with London characterised the region. Moreover, the absence of well-established roads and connections to major cities posed significant obstacles. The explorers were faced with the arduous task of transporting heavy equipment from the Persian Gulf to the designated oil-rich lands. They relied on the use of mules and the manpower of their team to navigate through the unforgiving terrain, encompassing vast deserts and treacherous mountains. This challenging journey was essential to gain access to the identified oil fields and set up the necessary equipment and facilities.

Due to the absence of efficient transportation infrastructure, the explorers devised a solution involving the Karun River. Moreover, upon commencing their oil-related activities, Reynolds chose to establish his operational base in a traditional neighbourhood of Ahwaz, strategically located in close proximity to the Karun River.¹⁷³ This location provided logistical advantages for transportation and proximity to the anticipated oil fields.¹⁷⁴

This exploration endeavour encountered initial resistance within the “tribal periphery”,¹⁷⁵ referring to the tribal communities inhabiting the areas where the oil exploration was taking place. Complicating matters further, the explorers faced hostility from local tribes who viewed their presence with scepticism and resorted to looting their facilities. As mentioned, concurrent with the British oil involvement in Iran, the country experienced a weakened central authority and the dominance of tribal autonomies.¹⁷⁶ This prevailing situation created an atmosphere of insecurity in the areas where the British conducted their oil activities. The unwelcoming attitude of these tribes added an additional layer of difficulty to the already demanding working conditions. Nevertheless, the exploration team persevered, driven by their mission to unlock the potential of the oil reserves in the region. The lack of a stable political power structure resulted in complex and challenging negotiations involving

¹⁷³ His furniture was including a large table, some chairs and 2 metal suitcases to keep official letters and contacts. His living room was also containing of a table, some chairs, and a bookshelf which were all made by local craftsmen.

¹⁷⁴ During this period, Dr Young, a British doctor, served as Reynolds' primary collaborator. However, in 1907, Young was replaced by an Indian counterpart, reflecting the diverse composition of the exploration team.

¹⁷⁵ Khazeni, Arash. *Tribes & Empire on the Margins of Nineteenth-Century Iran*. Publications on the near East. Seattle: University of Washington Press. 2009.

Abtahi, Alireza . *Naft va Bakhtiraryha: Oil & Bakhtiaries*. Institute of Contemporary History of Iran. 2005.

¹⁷⁶ The British suffered from this vulnerability for all the oil activities in Khuzestan. For gaining the environmental and social control of the local tribal authorities they tried to use the science of geography and data in the form of texts and maps. With the advent of the telegraph by British oil agents, the hole province become more accessible for the British government. These kinds of facilities were merely in use of British company men but not the Iranian government.

national, British, and local tribal confederations, further complicating the security landscape for the oil operations.¹⁷⁷

These tribal groups held significant influence and control over their territories, posing a challenge for the British in their pursuit of oil extraction. As the British exploration team delved into the task of uncovering oil reserves, they were faced with the daunting task of pinpointing the precise locations to focus their investigations. The exact geography of the oil-rich areas remained uncertain, and the explorers had to survey and examine various potential sites within the vast territories controlled by the local tribes. This necessitated establishing moveable facilities, such as tents, to serve as their temporary living and working spaces during the exploration process.

In this endeavour, the British explorers found themselves navigating a delicate relationship with the local communities. On the one hand, these communities possessed valuable knowledge of the region, including transportation routes and access to essential resources. The explorers relied on the support and cooperation of the locals to facilitate their transportation needs and establish the necessary infrastructure for their operations. On the other hand, the British investigators understood that securing the natives' assistance was crucial for their success, and they relied on the support of the locals to utilize existing infrastructure and temporary residency arrangements within the settlements. From the onset of exploration, it became apparent to the investigation team that the lands under the control of local elites and those rented by ordinary people held a complex power dynamic. They recognized that the tribal populations had a deep attachment to their lands, which served as the primary source of their livelihoods and political identity.

The success of oil exploration hinged upon securing the cooperation and support of the native population. Drawing from their prior colonial experiences, particularly in regions like India, the British agents were well aware of the complexities involved in engaging with native populations. They acknowledged that the tribal lands represented the most significant authority and source of power for the local communities. It was essential for the British explorers to demonstrate respect for this authority and accommodate the aspirations of the tribal leaders to maintain control over their lands. The ambiguous nature of the explorers' rights in relation to the privately owned lands designated for oil extraction and transportation necessitated negotiations and interactions with regional powers. The British exploration team, led by figures like George Reynolds, realized the importance of establishing agreements with local dignitaries and leaders to ensure the safety and

¹⁷⁷ Although these facilities could be removed from the lands easily, but due to the existing conflicts among local elites and national state, the oil explorers faced a sever unacceptance by locals.

progress of their oil investigations. In his correspondence, Reynolds emphasized the need to reach “some agreement” with the local dignitaries. He recognized that offering tangible benefits and incentives to the native communities would foster their approval and cooperation for the oil activities. This included sharing the potential benefits of the oil discoveries with the locals, safeguarding their interests, recruiting labour from ordinary tribespeople, and providing protection against potential threats.

One notable example of such negotiations took place with the Bakhtiari tribe. Before entering the Bakhtiari lands in 1905, Reynolds met with the British Council in Isfahan to familiarize them with the Bakhtiari dignitaries.¹⁷⁸ Through these interactions, an agreement was reached, leading to the establishment of the Bakhtiari Oil Company.¹⁷⁹ This company granted the Bakhtiaris a stake in the potential oil discoveries, with three per cent of the shares belonging to them. In return, the Bakhtiaris agreed to protect the oil facilities and the future pipelines.¹⁸⁰ Financial compensation was also provided, with 2,000 lire allocated for the protection of the oil facilities and an additional 1,000 lire for the future safeguarding of pipelines.¹⁸¹ The signing of this contract between the British exploration team and the Bakhtiari tribe raised concerns and objections from the nationalist factions in the capital. They feared that such agreements, backed by British influence, could lead to the separation of autonomous tribal territories and undermine the central government's authority. The weak Qajar government, however, lacked the capability to take decisive action against the APOC and its agreements with the local khans, highlighting the delicate balance of power and the complexity of political dynamics during that time. Overall, oil exploration in Iran during this period exemplified the intertwined challenges of colonial aspirations, tribal authority, and the quest for natural resources. The British navigated the intricate web of tribal politics, seeking agreements and cooperation while acknowledging the importance of tribal power structures. These engagements, along with the ensuing contracts, not only shaped

¹⁷⁸ Before entering into the Bakhtiaris lands in 1905, Reynolds met British council in Isfahan to make an announcement to Bakhtiaris elites.

¹⁷⁹ Bani Sadr, Abul Hasan. *Engelestan, Naft va Solteh, (oil and domination)*. Mossadegh publishers. 1977. Naderi, Mohammad Hassan. *Naft va Solteh, (England, oil and sovereignty) (case study of Bakhtiari Oil Company)* Proceedings of the Fourth Conference on the Iranian Islamic Model of Progress. 2015.

¹⁸⁰ Reconnaissance of Ahwaz – Naft Khaneh Pipeline Route. ArcRef: 49686. Barcode: 46046. BP Archives. Date: 1927.

¹⁸¹ with the share of 400,000 was established while three percent of its shares belonged to Bakhtiaris, plus 2,000 lire in return of protecting oil facilities and another 1000 lire for protection of future pipelines which were supposed to be built.

Naderi, Mohammad Hassan. *Naft va Solteh, (England, oil and sovereignty) (case study of Bakhtiari Oil Company)* Proceedings of the Fourth Conference on the Iranian Islamic Model of Progress. 2015.

the course of oil exploration but also left a lasting impact on Iran's political and social landscape during the early 20th century.¹⁸²

In January 1904, a seminal event unfolded as oil erupted triumphantly from the depths of Chapasorkh's oil well no.2. This momentous occurrence marked the inception of a new era, heralding the potential for a prodigious daily production exceeding 120 barrels. This brought some good news for D'Arcy in London, who had invested a significant amount of his personal wealth, approximately 150,000/225,000 lire, in the oil industry. However, by May 1904, the oil in Chapasorkh had run dry, leaving D'Arcy struggling to pay his employees. To overcome his financial difficulties, D'Arcy sought to renegotiate his agreement with the Iranian government, hoping to secure a new contract with the Burmah Oil Company. This revised contract would provide him with both financial and political support from the UK. Although he did not receive a positive response from Iran, in 1905, he managed to strike a deal with the Burmah Oil Company, the second-largest oil company in the British Empire after Shell. This agreement, backed by the British government, led to Iran accepting new beneficiaries for its potential oil resources.¹⁸³

In the subsequent phase of the oil exploration endeavour, attention turned towards the investigation of two distinct fields: the Naftun field, situated within the jurisdiction of Bakhtiaries in the region known as MIS, and the Shardin field, located approximately 55 miles adjacent to Ahwaz in the Arab's Lands.¹⁸⁴ In December 1905, Reynolds, at the helm of a team comprising seven individuals, established a base in Ahwaz to commence oil exploration operations in the Shardin area. At that time, Ahwaz bore witness to the coexistence of diverse sources of authority. The Qajar governor, "Heshmatoddoleh Ghajar,"¹⁸⁵ officially governed the region from 1897 to 1925, while influential local dignitaries of Arab and Bakhtiari origin exerted significant control and influence over the area, often disregarding the directives of the central government. Reynolds, acting as a bridge between the Shardin and Naftun fields, recognized the necessity of efficient transportation

¹⁸² Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power* Free Press trade paperback ed. New York: Free Press. 2008.

Naderi, Mohammad Hassan.. *Naft va Solteh, (England, oil and sovereignty) (case study of Bakhtiari Oil Company)* Proceedings of the Fourth Conference on the Iranian Islamic Model of Progress. 2015.

Abtahi, Alireza. *Naft va Bakhtirarya: Oil & Bakhtiaries*. Institute of Contemporary History of Iran. 2005. Svat Soucek, 'Arabistan or Khuzistan?', in *Iranian Studies* 17, no. 2-3 (1984) pp 195-214.

¹⁸³ Yaghubi-Nejad, Ali. *Raiis-E Naft (the Oil Boss)*. [oil Boss]. Yadvareh Ketab Publications, 1994.

¹⁸⁴ PourBakhtiari, Ghaffar. *Bakhtiari, Bakhtiariya, naft va dolat e englis, (Bakhtiari, British Oil and British Government)*. Historical Studies Quarterly , 22 in a row (Autumn 2017). 2017. P 83.

¹⁸⁵ before Nezamosaltane (the ruler of Ahwaz in Qajar period at the end of 19th century)

between these two locations. Consequently, after a span of two years, a road linking Shardin and Naftun was finally constructed in 1907. However, the realization soon emerged that oil reserves in the Shardin field proved elusive, rendering previous efforts unproductive. Taking advantage of the completed road infrastructure, the decision was made to relocate all oil facilities to the Naftun field, leveraging the newfound ease of vehicular transportation. In the Naftun field, an extensive reconstruction effort ensued, encompassing the establishment of temporary structures such as tents, working offices, kitchens, and oil extraction facilities. The climatic conditions in this new setting diverged from the arid sites nestled amidst the verdant Bakhtiari hills encountered previously.¹⁸⁶

This second oil field brought Ahwaz to the fore of the oil explorers' collective consciousness. While Shardin did not yield any oil, the completion of a road between Shardin and Naftun in 1907 enabled them to transport their equipment and personnel more efficiently. Consequently, they decided to relocate all their oil facilities to Naftun, taking advantage of the road for vehicular transportation. In Naftun's new field, they had to start afresh, setting up tents, offices, kitchens, and oil extraction facilities. The climate in this area differed from the dry sites amidst the green hills of Bakhtiari.

Finally, after an arduous period of seven years dedicated to oil exploration, the year 1908 marked a turning point as oil reserves were ultimately discovered within the vicinity of one of the world's largest oilfields. Spanning an expansive area exceeding ten square miles, this remarkable discovery materialized within the confines of an ancient fire temple known as Masjed-I-Soleiman (MIS). This momentous discovery, facilitated by the resilience and perseverance of the explorers, showcased the profound impact of their oil exploration endeavours. It symbolized human ambition and the unyielding pursuit of progress, which would leave an indelible mark on the annals of history in the years to come.¹⁸⁷

The story of financing in the early years of oil exploration from 1901 to 1908 sheds light on the concept of informal colonialism within the context of the petroleumscape. Informal colonialism refers to exerting control, influence, and dominance over a region without formal colonial rule. In this narrative, D'Arcy's limited financial resources in Britain and his need for external funding highlight the economic leverage that British actors possessed.¹⁸⁸ This financial dependency provided an

¹⁸⁶ Yaghubi-Nejad, Ali. *Raiis-E Naft (the Oil Boss)*. [oil Boss]. Yadvareh Ketab Publications, 1994.

¹⁸⁷ Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power* Free Press trade paperback ed. New York: Free Press. 2008. p.132

¹⁸⁸ Ibid., p.125

opportunity for the British imperial government to extend its influence over the oil exploration project. It demonstrates how economic power could be leveraged to shape the trajectory of a foreign region indirectly. Furthermore, the dispatch of British officers and Indian cavalry troops to safeguard the drilling area illustrates how the British government used its military and security apparatus to protect its economic interests. Captain Arnold Wilson's¹⁸⁹ covert mission to ensure the safety of the oil team showcases the dual role that British officials often played – one in an official capacity and another in safeguarding colonial or economic endeavours. It highlights the intertwined nature of economic and military control in the context of informal colonialism. Moreover, the fact that the British government extended its protective mantle over Reynolds' team and their operations underscores the operational autonomy granted to oil exploration activities. While there may not have been a formal colonial rule, this financial and security support effectively granted a degree of control over the Iranian territory, aligning with the principles of informal colonialism. Implicit in this financing narrative is the underlying goal of acquiring and exploiting land and resources in Iran. This aligns with the core principles of informal colonialism, which often involve acquiring resources and reshaping land ownership dynamics to serve the economic interests of external actors.¹⁹⁰ In summary, the story of financing in the early stages of oil exploration in Iran contributes to the understanding of informal colonialism by highlighting the economic, military, and operational aspects of control exercised by British actors. It exemplifies how informal colonialism can be driven by financial and security interests and how it can influence land ownership, resource exploitation, and power dynamics in a region without a formal colonial presence. These elements are crucial components within the petroleumscape concept, showcasing how the pursuit of oil shapes the socio-spatial landscape in informal colonial contexts.¹⁹¹

Documentation housed in archival records, primarily comprising correspondence and India Office minute papers, reveals a preoccupation with matters pertaining to the Bakhtiari tribe and its territorial domain in Persia. The discussions predominantly centred around the proposition of establishing a gendarmerie or Levy Corps, comprising British officers, within the Bakhtiari territory to pre-empt potential

¹⁸⁹ who was to become general manager of Anglo-Persian, and Acting Civil Commissioner for Mesopotamia (1918 – 20).

¹⁹⁰ There was a problematic situation for the lands' control between the Bakhtiaris' local elites as the owners and the tenants who were working or living in the lands. Dr. Ghaffar Pour Bakhtiari, *Bakhtiariya, naft va dolat e englis, (Bakhtiari, British Oil and British Government)*

Source: Captain A T Wilson. ArcRef 68779, Barcode: 63825. 1914-19. BP archives.

C A Walpole, Manager, Strick Scott and Co, Mohammerah – In letters. ArcRef: 71752, Barcode: 65573. 1914-15, BP Archives.

¹⁹¹ Wagoner, Harless D. *Anglo-Persian Relations 1914-1921*. M.A. University of Wisconsin—Madison, 1942.

clashes between Russian troops and the Bakhtiari tribe. However, the plans for the Levy Corps were postponed in the wake of the Russian February Revolution of 1917, pending a clearer understanding of the broader political and diplomatic landscape. In the interim, the Bakhtiari tribe offered their military cooperation to the British, proposing the maintenance of a force of Bakhtiari sowars within their territory. Consequently, British oil stakeholders grappled with the question of defining the relationship between the Bakhtiari tribes and the Syndicate, as well as the proposal to replace Government of India guards with local Bakhtiari personnel.¹⁹²

Critical decisions were primarily forged through collaborative efforts involving entities such as the Government of India, the British Minister of Foreign Office, representatives of Concessions Syndicate Ltd (later known as the Anglo-Persian Oil Company), geologist George B. Reynolds, Lieutenant-Colonel David Lockhart Robertson Lorimer (Vice-Consul in Arabistan, based in Ahwaz), Edward Grey (Foreign Secretary), Percy Cox (Political Resident in the Persian Gulf, stationed in Bushire), and William Knox D'Arcy (petroleum entrepreneur and holding various political and diplomatic positions in Persia). Their deliberations encompassed concerns related to oil operations in Persia, production status at the oil wells, the need for reservoirs and refineries, the size and duration of the deployment of the guard, questions of financial responsibility for the guard's costs and accommodation, and the allocation of staff allowances.¹⁹³

The backing provided by the British government to D'Arcy's concession, along with their control and support of oil exploration activities, primarily served the imperial interests of Britain, signifying the initial phase of colonial penetration into Iran and the broader Middle East. This support, in turn, played a decisive role in the triumph of British mining agents over local tribal powers and the national government. Consequently, in 1909, a new oil company named the Anglo-Persian Oil Company (APOC), affiliated with the Burmah Oil Company, was established in London. Britain indirectly assumed responsibility for the APOC's operations.¹⁹⁴

Throughout the period of oil exploration in Khuzestan, the British exercised environmental and social control over the local tribal authorities, facilitated by the employment of geographical knowledge and data in the form of textual records and maps. The advent of telegraphy by British oil agents rendered the entire province more accessible to both the national capital and the British government. The

¹⁹² File 1421/1908 Pt 1-2 'Persia: Oil', File 1421/1908 Pt 1 'Persia: oil; D'Arcy Oil Syndicate', British Library: India Office Records and Private . Papers, IOR/L/PS/10/143, in Qatar Digital Library

¹⁹³ Captain A T Wilson, *BP Archive, Arcref: 68779* . 1914-1919

¹⁹⁴ Yaghubi-Nejad, Ali. *Raiis-E Naft (the Oil Boss)*. [oil Boss]. Yadvareh Ketab Publications, 1994.

overarching objective of securing primary control over the oil fields necessitated the curtailment of tribal power and their autonomy in governing their respective domains.¹⁹⁵

3.3.2 The Land Puzzle: Navigating Landownership and Industrial Expansion¹⁹⁶

This section examines the complexities involved in acquiring land for oil development, the negotiations with influential landowners, and the broader implications for industrial expansion in Iran. By the year 1910, APOC recognized the inefficiency of using over six thousand mules to transport crude oil extracted from the oil wells. This led to the imperative of constructing pipelines spanning approximately 150 kilometres, traversing challenging terrain, including high mountains and vast deserts, to transport the crude oil to the ports of Abadan for further shipment. However, securing the necessary land for this extensive pipeline network was not a straightforward task. The land required for the pipeline infrastructure was divided between the Bakhtiari authorities and Sheikh Khazal, who

¹⁹⁵ the India Office ; the Foreign Office; the War Office; the Treasury; the Foreign and Political Department of the Government of India; Brigadier-General Sir Percy Sykes, Inspector-General, South Persia Military Police; HM Minister, Tehran (Sir Charles Marling); HM Vice-Consul, Ahwaz (Captain E Noel); the Deputy Political Resident in the Persian Gulf ; Lieutenant-Colonel Sir Percy Cox, Political Resident in the Persian Gulf and Chief Political Officer, Basra; HM Consul, Kerman; the Civil Commissioner, Baghdad; the Chief of the Imperial General Staff (C.I.G.S.); the Commander-in-Chief (C-in-C), India; and the Chief of the General Staff, India. File 469/1917 Pt 2 'Persia: Bakhtiari affairs. Bakhtiari gendarmerie', British Library: India Office Records and Private Papers, IOR/L/PS/10/653, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100000000419.0x000224> [accessed 19 December 2021] Ref: IOR/L/PS/10/143. File 1421/1908 Pt 2 'Persia: oil; Ahwaz oil guard', British Library: India Office Records and Private Papers, IOR/L/PS/10/143/2, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100028322646.0x000001> [accessed 19 December 2021] Captain A T Wilson, letter. 1914-1919. BP Archives, ArcRef: 68779

¹⁹⁶ Ahwaz Land Purchases. ArcRef: 102204. 1909-1932. signed originals. only a description exists for the earliest agreement.
agreement includes: Lot No 60: land for Ahwaz station (16-07-1909) with Shaikh of Mohammerah. 10 jaribs for 160 £. this amount represented 10 £ p.a. for 16 years.
Lot No 61: land for extension of Ahwaz station 1921. with Shaikh of Mohammerah. 57.9 Acres for free. period : Concession
Lot No 62: land for extension of Ahwaz stations 1924. 16 jaribs. (15.43 Acres) with Shaikh of Mohammerah. this agreement commuted balance of previous rents and consolidated those agreements, making a total acquisition of 86 jaribs. amount: 1000 £. expired on 1993.
Lot No 63: land for distribution depot left bank 1928. area 16,800 sq.feet = 1866 sq.yds.- 4 Khuzestan jaribs. (386 Acres) for free, and not a specific period. this agreement was made with the Persian Government.
Lot No 64: land for cargo and distribution depot right bank 1932. area 700 feet by 400 feet= 31,112 sq.yds = 6.67 Khuzestan jaribs) or 6.43 Acres.

wielded significant control over the respective territories. The strategic location of Ahwaz, situated in the heart of the province, made it an ideal site for storing oil and establishing industrial facilities. Ahwaz's connection to the only navigable river from the Persian Gulf, as well as its proximity to the port of Mohamreh, ensured efficient transportation of oil via river channels.¹⁹⁷ Moreover, recognizing the potential benefits of refining oil on-site rather than transporting crude, the colonial powers saw the establishment of a refinery near the Persian Gulf as a solution to various logistical challenges. APOC engineers meticulously chose the site of Abadan, under Sheikh Khazal's jurisdiction, for the refinery. Abadan possessed favourable attributes, including flat desert terrain, proximity to the Karun River's confluence, and easy access to international waters, making it an ideal location for refining and shipping operations.¹⁹⁸

In the early stages of the oil industry's expansion in Ahwaz, the oil actors needed to acquire land to develop the necessary infrastructure, including living and working areas, facilities and other related infrastructure. As the oil industry grew in Ahwaz, the APOC began to acquire strategic and desirable locations within the city for their operations. These prime locations often included previously owned areas by local residents or other entities. The acquisition of such lands by the oil company resulted in a substantial transfer of land ownership in favour of APOC. The APOC's need for specific types of land and their financial resources enabled them to acquire the finest locations in the city, sometimes displacing local residents or compelling them to sell their properties.

As APOC expanded its operations and influence in Ahwaz, it established various facilities such as refineries, employee housing complexes, administrative buildings, and supporting infrastructure. These developments not only altered the ownership of land but also transformed the physical and social landscape of the city. The concentration of APOC-owned properties in desirable locations had significant implications for the local community. It created a divide between the company-owned areas and those still under local ownership. The transformation of land ownership and the concentration of resources in the hands of the oil company had both positive and negative effects on the local population, including economic opportunities but also potential social and economic disparities. This process played a crucial role in shaping the city's urban landscape and social dynamics during that period.

¹⁹⁷ Crude oil had to be transported with mulls through dangerous roads of Khuzestan to the Persian Gulf and then to be exported to Britain. Reconnaissance of Ahwaz, Naft Khana Pipeline Route. 1927, BP Archives. ArcRef: 49686

¹⁹⁸ The APOC, *The Naft Magazine*. Published by APOC, 1932.

Acquiring land for oil development required navigating conflicts of interest between the building industry and landowners. Farmers, tribal elites, and the state were often reluctant to see their valuable farmland converted into industrial zones. APOC tackled this challenge by engaging in negotiations and securing lease agreements with influential landowners like Sheikh Khazal, who acted on behalf of his descendants and Arab tribes. The lease agreements entailed an annual rent, granting APOC the necessary permissions to construct various facilities, including infrastructure, pipelines, telegraph and telephone stations, pumps, storage areas, and even residential houses. However, it was explicitly stated that at the end of the rental period, ownership of the land and any constructed buildings would revert to Sheikh Khazal or his kin.¹⁹⁹

Sheikh Khazal viewed APOC as a political ally against the Iranian national government and sought to cultivate a close relationship with the colonial actors. In addition to leasing lands, APOC further solidified this relationship by building a palace for Sheikh Khazal in Mohamreh (now Khorramshahr). This reciprocal arrangement was driven by Sheikh Khazal's desire for assurances from the British government regarding protection against potential land invasions, regardless of any changes in the Persian government. Furthermore, Sheikh Khazal's preference for the British consular agent in Mohamreh as a judge and mediator in potential conflicts with APOC demonstrated the delicate balance of power between local tribes and the national state. While APOC sought to maintain political relations with the Iranian government, the company faced criticism from nationalists who viewed their activities as contrary to federal rules, highlighting the tensions inherent in colonial-era oil development.²⁰⁰

Security was a crucial consideration in the oil industry, divided into two main aspects: protection of non-industrial operations, such as office buildings and urban facilities, and safeguarding industrial activities, including wells and pipelines. APOC often entered into agreements with influential locals, hiring a certain number of individuals to serve as guards for specific regions. In the case of Sheikh Khazal, he was responsible for deploying guards to protect the oil pipelines from damage and potential fires, with the company assuming the responsibility of paying their salaries. Sheikh Khazal also held the authority to punish any crimes committed concerning the protected infrastructure. The process of securing land for oil-based development in early 20th century Iran was complex and multifaceted. Through negotiations and lease agreements, APOC managed to acquire the necessary lands for building

¹⁹⁹ 'Ahwaz: grant of compensation to the Shaikh of Mohammerah on account of money he advanced towards the building of a consulate at Ahwaz' (CE, Gregorian) , 1933- 1936. Reference IOR/L/PS/12/3649.

²⁰⁰ Abtahi, Alireza . *Naft va Bakhtirayha: Oil & Bakhtiaries*. Institute of Contemporary History of Iran. 2005.

oil infrastructure, with Sheikh Khazal playing a significant role as a landowner and political ally. This interaction between the colonial powers and local actors reveals the intricate dynamics of power, politics, and economic interests that shaped Iran's early stages of oil development.²⁰¹

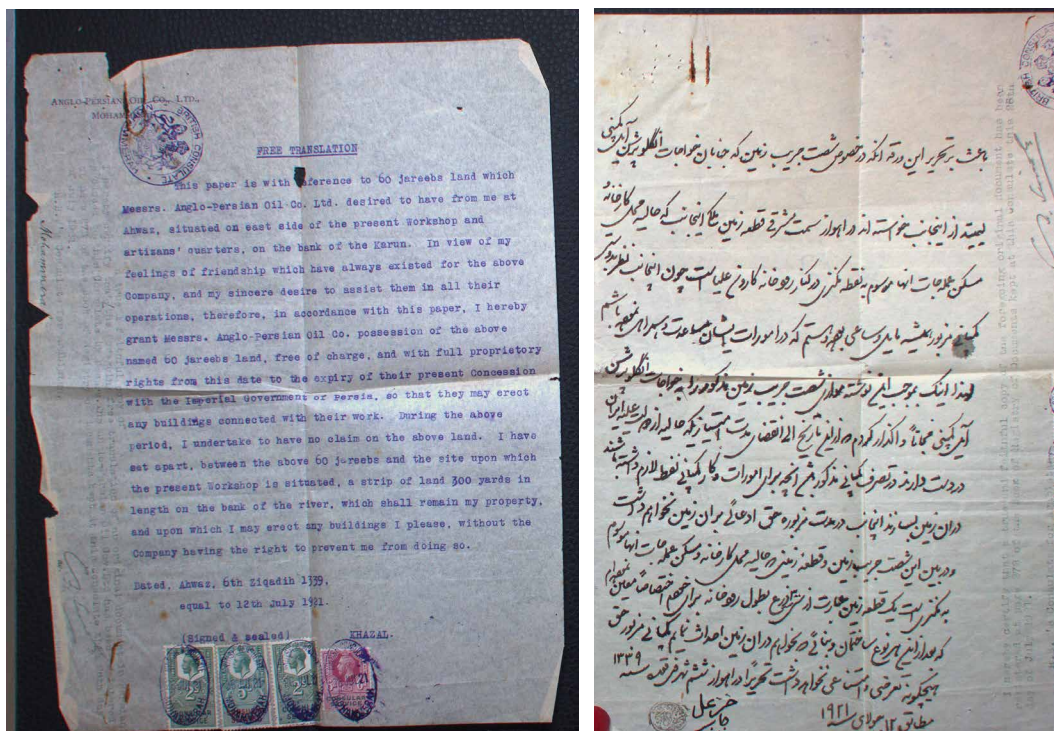


FIG. 3.2 Lot No. 61: Land for Extension of Ahwaz Station, 1921, with the Shaikh of Mohammerah. 57.9 acres granted for free. Period: Concession.

Source: ArcRef: 102204, Ahwaz Land Purchases, Barcode: 84347. BP Archives.
Date: 1921. Accessed: February 2018.

²⁰¹ Ibid.

Ehsani, Kaveh. 2014. "The Social History of Labor in the Iranian Oil Industry : The Built Environment and the Making of the Working Class (1908-1941)." Dissertation, publisher not identified. pp 126–130.

Atabaki, Touraj, Elisabetta Bini, and Kaveh Ehsani, eds. 2018. *Working for Oil : Comparative Social Histories of Labor in the Global Oil Industry*. Cham: Springer International Publishing. <https://doi.org/10.1007/978-3-319-56445-6>.

Arabistan: Excess expenditure at Ahwaz 1921-26 . British library, IOR/L/PS/11/208, P 5527/1921

“This paper is with reference to 60 jareeb lands which Anglo-Persian Oil Co. Ltd. Desired to have from me at Ahwaz. Situated on the east side of the present workshop and artisans’ quarters. On the bank of the Karun. In view of my feelings of friendship which have always existed for the above Company. And my sincere desire to assist them in all their operations. Therefore, in accordance with this paper. I hereby grant Messer. Anglo-Persian Oil Co. possession of the above-named 60 jareeb lands. Free of charge. And with full property rights from this date to the expiry of their present concession with the Imperial Government of Persia. So that they may erect any buildings connected with their work. During the above period. I undertake to have no claim on the above land. I have set apart. Between the 60 jareeb lands and the site upon which the present workshop is situated. A strip of land 300 yards in length on the bank of the river which shall remain my property. And upon which I may erect any building I please. Without the Company having the right to prevent me from doing so. 1921 – Khazal”

In terms of building living and working areas, related facilities and infrastructures, the Oil Company started to own the finest locations in the city (abandoned or farmlands) by getting them as gifts, occupations or buying at low prices. Rapid urban growth increased the demand for urban land, particularly the well-located ones connected to the Karun harbour. Changing landownership shaped the initial relationship between the oil actors and the locals and a correlation between land values and land uses.

To further protect APOC’s property in Khuzestan, British oil actors²⁰² proposed a grant of British honours to Bakhtiari Khans without the intervention of the

²⁰² Walter Beaupre Townley and Charles Marling, British Ministers at Tehran; Edward Grey, Secretary of State for Foreign Affairs; George Buchanan, British Ambassador in Russia; Eyre Alexander Barby Wichart Crowe and Walter Langley, Foreign Office; J G L Ranking, British Consul at Ahwaz; Percy Cox, Political Resident in Persian Gulf ; Thomas William Holderness, Lionel Abrahams and Arthur Hirtzel, India Office ; Charles Hardinge, Viceroy of India; Anglo-Persian Oil Company.

The volume’s principal correspondents are: Thomas William Holderness and Arthur Hirtzel, India Office ; Charles Hardinge, the Viceroy of India; Edward Grey, Secretary of State for Foreign Affairs; Walter Beaupre Townley and Charles Marling, British Ministers at Tehran; Eyre Alexander Barby Wichart Crowe, Foreign Office; Percy Cox, Political Resident in Persian Gulf ; Terence Humphrey Keyes, Political Agent in Bahrain; Alfred Hamilton, the Secretary to the Government of India in the Foreign and Political Department, Delhi; the Persian Minister of Foreign Affairs.

The volume’s principal correspondents are: Thomas William Holderness and Arthur Hirtzel, India Office ; Eyre Alexander Barby Wichart Crowe, Foreign Office; Charles Hardinge, Viceroy of India; Walter Beaupre Townley and Charles Marling, British Ministers at Tehran; Percy Cox, Political Resident in Persian Gulf ; Edward Grey, Secretary of State for Foreign Affairs; Strick, Scott and Co; Anglo-Persian Oil Company

File 3516/1914 Pt 4 ‘German War: Persia’, British Library: India Office Records and Private Papers, IOR/L/PS/10/481, in *Qatar Digital Library*

File 3516/1914 Pt 5 ‘German War: Persia; situation in Arabistan 1915’, British Library: India Office Records and Private Papers, IOR/L/PS/10/482, in *Qatar Digital Library*

government of Iran. Contracts for the mapping, excavation and construction of roads, pipelines, facilities and buildings required in six materials between APOC, British Consulate Presse in Isfahan, Reynolds representative of Darsey, Nawf Gholi Khan Samsam al-Saltanah, Gholam Hossein Khan, Shahab al-Saltanah, Haj Ali Gholi Khan, Sirdar Assad, Nasir Khan Sarem al-Mulk and Sirdar Jang were signed. There were differences between the Persian and Latin texts of the contract, including the assignment of land in the first clause of the contract. For example, the *Land Transfer Agreement* was listed free of charge only in the foreign language document, and in the Persian text, the contract did not contain a free quote.²⁰³ Likewise, APOC made new contracts to rent lands from Shaykh Khaz'al²⁰⁴ as the local landowner to allocate a large area of land for the Company to subdivide into parcels and use for different functions of a company town. They also signed with Sheikh for grounds required for Ahwaz station in 1909²⁰⁵, lands for the distribution depot on the left bank of Kaur in Ahwaz in 1928, and cargo and distribution depot on the right bank of the river at Ahwaz in 1932.²⁰⁶ Making these contracts meant paying subsidies to local elites, the matrimonial alliance between the Sheikh of Mohammerah and Bahktiaris.

The consequences of consensual promises among APOC and the local leaders had a posturing layer and a profound one. It seemed there was an opportunity for local magnates to strengthen themselves for possible future attacks from the national state on their autonomy. APOC again proposed to guarantee local autonomy in the event of the dissolution of Persia to secure its cordial relations with them

The file mainly consists of internal India Office notes, Minute Papers, and Reference Papers, and correspondence between the India Office and the following: the Manager of the Eastern Bank, Limited, London; the Viceroy of India, Foreign Department; and the Foreign Office. It also includes India Office correspondence with the Treasury, the Colonial Office, the Imperial Bank of Persia, the War Office, and other correspondents.

The file includes a divider which gives the subject number, the year the subject file was opened, the subject heading, and a list of correspondence references by year. This is placed at the back of the correspondence. File 74/1915 Pt 2 'German War: Banks at Basra +c. - the Eastern Bank', British Library: India Office Records and Private Papers, IOR/L/PS/10/529, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100000000419.0x0001a8> [accessed 19 December 2021]

²⁰³ Naderi, Mohammad Hassan. 2015. Naft va Solteh, (England, oil and sovereignty) (case study of Bakhtiari Oil Company) Proceedings of the Fourth Conference on the Iranian Islamic Model of Progress. (State Department Archival Documents, Iran, document No. 1626 23 1 41 AH)

²⁰⁴ There are signed agreements including: land for Ahwaz station 1909, land for extension of Ahwaz station 1921, land for extension of Ahwaz stations 1924, land for distribution depot left bank 1928, land for cargo and distribution depot right bank 1932: BP Archive, Arcref: 102204. Ahwaz land Purchases, 1909-1932

²⁰⁵ the extensions of Ahwaz station 1921 and 1924

²⁰⁶ BP Archive, Arcref: 102204. Ahwaz land Purchases, 1909-1932

and ensure safety for British trade.²⁰⁷ Consequently, the benefits of renting the lands to APOC were visible in enhancing the local elites. Where land received urban services generated by the oil industry, the landowners obtained new wealth without any investment. The transformation of land ownership from local tribes to the British Company's actors in need to expand oil installations was intertwined with wealth flows for the local elites: the indigenous communities and local elites became significant beneficiaries. APOC also built some grand houses for the elites in and out of Ahwaz. (Sheikh Khazal requested to purchase rifles from the British government).²⁰⁸

Behind this superficial appearance, APOC could obtain a stable situation to build for its necessities.²⁰⁹ In fact, the Company's actors directly limited the landowners' share of power by holding their property. This practice affected a severe transformation of land ownership from locals to the APOC's properties. APOC dominated the process of land assembly for development, and the expansion of the oil instructions reinforced its power by the concentration of land ownership as a large landowner. Gradually, possessing oil lands gave the oil actors an advantage over both the locals and the national state. Thus, it gained most of the development profit in time and turned the Company into a controlling position in development transactions. This was the final colonial target for APOC to grasp primary control of the oil fields due to the closure of tribal independence and their power to rule their authorities.

In the early stages of Ahwaz's development, no overarching or comprehensive plan existed for the city's expansion. This lack of a cohesive plan allowed for a more opportunistic approach to land acquisition. During this period, land acquisition in Ahwaz was driven by various actors, including the Anglo-Persian Oil Company (APOC), individual landowners, and the government. The absence of a clear urban planning framework meant that land could be acquired through different means, such as direct purchase, negotiation, or even coercion.

The local people and the government were involved in selling or transferring lands, often at low prices. The local people, particularly those who owned lands in and around Ahwaz, were often compelled to sell their properties due to economic pressures or the prospect of industrial development. The presence of APOC and its

²⁰⁷ File 3516/1914 Pt 12 'German War: Persia; Bakhtiari and Bawi affairs', British Library: India Office Records and Private Papers, IOR/L/PS/10/488, in Qatar Digital Library

²⁰⁸ The APOC, *The Naft Magazine*. Published by APOC, 1932.

²⁰⁹ Ehsani, Kaveh. *Oil, state and society in Iran in the aftermath of the First World War*. (published by the Gingko Library. 2015.

growing influence in the region created opportunities for landowners to profit from the demand for land brought about by oil exploration and subsequent urban growth. Additionally, the government, both at the local and national levels, played a role in land acquisition and redistribution. The government recognized the economic potential of oil and sought to facilitate its exploitation. As a result, they sometimes acquired lands from local owners and allocated them to APOC or other entities involved in oil-related activities.

It's important to note that the lack of a comprehensive plan for urban expansion and land acquisition also contributed to the emergence of informal settlements and haphazard development patterns in Ahwaz. Without proper zoning regulations or coordinated infrastructure development, the city grew fragmented and unplanned, resulting in a lack of basic amenities and services in certain areas. However, it also led to the uneven and uncoordinated growth of the city, with implications for infrastructure, services, and the overall livability of different areas.

The other action of the Company to get the primary influence on the oil fields was hiring local people to provide experienced and educated labour. With the elites' support, APOC could provide for its labour need from local tribespeople. On the one hand, APOC needed thousands of workers to expand operations when the oil fields' harsh working and living conditions demotivated most experienced European workers to come to the area. On the other hand, this policy could serve to develop future generations of companies guards, technicians, labours and employees from the locals to transform them from tribal treats to safe Company men.²¹⁰ Initially, oil activities did not require many experienced employees, and the local communities could supply most of the Company's requirements for cheap labour. By the end of 1910, the Company had hired about 2'500 employees,²¹¹ mainly from the local tribespeople, some from Indian workers, and a few British experts.²¹²

As it was expected, relations and negotiations among local powers and oil exploration agents developed the initial phase of the mentioned informal colonial infiltration in Iran. The informal imperial and colonial oil project reached the country's interior and hinterlands by signing these concessions. It opened and integrated tribal territories (such as the Bakhtiyari on the Zagros Mountains and Arabs on the coast of the Persian Gulf) to international commercial traffic and the

²¹⁰ Ibid.

²¹¹ Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power* Free Press trade paperback ed. New York: Free Press. 2008. P 132

²¹² The Anglo Persian Oil Company Limited (APOC): Persian Compendium: Central Staff Department, 1926-27. BP Archives, ArcRef: 37034

worldwide economy. Various oil-based architectural, urban, and infrastructural projects drastically altered the environment and society of Iranian oil fields.²¹³ The physical process of urban development –primarily held By APOC– involved the assembly of land rights, building plans and materials, labour and capital in providing serviced buildings. In this stage, Abadan (as the location of the refinery), MIS (the location of oil wells) and Ahwaz (the storage centre of the oil facilities) started their urban development in complex and often contradictory ways of interacting with local patterns of development. These juxtapositions in urban scenes represented the contradictions among informal colonisers, the colonised state, citizens' socio-cultural and political worlds, and their struggles for sovereignty.

The oil properties and amount of land that the Darcy Company and its partners needed in Ahwaz played a central role in the creation, establishment and strengthening of the city's modernisation process.²¹⁴ There was no overall or comprehensive plan for the growth of Ahwaz. As the new landowner, APOC was the actor who decided on its properties differently and became the primary decision-maker for the land use and the function of the urban contexts of Ahwaz and could urbanise lands outside the defined metropolitan area and expand urban regions on the grounds around the city. The oil actors not only devised the extracting policies or launched the building programmes but also, as the owners of the spaces, were the primary decision-makers in choosing local builders or international architects and planners to design the space for them. Likewise, APOC selected construction companies, manufacturers, and property developers. It also decided on the nationality of its employees as Iranians, Indians or Europeans to work and live in the oil fields. APOC, in this way, directed what, when, and how to be constructed and finally chose who could use the buildings for which specific periods.

In the context of APOC's pivotal role in shaping Ahwaz's urban landscape, the British Consulate at Ahwaz emerged as a paradigm of British informal colonial architecture during the beginning of the Iranian oil development era. This case study exemplifies the tangible manifestations of British influence and control within the petroleumscape of Ahwaz. Let's delve into the intricacies of this architectural emblem of British presence and explore its significance in the broader narrative of informal colonialism and urban development.

²¹³ Masjed Soleyman(MIS) and Abadan.

Vali Zadeh, Iraj. *Anglo & Banglo in Abadan*. Simia Honar Publications, 2010.

²¹⁴ Shafiee, Katayoun. *Machineries of Oil : An Infrastructural History of Bp in Iran*. Infrastructures Series. Cambridge, Massachusetts: MIT Press. 2018.

3.3.2.1 Case Example: The British Consulate at Ahwaz: A Paradigm of British Informal Colonial Architecture in the Iranian Oil Development Era

This case study delves into intricate dynamics surrounding the establishment of the British consulate in Ahwaz as an exemplar of the British initial informal colonial activities during the era of Iranian oil development. Through meticulous examination of archival sources, primary documents, correspondences, and historical records, it explores the decision-making process, land acquisition negotiations, and architectural planning involved in the construction of the consulate. Examining the collaborative efforts between key British officials and local landowners sheds light on the interplay between colonial interests, diplomacy, and architectural design in shaping the early oil landscape in Iran.

As Britain sought to secure its interests in the region, the construction of a British consulate at Ahwaz became a significant undertaking, reflecting the expansion of British power in Iran. The decision to establish a British consulate in Ahwaz was the result of a collaborative decision-making process among prominent individuals involved in British diplomatic and governmental affairs. Notable figures such as Percy Cox, the political resident at Bushire, and William McDouall, the Consul for Arabistan at Mohammerah (Korramshahr), played crucial roles in shaping the project. Lieutenant James Gabriel Lancaster Ranking, Vice-Consul and Acting Vice-Consul for Arabistan at Ahwaz, provided valuable insights into the local context, while Arthur Hardinge, the British Minister at Tehran, facilitated coordination between the various parties involved.

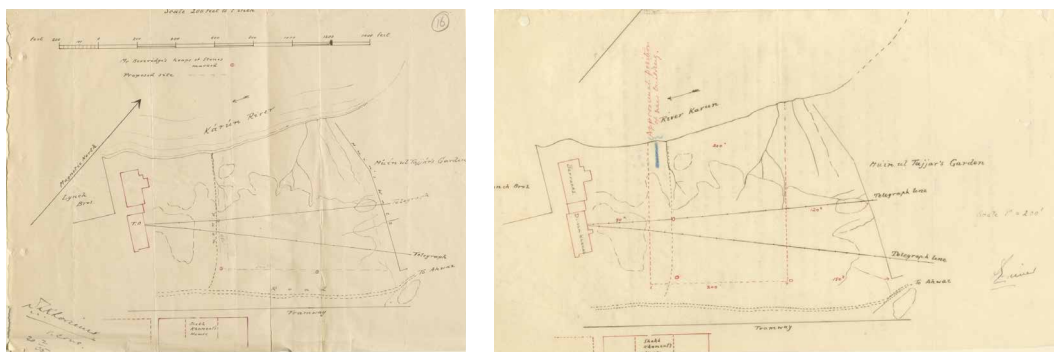


FIG. 3.3 Sketch plan of the Proposed Site for a Consulate at Ahwaz.

Source: British Library: India Office Records and Private Papers, IOR/R/15/1/384, f 16, in Qatar Digital Library https://www.qdl.qa/archive/81055/vdc_100023555826.0x00002b.

Date: 1909. Accessed: February 2023.

Careful considerations were made regarding the selection of the consulate's site in Ahwaz. Factors such as proximity to the river, accessibility, and potential for expansion were taken into account. The discussions revolved around identifying an optimal location that would facilitate British interests in the region while aligning with their policies and long-term goals in the Iranian oil sector. The process of establishing the consulate involved detailed discussions on responsibilities and financing. Parties involved, including the British government and APOC, deliberated on the allocation of tasks, ranging from architectural design to construction supervision. Determining the financial aspects, including the sourcing of funds and cost-sharing arrangements, was crucial to the decision-making process. Notably, negotiations were conducted with Mo'in-o-Tojjar, the owner of the land intended for rental. In alignment with British policies, the Anglo-Persian Oil Company (APOC), after entering into contracts with local stakeholders, sought permission to assume ownership of a vast tract of land measuring 6 miles in length and 2 miles in width, situated along the river in Ahwaz. Furthermore, APOC actively engaged national engineers and supervisors from the capital city to oversee the construction of the consulate while also developing sketch plans to guide the realization of their vision.²¹⁵

The design of the British consulate at Ahwaz exemplified the principles and characteristics of British informal colonial architecture prevalent during the time. The architecture embraced a blend of British and local influences, aiming to create a distinct identity that reflected both colonial authority and the cultural context of the region. It featured elements such as spacious verandas, high ceilings, large windows, and natural ventilation systems, which were suited to the local climate and promoted comfort within the building. The use of locally available materials, such as clay bricks, timber, and palm thatch, further emphasized the integration of local craftsmanship and resources into the architectural fabric. Incorporating elements inspired by local architectural traditions and cultural aesthetics. The inclusion of intricate geometric patterns, ornamental motifs, and decorative details drawn from Persian and Arab architectural styles demonstrated a conscious effort to integrate with the local visual language. By assimilating these cultural influences, the British sought to create an architectural identity that was both familiar and acceptable to the local population while still asserting their colonial presence.

²¹⁵ Coll 29/73 'Ahwaz: grant of compensation to the Shaikh of Mohammerah on account of money he advanced towards the building of a consulate at Ahwaz' Coll 29/48 'Ahwaz: consulate site and buildings' [4r] (7/619). This item is part of Coll 29/48 'Ahwaz: consulate site and buildings'. Ref: IOR/L/PS/12/3623 File 26/94 (F 26) Mohammerah; Shaikh Khazal's offer re: building of Ahwaz Consulate', British Library: India Office Records and Private Papers, IOR/R/15/1/384, in *Qatar Digital Library* <https://www.qdl.qa/archive/81055/vdc_100000000193.0x000165> [accessed 19 December 2021]

The construction of the British consulate at Ahwaz had significant implications for the British presence in the region. The architectural design served as a physical representation of colonial authority and control over the oil-rich territories. It projected a sense of permanence, stability, and power, asserting the British Empire's dominance in the economic and political realms. Furthermore, the consulate's architectural grandeur and strategic location conveyed the British Empire's intention to maintain a long-term presence in Ahwaz, safeguarding its interests in the burgeoning Iranian oil industry. It symbolized the colonial authority and influence exerted by the British Empire during the Iranian oil development era. As a physical manifestation of colonial power, the consulate stood as a testament to the economic, political, and cultural dominance of the British Empire in the region. Its architecture communicated a sense of permanence and control, serving as a reminder of the colonial presence and its impact on the local population. Moreover, its construction had significant socioeconomic effects on the local community. The influx of British officials, engineers, and workers associated with the consulate brought about economic opportunities and employment for the local population. The presence of the consulate also facilitated the establishment of trade networks, contributing to the growth of local businesses and economies. However, these socioeconomic changes were not without their challenges, as they also brought about social and cultural transformations, altering traditional structures and dynamics within the local community.

The British consulate at Ahwaz holds historical significance in the development of Iran's oil industry. As a key administrative and diplomatic centre, it served as a hub for British oil operations, facilitating the coordination of activities and providing a platform for negotiations with local stakeholders. The consulate played a pivotal role in shaping the trajectory of the Iranian oil industry, influencing policies, land acquisition strategies, and the overall British presence in the region. Its legacy continues to resonate in the history of Iran's oil industry, marking a crucial chapter in the nation's economic and political evolution. The case study provides valuable insights into British informal colonial architecture during the Iranian oil development era. The consulate's construction involved collaborative decision-making, negotiations for land rental, and the integration of local influences into the architectural design. Its architectural significance lies in its embodiment of British informal colonial principles, its reflection of the local cultural context, and its symbolic representation of colonial authority. The consulate's impacts on the local community were both socioeconomic and cultural, and its legacy remains significant in the historical development of Iran's oil industry. By examining the British consulate at Ahwaz, this study contributes to a deeper understanding of the intersection between architecture, colonialism, and oil development in the context of Iran's history.



FIG. 3.4 Pipeline Establishment and Maintenance at Ahwaz.

Source: ArcRef: 78026, Barcode: 69864, Company: The Anglo-Iranian Oil Co Limited. BP Archives.
Date: Unknown (1946–1951). Accessed: February 2018.

3.3.3 The Prodigal Symphony: World War I's Profound Influence on the Oil Company and the Ephemeral Dance of Power

To unveil the profound repercussions of World War I on the hallowed oil fields, the visceral tales woven between the Anglo-Persian Oil Company (APOC) and the indigenous populace, the following paragraphs mesmerize tapestry of historical chronicles and clandestine artefacts. They cast a luminous light on the Oil Company's pre-war struggles, the British government's strategic machinations, the intricate web of imperial control, the tumultuous storms of military occupation, and the seismic shifts in power within the Iranian oil fields. This piece concludes by revealing the enduring consequences of these epochal events on both the local denizens and the geopolitical theatre of the region. Prior to the outbreak of World War I, the Oil Company struggled to derive substantial profits from its oil production endeavours. The company encountered various financial predicaments, and the peril of incurring a complete loss on its investments in Persia loomed ominously. Nonetheless, it managed to retain control over the revenues until the commercial exploitation of oil commenced in the late 1910s. Having expended a considerable portion of its capital on the construction of Abadan's refinery, APOC confronted severe financial difficulties and failed to achieve satisfactory profitability from oil production, resulting in its inability to fulfil dividend payments to Bakhtraries and Arabs. This marked the initiation of a deteriorating and precarious relationship between APOC and the local populace.

The British government was swayed by international circumstances, including the looming possibility of a global conflict and the future reliance of the Navy on oil as its primary fuel, which led to Winston Churchill's decision. In 1914, the government entered into a twenty-year supply agreement with APOC, securing a controlling interest of 51 per cent in the Company. Subsequently, with the protection of the British army as a safeguard, APOC charted out plans for significant expansions.²¹⁶ The oil-powered British naval forces in World War I propelled the demand for increased oil drilling. In exchange for meeting the Navy's fuel requirements, APOC received financial backing from the British government for its enterprise.²¹⁷ The simultaneous emergence of the British government as both the largest shareholder and the principal customer of the Company presented a critical and intricate predicament. The official involvement of the British government in Iranian oil activities added further complexity to the political dynamics, solidifying imperial control over the oil fields in Iran. The Iranian political culture harboured persistent scepticism regarding British imperial motives towards the nation. From Iran's perspective, British participation in APOC signified the extension of their colonial authority into the Iranian hinterlands through access to the oil fields.

In due course, APOC assumed the role of a symbol of support for the British military and found itself tasked with overseeing British interests in Iranian oil regions that lay beyond the borders of British jurisdiction. During the course of the First World War, the British sought to preserve Iran's neutrality in order to maintain control over the nation. Their objective was to prevent Iran from entering the war and supporting the Ottoman Empire, particularly due to the rise of pro-Islamic sentiments in early 1915 within a Muslim coalition. German agents and Turkish forces, who stood in opposition to the British in the Middle East, provided a convenient pretext to incite the Bakhtiaries and encourage acts of sabotage against APOC's pipelines.²¹⁸ The attacks on APOC's properties, coupled with the state's inability to ensure security within the concession areas, furnished the Company with sufficient grounds and resolve to withhold the Iranian state's share of oil profits.²¹⁹ This concern prompted Britain to expand its colonial and imperial activities in the oil fields, even in the absence of a formal governmental statute granting them authority over Iran. Despite

²¹⁶ Ferrier, R.W. *The History of the British Petroleum Company*. Vol. Vol. 1, the Developing Years 1901-1932 /. Cambridge etc.: Cambridge University Press. 1982.

²¹⁷ Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power* Free Press trade paperback ed. New York: Free Press.. 2008. pp.120,121

²¹⁸ Ibid. p. 157

²¹⁹ Atabaki, Touraj and Ehsani, Kaveh. 'Shifting Governmentality in the Shadow of Labor activism: Revisiting the Roots and Impact of the 1929 Abadan Oil workers' Strike', in *Middle East Studies Association .Annual conference*, New Orleans. 2013 .

Iran's official request for the respect of its neutrality, Britain disregarded these appeals and launched a military invasion of Iranian oil fields with the assistance of A. Wilson led British troops to Khuzestan and conducted a landing near Ahwaz on February 20, 1915. The deployment aimed to safeguard the oil facilities along the Karun River and Ahwaz while also fostering the spread of the Jihad movement among Arab tribes. This imperial incursion sought to establish secure control over the oil fields during the Middle Eastern conflict, where safeguarding the Khuzestan facilities was paramount in Britain's wartime strategy.²²⁰

The activities of the Oil Company within the oil fields, facilitated through military occupation, posed significant challenges for both the indigenous population and the federal state. Although this invasion carried the potential for territorial fragmentation, the Iranian government lacked the necessary power beyond its capital to safeguard its borders or respond to this illegal incursion into its territories. While the British aspired to be accepted by the locals without resorting to armed conflict, for the Arabs and Bakhtiaries, it constituted a clear violation of their boundaries and authority. The Bawi tribe, for instance, engaged in acts of sabotage against pipelines and telegraph lines near Ahwaz but ultimately suffered defeat at the hands of Sheikh Khazal in February 1915. With its affiliations to Germany, Turkey supported and encouraged raids among the Arabs alongside the British army, leading to the British emerging victorious and the tragic loss of numerous lives among the local populace in a field near Ahwaz.²²¹ After this conflict, the British established absolute dominion over the oil fields, effectively marking them as their territory in the Middle East.²²²

²²⁰ Ford, Roger. *Eden to Armageddon : The First World War in the Middle East*. London: Weidenfeld & Nicolson, 2009.

²²¹ Letters from Anglo-Persian Oil Company (APOC) staff regarding German intrigues among Bakhtiari and other tribes of southern Persia.

²²² Ferrier, R.W. *The History of the British Petroleum Company*. Vol. Vol. 1, the Developing Years 1901-1932 /. Cambridge etc.: Cambridge University Press. 1982.

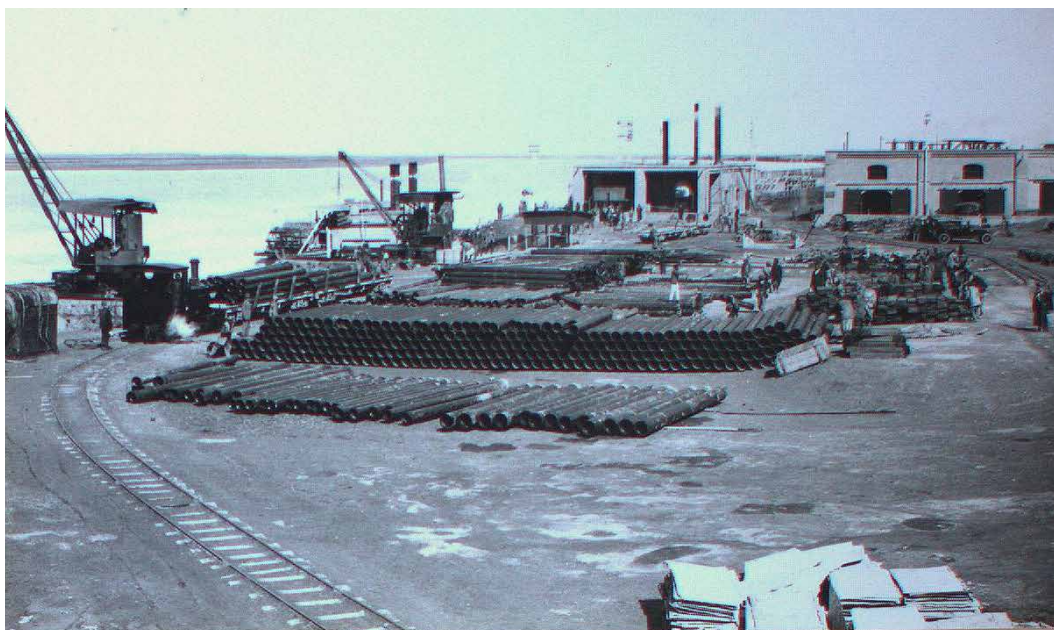


FIG. 3.5 Ahwaz - the Company's Store Yard and Seif above the Rapids on the Karun.

Source: Album of photographs of Persia. ArcRef: 24931, Barcode: 22758. BP Archives.

Date: 1925-7. Accessed: February 2018.

3.4 Engineering Ambitions: Planning and Constructing the Oil Properties

Following the culmination of World War I, the landscape of oil activities underwent substantial advancements, leading the Anglo-Persian Oil Company (APOC) investigators to establish a network of interconnected cities centred around the newfound oil fields. Concurrently, extensive explorations were conducted to uncover additional reservoirs, driven by the prospect of heightened petroleum productivity. The surge in demand for oil as a primary fuel source for industrial machinery contributed to a remarkable escalation in its price. Consequently, the industry experienced a substantial boost in revenue, empowering APOC to allocate its newfound wealth towards the development of urban infrastructures, marking the onset of a transformative phase. This ambitious expansion of urban environments played a pivotal role in establishing a cyclical process that fostered heightened levels of oil production. As the Oil Company aimed to maximize productivity within compressed timelines, swift adaptations became imperative in Ahwaz, the epicentre of oil operations. The exigencies and requirements of the oil industry necessitated a rapid and comprehensive urban transformation encompassing residential and occupational areas, along with the provision of essential facilities and infrastructural developments. The acceleration of urban expansion, driven by the imperative of establishing secure transportation and distribution routes between oil sources and refineries, entailed substantial investments, expansive land utilization, and the creation of an entirely new petroleumscape.²²³

This statement signifies that APOC, driven primarily by its pursuit of financial gain, adopted and implemented similar urban development practices in various locations, irrespective of the distinct geographical settings of these areas. The aim was to establish new industrial cities that revolved around oil extraction and production. The emergence of these new cities was shaped by the precedents set by earlier oil towns, resulting in striking similarities in their urban and architectural growth patterns. Ahwaz, in particular, witnessed a profound influence from the urban development of Masjed Soleyman (MIS), characterized by its oil wells, and Abadan, renowned for its oil refinery. Nevertheless, Ahwaz also encountered unique constructions tailored to cater to the evolving industrial requirements.²²⁴

²²³ Persian Oil Industry Photograph Album, 1910-30 . BP Archives. Arcref: 90702

²²⁴ The Anglo-Persian Oil Company Limited(APOC), Persian Compendim: Transport Department, 1927. BP Archive, ArcRef: 37066

It demonstrates the global reach and influence of APOC as a major player in the oil industry. APOC's financial motivations drove it to apply uniform urban practices across different regions, suggesting a degree of standardization in the Company's approach to city development. APOC's replication of urban practices used in the first oil cities underscores the imprint of the oil industry on urbanization. It implies that certain features and structures associated with oil towns were considered essential for the success of oil-based industrialization, regardless of the specific location. This concept fits within the framework of the petroleumscape, as it showcases how the oil industry shapes urban landscapes. It reveals how APOC's financial interests were a driving force behind the petroleumscape concept, influencing the design, layout, and architectural elements of these newly established cities. While APOC replicated certain practices, the mention of unique constructions tailored to industrial requirements also suggests that there were local adaptations to the overarching urban model. This dynamic between global influence and local adjustments adds depth to this analysis. Overall, this idea serves to emphasize the powerful impact of the oil industry, as represented by APOC, in moulding urban environments and creating what is termed "new industrial civilizations" in various locations. It highlights a tension between global standardization and localized responses within the petroleumscape, which will be explored further in this research.

The advent of oil introduced a novel range of functions for buildings, extending beyond residential housing to encompass industrial, social, and commercial roles. Various types of structures, including oil storage and pumping stations, bore the unmistakable imprint of the oil industry. The purposes, benefits, and functions of the lands themselves underwent transformations in accordance with the nature of the buildings erected upon them. In the 1920s, the Company erected the Darkhovin pumping station south of Ahwaz, which served as a storage and pumping facility for the oil extracted from MIS, facilitating its transportation to Abadan.²²⁵ The construction of the Darkhovin pumping station south of Ahwaz exemplifies a tangible element within the broader petroleumscape concept. This facility was not merely a storage and pumping station; it was a crucial node within the intricate network of oil infrastructure, a spatial emanation directly linked to the production, transportation, and distribution of oil. The Darkhovin pumping station played a pivotal role in facilitating the seamless movement of oil extracted from the nearby oilfields of Masjed Soleyman (MIS) to Abadan, a process that intertwined geographical and industrial spaces in a significant way.

²²⁵ Naderi, Mohammad Hassan. *Naft va Solteh, (England, oil and sovereignty) (case study of Bakhtiari Oil Company)* Proceedings of the Fourth Conference on the Iranian Islamic Model of Progress. 2015. Ghaiyem, Bahador . *Tarikh-E Hashtad Sale-Ie Bandar-E Imam Khomeini [Eighty Years History of Imam Khomeini Port]* . 2010.

In this historical context, the petroleumscape concept becomes highly relevant. It underscores how the Darkhovin pumping station, alongside other oil-related sites, contributed to a web of spaces intrinsically connected to the singular commodity of oil. The station's presence was not an isolated feature but a part of a larger petroleumscape, an evolving landscape encompassing refineries, transport networks, and urban developments that shaped the city of Ahwaz and its surroundings. This interconnectedness within the petroleumscape demonstrates the influence of oil in shaping both spatial and economic landscapes. The Darkhovin pumping station serves as a vivid example of how oil-related structures and their strategic locations were vital for the continuous production and transportation of oil. It accentuates the idea that these oil spaces, whether large refineries or smaller facilities like Darkhovin, collectively formed a dynamic system that played a role in influencing the city's development, reinforcing economic systems, and contributing to the broader narrative of the petroleumscape.

Furthermore, a sizable workshop was established in Ahwaz to address the significant repair needs of the pumping station plants. This workshop required specialized machine tools and the production of materials for the main pipeline, items that could not be readily procured from England. Additionally, the workshop played a vital role in maintaining the rolling stock on the Ahwaz tramline and catering to the crafts along the upper Karun River. ²²⁶

In the early stages, the expansion of the town lacked a cohesive and overarching plan, leading to the opportunistic acquisition or purchase of lands at relatively low prices from local inhabitants or the state. The Company strategically procured prime locations within the city, primarily for residential purposes. Recognizing the intrinsic value and desirability of lands in close proximity to the Karun River in Ahwaz, the oil actors made the decision to demolish existing mud houses and relocate the native population to new suburban areas. Concurrently, they sought to construct modern neighbourhoods to accommodate their own needs and aspirations.

The extensive construction activities driven by the oil industry brought about a pervasive phenomenon of oil-induced industrial colonization, exerting dominance over land and property values in Ahwaz. These transformative processes engendered significant and intricate alterations in both the physical and social fabric of the city.

²²⁶ BP Archive, ArcRef: 53970; *A report on the Ahwaz workshops. Areas Covered: Building, Plant, Staff, Routine.* (1927).

Ahwaz Land Purchases. ArcRef: 102204. Barcode: 84347. 1909-32. BP Archives.

William Knox D'Arcy. ArcRef: 115914. Barcode: Z01439570. 1901-17. BP Archives.

Persia 1929. ArcRef: 36150. Barcode: 32668. 1929. BP Archives.

The inherent value of lands experienced a fundamental shift in accordance with the changing functions of the buildings erected upon them. The onset of the oil invasion spurred a reconfiguration of the utilization of the city's vacant lands and individual sites. The escalating demand for land, particularly in well-positioned locations, precipitated a paradigm shift in land values, elevating previously disregarded wastelands into reservoirs of wealth abundant with the coveted black gold and its associated facilities. This surge in differential pricing across diverse locations within the city introduced a newfound dynamism in the realm of land values.

This abrupt transformation of values fostered a novel landscape of land ownership, perpetuating a crucial struggle to ascertain who held the rights to the land and the accompanying profits. The realm of land ownership now emerged as a potent investment opportunity within the processes of urban growth, offering a pathway to substantial wealth creation. The acquisition and control of land became inextricably linked with the prospect of securing exclusive rights and reaping the benefits of this burgeoning urban development.

At the heart of the oil-rich city, the primary focal point of aspiration revolved around the challenge of managing the rapid pace of change unfolding within the realms of both industry and society. This endeavour, however, proved to be a formidable task that required astute organization and coordination. As the operations of the Anglo-Persian Oil Company (APOC) expanded, it assumed a position of dominant authority, exerting control over the city and its inhabitants by virtue of its status as the foremost investor and landowner. In this capacity, APOC assumed the responsibility of engaging local or international architects and constructors to design and construct spaces tailored to its specific needs.

The Company played a pivotal role in overseeing the process of urban expansion, making crucial decisions regarding land allocation and development. Through tenancy arrangements, APOC rented out properties to its oil employees, thus providing them with both residential and workspaces. In essence, these workplaces evolved into vibrant communities that came to be regarded as hometowns for both local and international citizens who found themselves woven into the fabric of the oil industry.

3.4.1 **Reconfiguring Urban Landscapes: The Transformative Dynamics of Colonial Settlement Patterns in Ahwaz**

Ahwaz's social and urban fabric underwent significant transformations influenced by the British colonial approach, particularly concerning settlement patterns. APOC's engineers drew inspiration primarily from the imposing colonial architecture prevalent in Britain, as witnessed in numerous other colonized territories. The initial trajectory of urban expansion in Ahwaz adhered to the principles of segregated urban planning established within Britain's colonial practices. At the heart of this planning approach resided the concept of isolation, primarily along racial lines. Given the substantial disparities between the colonizers and the colonized population, reconciling the diverse racial groups seemed an insurmountable task for the Company actors. Consequently, their initial recourse was to erect stark barriers and divisions among these groups based on national, social, and economic hierarchies and diversities. The Company towns emerged as residential enclaves within the oil-rich landscapes, exclusively owned, designed, financed, reserved, and organized by the Oil Company. APOC meticulously allocated distinct architectural styles and house sizes commensurate with the various employee classes and ranks within the Company—ranging from local workers to international staff and managers—thus engendering a stratified society. The ramifications of these decisions extended far beyond their immediate consequences, permeating the social fabric of Ahwaz.²²⁷

The description of the Oil Company's deliberate efforts to establish stark barriers and divisions among different groups within the petroleumscape, based on national, social, and economic hierarchies, is a poignant illustration of how the petroleumscape concept operated in Ahwaz. It emphasizes the way in which the petroleumscape went beyond just physical infrastructure and encompasses the social, cultural, and economic dimensions of oil-rich regions. The Company towns, serving as residential enclaves exclusively owned and controlled by the Oil Company, were an integral part of the petroleumscape. These towns, designed and organized according to distinct architectural styles and house sizes, mirrored the spatial and social segregation that characterizes the colonial petroleumscape of Ahwaz. They reflected the stratification of society, with different employee classes and ranks having their own defined spaces and living conditions within the broader oil landscape. This approach was consistent with the petroleumscape concept, which underscores how the oil industry shaped spatial and social structures. The deliberate allocation of specific architectural styles and accommodations according to

²²⁷ Porteous, J. Douglas. *The Nature of the Company Town*. [in English] Publication (Institute of British Geographers); No. 51. 1970.

employee class aligns with the broader theme of how the petroleumscape influenced both the physical environment and the social dynamics of the areas it encompasses.

Besides constructing contemporary structures, industrial complexes, and urban infrastructure, the infusion of international lifestyles and cultures among foreign employees formed an integral part of the pursuit of modernity. During the early stages of oil industrialization, British agents demonstrated a growing concern for their workers by establishing a welfare system that prioritized family-oriented and stable housing. The British employees, accompanied by their families for the most part, anticipated living spaces reminiscent of their hometowns, if not more advanced, to cultivate a sense of belonging in their newfound community. Having undergone rigorous training before entering the Iranian oil fields, these individuals held lofty expectations, expecting not only handsome remuneration but also comfortable living conditions and recreational facilities. In response, APOC agents made the conscious decision to enhance the quality of life solely for their British staff. Within the confines of a colonial urban atmosphere, British employees predominantly enjoyed urban amenities. As the purpose of the city evolved, APOC found itself compelled to develop various related institutions to cater to its growing needs. In addition to housing developments, the Company generously financed the construction of new urban facilities, including pools, hospitals, and clubs, exclusively for British engineers.²²⁸ Simultaneously, Fuccaro asserts that technology was the foremost import in these Company towns, which acted as central hubs of oil-driven modernity.²²⁹ The early manifestations of modernism within the realms of architecture and urban planning were pioneered through Western influences in these towns. Symbolizing the novelty introduced by the oil industry, company towns played a significant role in popularizing oil-driven modernity's perceived advantages and disadvantages as a Western import.²³⁰ This wave of modernization brought about profound transformations in every facet of citizens' living conditions, leaving an indelible impact on the social and physical fabric of the city. It also served as the initial nexus between diverse actors involved in the progression of modernity, engendering substantial and intricate changes.²³¹

²²⁸ Architect Magazine: "Abadan; Az Nazar'e Sakhteman Va Shahrsazi," [Abadan: In View of Architecture and Urbanism.] *Architect* 1 (1946).

²²⁹ Ibid.

²³⁰ Fuccaro, Nelida. *Histories of Oil and Urban Modernity in the Middle East*. Comparative Studies of South Asia, Africa and the Middle East, 33, 1. Durham, NC: Duke Univ. Press. 2013.

²³¹ The Anglo-Persian Oil Company Limited (APOC) Persian Compendium: Labour Department. ArcRef: 37023. Barcode: 33557. BP Archives. Date: 1927.
The Anglo-Persian Oil Company Limited (APOC) Persian Compendium: Transport Department. ArcRef: 37066. Barcode: 33599. BP Archives. Date: 1927-28

The influx of foreign employees into the local landscape brought about a profound cultural and social upheaval for the indigenous population. As rapid urbanization took hold, the urban areas of Ahwaz underwent significant transformations. The Anglo-Persian Oil Company (APOC) held sway over large portions of the town, ushering in a new way of life not only within the Company's properties but also in territories governed by local authorities or the national state. This process began with the introduction of superficial elements of urban facilities, which primarily served to acquaint the locals with the external trappings of modernity. For many residents, this marked their first encounter with modern industrialized social, cultural, healthcare, and recreational amenities and infrastructure. They could only observe the changes taking place in the industrial growth of the built environment while the ownership of these facilities within their own city's boundaries remained predominantly in the hands of the British. As Fuccaro aptly argues, "undoubtedly company towns came to symbolise the newness brought about by the oil industry, and as such contributed to popularising the benefits and evils of oil modernity as a Western import".²³²

The establishment of various Company towns within the city of Ahwaz served a singular purpose: the oil industry. However, ironically, oil also contributed to their isolation from the rest of the city.²³³ As previously mentioned, the urban expansion of Ahwaz adhered to colonial town planning principles, leading to a division of the city into distinct sections. These included the older traditional neighbourhood of Ameri, the new and modern gated communities like Khorramkushk in the northeast, Kut-Abdollah in the south, Camp-Low (comprising movable camps), the New-Site, Karun, and self-built houses by labourers in Hasir-Abad. The development of these new urban structures, fuelled by oil-related investments, reinforced spatial segregation in Ahwaz, which mirrored both racist ideologies and hierarchies perpetuated by British dominance. In the older neighbourhoods of Ahwaz, individuals from different socioeconomic backgrounds lived in close proximity to one another. However, in the newly planned Company towns, social status became a significant point of contention among residents. The rapid escalation of land prices further exacerbated this pattern of urban development, accentuating social segregation and effectively excluding the poor from accessing valuable urban lands.²³⁴

The architectural landscape of colonial Ahwaz represented the socio-cultural worlds of both the colonizers and the colonized in intricate and often contradictory ways.

²³² Ibid.

²³³ Persia 1910 to 1925, BP Archives, ArcRef: 36195

²³⁴ Iranian national oil Company. *Research on Iran's Oil Industry*. 1970.

It became a symbolic representation of the complex dynamics between these two groups.²³⁵ The creation of Company towns, while providing housing for employees, inadvertently reinforced spatial apartheid and cultural barriers.²³⁶ Consequently, the segregated nature of the city perpetuated a segregated society, reinforcing discrimination and prejudice. Expanding on the data, it is essential to note that the spatial segregation and cultural barriers prevalent in Ahwaz were not unique to the city. Similar patterns emerged in other regions with significant colonial influence and extractive industries.

In Ahwaz, the Company towns served as physical manifestations of the power dynamics at play during the colonial era. They represented the stark divide between the privileged British employees and the local population, who often faced socio-economic disadvantages and limited access to resources. This spatial apartheid not only perpetuated inequalities but also perpetuated cultural divisions and limited opportunities for interaction and mutual understanding between different groups within the city. The creation of Company towns in Ahwaz, driven by the oil industry, played a pivotal role in shaping the urban landscape and reinforcing social segregation. The consequences of this spatial apartheid went beyond physical boundaries, as it had a profound impact on the city's social fabric, perpetuating discrimination and hindering the development of a more inclusive and harmonious society. The ramifications of these decisions, as highlighted, extended beyond the immediate consequences. They permeated the social fabric of Ahwaz, illustrating how the petroleumscape concept encompasses not only the physical landscapes but also the social and cultural landscapes of oil-rich regions. The petroleumscape, as a concept, emphasized the interconnectedness of various aspects within the oil industry's spatial and social presence, shedding light on the profound influence it exerts on the lives and interactions of those within its domain.

3.4.2 **Embodying Elegance and Exclusivity: The Evolution of Bungalows as Icons of British Prestige in Ahwaz**

In the higher echelons of society, the Anglo-Persian Oil Company (APOC) crafted a vision of opulence and distinction, manifested in the form of single-family detached houses nestled within the charming environs of Khorram Kushk. The construction of these opulent houses within the picturesque setting of Khorram Kushk for the

²³⁵ Scriver, Peter, and Vikramaditya Prakash. 2007. *Colonial Modernities : Building, Dwelling and Architecture in British India and Ceylon*. The Architect Series. London: Routledge.

²³⁶ Faateh, M. *Panjah sal naft e Iran. Fifty Years of Iranian Oil*. Payam publications. 1356/1977.

higher echelons of society, particularly employees of the Anglo-Persian Oil Company (APOC), was a quintessential manifestation of the ancillary petroleumscape. This concept within the broader petroleumscape framework delves into the auxiliary elements of the oil industry that extend beyond the core production and transportation infrastructure. In this context, the petroleumscape's ancillary aspects were particularly significant. These luxurious residences, exclusive to the privileged upper echelons, exemplify how the oil industry's influence reaches into the lifestyle and spatial domain of its employees. It reflects the idea that the petroleumscape was not solely about oil refineries, pipelines, or storage tanks but encompassed a spectrum of spaces and environments that cater to the needs and desires of those engaged in the industry.

These magnificent dwellings, known as “Bungalows”²³⁷, represented the pinnacle of architectural refinement, gracing the landscapes of separate garden suburb extensions, neighbourhoods, and Company towns.²³⁸ The very essence of the bungalow concept traces its origins back to the pioneering endeavours of British army engineers in Bengal²³⁹, who sought to elevate the traditional domestic structure into a standardized and enduring dwelling for the esteemed East India Company.²⁴⁰ By meticulously adapting and perfecting this architectural gem, the bungalows emerged as iconic symbols of social and spatial separation within colonial society.²⁴¹ As the Anglo-Persian Oil Company flourished, the bungalows became veritable emblems of Britain's industrial prowess, reflecting the nation's meteoric rise in both industry and entrepreneurship.²⁴² Revered architectural scholar Anthony D. King²⁴³ notes that these bungalows and the distinctive architectural language they embodied served as powerful visual representations of British imperial might,

²³⁷ The name derives from a Hindi word meaning “a house in the Bengali style” and came into English during the era of the British administration of India.

²³⁸ Anthony King, the bungalow's sociologist-historian, has analysed the circulation of the bungalow around the world as a colonial character and symbol of the British imperial, political and economic power to express the growth of the industry and capitalism of Britain. King, A. D, *The Bungalow : The Production of a Global Culture*. 1984. London: Routledge & Kegan Paul.

²³⁹ The bungalow was originated in colonial India from eighteen century and exported as a particular Anglo-Indian dwelling variety and its ideological architecture.

²⁴⁰ The origin and indigenisation of the Imperial bungalow in India. BY MIKI DESAI AND MADHAVI DESAI INDIA, 2016.

²⁴¹ Crinson, Mark. *Modern Architecture and the End of Empire*. British Art and Visual Culture Since 1750, New Readings. Aldershot, Hants, England: Ashgate. 2003. P 54.
Naft magazine, 7, July 1931, P 16.

²⁴² King, A. D, *The Bungalow : The Production of a Global Culture*. London: Routledge & Kegan Paul. 1984.

²⁴³

encapsulating the extraordinary growth of industry and the audacious spirit of the nation.

Amidst the sprawling oil fields of Iran, a remarkable architectural phenomenon emerged, captivating the gaze with its blend of indigenous influences and the refined, exquisite colonial style imported from India. This newfound variety of bungalows gracefully adapted to the unique geo-climatic conditions of the region, undergoing a metamorphosis in both layout and articulation.²⁴⁴ In Ahwaz, these Indian-inspired bungalows evolved into a more sophisticated form, proudly signalling the commanding social stature of their esteemed British owners. Adjacent to the Karun River, the Anglo-Persian Oil Company (APOC) meticulously set aside expansive, landscaped parcels of land, reserving them for their exclusive social and civic enclaves. Within this privileged domain, the Hasht-Bangleh, or the Eight Bungalow Complex, flourished. Nestled within the lush gardens to the west of Karun, this enclave served as a testament to the earliest instances of colonial architecture in the city. Painstakingly crafted by skilled artisans, these bungalows became the cherished abodes of APOC's British managers and esteemed military officers and even hosted distinguished guests such as Sheikh Khazal or the Shah.²⁴⁵

The Hasht-Bangleh complex embodied the epitome of British colonial architectural finesse. Positioned at the culmination of an elegant palm tree-lined axis, it offered a mesmerizing perspective view of the tranquil river. The modernist design of the buildings bore striking resemblances to the sleek villas that dotted the European landscapes of the 1930s and 1940s. Every intricate detail, from the graceful proportions to the harmonious blending of materials, bore testament to the unrivalled craftsmanship and unwavering dedication to architectural excellence. The vision of opulence and distinction that APOC cultivated in Ahwaz highlights the role of the ancillary petroleumscape in shaping the living environments of the oil industry's elite. This ancillary petroleumscape was intertwined with the broader landscape, emphasizing the interplay between the oil industry's economic and cultural influence and the physical spaces where its employees reside. In other words, the opulent houses nestled within Ahwaz, designed for the higher echelons of society connected to APOC, served as an eloquent example of how the petroleumscape, particularly its ancillary dimension, extended its influence into the realms of luxury and exclusivity, impacting the spatial, social, and cultural fabric of the areas it encompasses.

²⁴⁴ Jackson, Iain. "The Architecture of the British Mandate in Iraq: Nation-Building and State Creation." *The Journal of Architecture* 21 (3): 375–417. 2016. <https://doi.org/10.1080/13602365.2016.1179662>.

²⁴⁵ In the years of the power of Sheikh Khazal, he acquired a palace in the Eight Bungalow Complex. The presence of Sheikh in the city was for relaxation and not permanent living.

In the progressive evolution of bungalows within the captivating city of Ahwaz, the archetypal Bungalow blossomed into a sublime manifestation of architectural brilliance. These extraordinary dwellings, characterized by their low, single-storied structures, embodied a harmonious blend of simplicity and spaciousness encased within thick brick walls. A symphony of design elements graced these abodes, each contributing to the grand spatial organization that defined their allure. At the heart of the bungalow's interior laid a captivating hall, around which several rooms gracefully sprawled, revealing an asymmetrical layout that exuded an air of uniqueness. Crescent-shaped brick facades adorned the porches, their elegance capturing the imagination and offering a visual feast for the beholder. The wide arcaded verandas, elegantly draping the front entrance, served as both a climatic solution for natural ventilation and a captivating architectural feature. Balconies, overlooking the lush gardens, added an enchanting touch, evoking a sense of tranquillity and allowing residents to bask in the beauty of nature. The bungalow, reminiscent of a grand villa, showcased its architectural prowess through the sturdy facades that dutifully upheld the roof, an architectural dance between form and function. The ceilings, high and flat, stood as stalwart guardians, shielding the interiors from the relentless summer heat, while cool basements, inspired by the ingenious cellars of local architecture in nearby cities like Dezful and Shushtar, provided respite from the scorching temperatures.²⁴⁶

These remarkable bungalows were not merely physical structures but living embodiments of diverse ways of life and the intricate hierarchy that governed the residents within. As one ventured through their corridors, one could discern the subtle contrasts between family members, visitors, and devoted servants. Reflecting the multifaceted tapestry of society, the kitchen and servants' quarters were purposefully sequestered, discreetly tucked away behind the main house, a physical testament to the societal divisions and the contrasting lifestyles of those who resided within these captivating abodes. In this exquisite arrangement, the bungalow served as an architectural canvas, painting a vivid tableau of the contrasts between the social classes, offering a tangible representation of the intricate dynamics between the oil actors and their dedicated servants. It stood as a testament to the power of architecture to reflect and shape society, intricately weaving together the threads of tradition, elegance, and social hierarchy.

²⁴⁶ Housing General: H and AB Projects: Refineries Areas: Situation at date of Evacuation. ArcRef: 68380. Barcode: 63649. 1951. BP Archives.

Labour Staff and Housing, Iran, 1947 to 1951. ArcRef: 68186. Barcode: 63573. 1950-1. BP Archives.

AIOC Housing: Abadan, Mashu and Fields (Khuzistan) Areas. ArcRef: 41669. Barcode: 38614. 1954. BP Archives.

Housing and Feeding of Labour. ArcRef: 72350. Barcode: 66015. 1938. BP Archives.

The buildings themselves bore witness to a creative fusion of materials. In their quest for swift and familiar construction solutions, British officials in Ahwaz sought to import materials that could facilitate rapid development. Bricks, bearing the distinguished stamp of London upon their surface, were chosen as the cornerstone of this architectural endeavour. The allure of brick lay not only in its modernity but also in its suitability for Khuzestan's hot and humid climate. As these bricks were employed, an architectural marvel began to emerge, with arches gracing the facades of the buildings, a testament to the ingenuity of British engineers well-versed in the art of construction in colonial territories. Intriguingly, the influence of British railways found its way into the very fabric of these structures. Railway steel, harnessed in the ceilings, whispered tales of modernity, as it made its entrance alongside the construction of the British railways between MIS and Darkhazine in 1911. The infusion of this contemporary material into the traditional brick buildings exemplified the harmonious convergence of colonial influences and local construction practices. In certain areas, leaves adorned the ceilings and walls, an exquisite touch that married nature's delicate beauty with the solidity of architectural form. As time progressed, lime and Portland cement stepped onto the stage, lending their strength and charm to the evolving construction landscape. These materials, serving as allies to other building components, elevated the overall aesthetic, creating a more pleasing and refined outcome.

In the eyes of the authorities, housing in Ahwaz transcended mere functionality, becoming an opportunity to explore the realms of architectural artistry and elegance. With Iranian craftsmen and contractors at the helm of construction, the bungalow's physical fabric remained firmly rooted in the rich traditions of Iranian architecture, even as the materials, technology, and practices evolved. This delicate balance of influences ensured that these structures harmoniously married the past and the present. As one traversed the Bungalows, a tapestry of architectural marvels unfolded, revealing the exquisite craftsmanship of Isfahani artisans who left their indelible mark on the polished building facades. These expertly crafted facades, adorned with ornate brickwork and arches, evoked a sense of tradition, paying homage to the architectural heritage that thrived in Iran for centuries. The allure of the bungalows extended beyond their outward appearance. Step through the all-wood doors, adorned with intricate carvings, and enter a world where Western spatial organization seamlessly intertwined with traditional design elements. The central buildings exuded an unmistakable influence of colonial architecture, with their carefully planned layouts offering a glimpse into a different world. Within these walls, the artistry of Iranian craftsmen merged with the Western notion of space, resulting in a symphony of cultural exchange and creative expression.

Amidst the captivating tapestry of Ahwaz's bungalows, an aerial vantage point unveils a panoramic spectacle, offering a new dimension to their architectural allure, intrincating web of bungalow rooftops and sprawling gardens, a testament to the grandeur and scale of this architectural phenomenon. From this elevated perspective, the remarkable uniformity in the layout and design of the bungalows becomes apparent. The low, single-storied structures stretched out across the landscape, their simple yet spacious presence commanding attention. The aerial view unveils the meticulous planning that went into the creation of these bungalow enclaves. The carefully crafted garden suburbs and separated neighbourhoods, each with their distinct character, formed a captivating mosaic on the canvas of Ahwaz. The landscaped parcels adjacent to the Karun River, reserved by APOC for their social and civil lines, presented an inviting oasis of green amidst the urban fabric.

Asymmetrical in their internal arrangement, these bungalows stood as tangible representations of the harmonious blend of indigenous architectural traditions and the imported colonial style. Within this enchanting landscape, the architectural intricacies of the bungalows came to life. Every element exuded a sense of charm and sophistication, from the arches that adorned their exteriors to the wide arcaded verandas that graced the front entrances. The facades, bearing the polished bricks and the characteristic crescent-shaped brickwork, tell stories of craftsmanship passed down through generations. As the camera pans over the city, the bungalows' distinctive rooftops come into focus. High and flat, these ceilings were not merely aesthetic choices but practical solutions to protect the interiors from the scorching summer heat. Meanwhile, the incorporation of cool basements, inspired by the traditional cellars of nearby cities like Dezful and Shushtar, further enhanced the comfort and functionality of these architectural gems.

The aerial perspective also sheds light on the nuanced social dynamics embodied within the bungalow communities. The separation of spaces, evident in the isolation of the kitchen and servants' quarters behind the main house, reflects the hierarchical structure of society at the time. As symbols of prestige and social standing, the bungalows served as visual markers of the stark contrast between the lives of the servants and the privileged oil actors. It offers a glimpse into a world where architectural splendour met urban planning finesse. With its sweeping views and intricate details, the aerial photo invites viewers to embark on a visual journey, exploring the juxtaposition of tradition and innovation, functionality and aesthetics. In this aerial narrative, the bungalows of Ahwaz stand as testaments to the transformative power of architecture, resonating with the echoes of a bygone era when artistry and elegance were interwoven into the fabric of urban development. Each frame captures a moment frozen in time, immortalizing the legacy of Iranian

craftsmanship, the interplay between cultures, and the captivating beauty that defines Ahwaz's architectural landscape.

Ahwaz underwent a remarkable transformation in its architectural panorama, as British engineers brought innovation and modern materials to the region. This marriage of tradition and ingenuity fostered an environment where rapid development unfolded harmoniously while embracing the area's unique characteristics. The resulting structures were more than mere bricks and steel; they embodied the delicate balance between functional efficiency and aesthetic appeal, standing as testaments to the power of architectural design. Immersed in an aura of elegance and exclusivity, the bungalows of Khorram-Kushk represented magnificent embodiments of architectural splendour, serving as symbols of British prestige and influence. Within their walls, the elite of society indulged in the comfort and luxury offered by these exquisite abodes. Blending colonial elegance with the captivating allure of the Iranian landscape, these remarkable structures became a fusion of cultures and architectural styles. Each bungalow bore witness to the transformative power of architecture, seamlessly merging tradition with modernity and artistry with functionality. They stood as tangible reminders of the visionary aspiration to infuse the cityscape with refined elegance, leaving an indelible imprint on Ahwaz's cultural fabric. These enduring legacies continue to captivate, embodying the pursuit of architectural excellence and refined living.

Today, the bungalows in Ahwaz stand as captivating historical artefacts, evoking wonder and admiration. These architectural masterpieces bear witness to a bygone era when British colonial influence shaped the city's landscape. Admired for their timeless beauty and rich cultural heritage, they serve as lasting tributes to the intertwined histories of the two nations. Reflecting the convergence of swift construction methods, modern materials, and creative architectural ingenuity, they form a tapestry of captivating structures that grace the city with enduring charm. Transformed bungalows and refined living spaces within these architectural marvels continue to captivate discerning eyes, epitomizing exceptional design. Strolling through streets adorned with these architectural gems evokes profound awe, as they not only enrich the urban fabric but also signify the lasting legacy of Iranian craftsmanship. Representing the interplay between cultures, these buildings showcase the transcendent power of architectural design, offering spaces that are both functional and aesthetically captivating. Each structure whispers stories of the past, inviting us to appreciate the timeless allure of extraordinary architectural achievements.



FIG. 3.6 Bungalow No.01 and Garden, Ahwaz.

Source: Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Accessed: February 2018.



FIG. 3.7 Bungalow No.01 and Garden, Ahwaz.

Source: Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Accessed: February 2018.



FIG. 3.8 Bungalow No.03 and Garden. Ahwaz.

Source: Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Accessed: February 2018.



FIG. 3.9 Bungalow No.04 and Garden, Ahwaz.

Source: *Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views*. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Accessed: February 2018.

3.4.3 Socio-Architectural Metamorphosis: Exploring Shifting Lifestyles and the Rise of Social Housing

As the oil industry rapidly propelled Ahwaz into the realms of modernity, the arrival of foreign employees sparked a profound cultural and social shock among the local population. The alluring promises of the modern system enticed many native communities to migrate from the oil fields to the burgeoning centres of oil activities, transforming Ahwaz into a vibrant hub of industrialization. However, this newfound prosperity came at a cost, as the locals became increasingly reliant on the industry, abandoning traditional agricultural practices and immersing themselves in the unfamiliar world of urban living. Once stewards of their own lands, the indigenous population found themselves relegated to a subordinate position within their own city. British oil activities, dominated by the Anglo-Persian Oil Company (APOC), introduced a range of social, cultural, health, and leisure facilities that were previously unheard of to the local residents. Although these amenities were off-limits

to the indigenous population, their mere existence sparked a wave of transformation in local lifestyles as the locals grappled with the bewildering pace of change thrust upon them. Unaccustomed to the sweeping wave of modernization that was engulfing the world, the inhabitants of Ahwaz could scarcely fathom the profound impact that these developments would have on their city. In their own lands, they were reduced to second-class citizens, grappling with the disruptive effects of rapid change and struggling to comprehend the forces shaping their daily lives.

By the oil industry pressing on and driven by a relentless pursuit of industrialization and productivity, the British actors sought to mould the local population, deemed colonized subjects, into properly organized employees of the Company. This endeavour necessitated a fundamental transformation of traditional habitation patterns, replacing them with Westernized norms of orderly industrial city living. They recognized the need for adequate housing for their labourers and embarked on the construction of social housing projects. One notable example is the development of collective row houses, which became a prominent feature of the city's urban landscape during the early stages of industrialization. These tiny collective row houses were designed to accommodate the growing population of labourers working in the oil industry with limited access to urban facilities. The challenges of housing provision loomed large in this process, compelling the formulation of suitable typological practices to overcome them. Through an evolutive typology, the architectural landscape underwent a profound shift, as extended families gave way to smaller nuclear units, fundamentally altering the fabric of traditional family structures.²⁴⁷

This phase also witnessed the advent of mass production, as workers' and employees' houses were built across all areas. The houses were typically built in clusters, forming rows of identical units. The architecture of these housing complexes prioritized functionality and efficiency, aiming to provide basic shelter for the workers and their families. The row houses were characterized by their compact layouts and shared amenities. They exhibited a practical design, focusing on feasibility rather than ornate aesthetics. These functional yet unadorned structures displayed vernacular styles and materials, lining the narrow streets of the neighbourhoods. The materials used for construction were often simple and cost-effective, reflecting the need for affordable housing solutions for the labourers. The units were often small in size, with multiple rooms designed to accommodate nuclear families. The emphasis was on maximizing space utilization, ensuring that the available land could accommodate a larger number of housing units.

²⁴⁷ Karimi, Z. Pamela. 2013. *Domesticity and Consumer Culture in Iran : Interior Revolutions of the Modern Era*. Iranian Studies, 16. London: Routledge. <https://doi.org/10.4324/9780203072905>.

APOC adopted a centralized policy and management approach, employing identical architectural styles in cities throughout the southern oil-rich regions. The houses built for Ahwaz labourers bore striking similarities to the row houses found in MIS and Abadan, reflecting a standardized approach to housing provision in these industrial enclaves. While they lacked the grandeur of the colonial bungalows, these utilitarian housing units played a crucial role in supporting the burgeoning oil industry by providing affordable accommodation for the workers. They played a vital role in providing accommodation for the expanding labour force, allowing workers to live in close proximity to their workplaces and ensuring the smooth operation of the oil industry. The collective row houses represented a pragmatic approach to housing provision, addressing the immediate needs of the labourers and supporting the industrialization efforts in Ahwaz. These early social housing projects laid the foundation for subsequent developments in the city's housing sector. They set a precedent for future urban planning and influenced the architectural styles and typologies of residential buildings in Ahwaz. The provision of social housing by the British authorities played a significant role in shaping the city's social fabric and contributed to the transformation of Ahwaz into an industrial centre.



FIG. 3.10 Photographs of Persia (photographs of APOC publicity albums).

Source: ArcRef: 24931, Barcode: 22758. *Company:* The Anglo-Iranian Oil Co Ltd.
Date: 1925–1927. *Accessed:* February 2018.



FIG. 3.11 Ahwaz Clerks' Quarters.

Source: ArcRef: 77523, Barcode: 69206, *The Anglo-Persian Oil Company, Limited*, BP Archives.
Date: 1920–21. Accessed: February 2018.

3.4.4 Unveiling the Shadows: The Plight of Slums and the Dwellings of Contemporary Laborers in Ahwaz

Slums and informal settlements emerged as a stark reality in Ahwaz, a consequence of the rapid environmental growth coupled with slow economic progress and the inability to address the pressing housing needs of the population.²⁴⁸ The link between oil-based growth and uncoordinated urban expansion exacerbated the challenges faced by the city. While privileged architects and urban designers focused on shaping the hierarchical structures of urban design, another pressing issue arose in the form of temporary settlements established by Iranian immigrants, creating starkly contrasting urban zones. The influx of immigrants seeking employment in the oil industry led to the formation of shanty towns and slums on the outskirts of Ahwaz. These impoverished areas, characterized by primitive living conditions, emerged as a response to the immediate needs of the workers. However, these settlements were not aligned with the industrial economy or governmental policies, existing in a state of disconnect from the larger urban framework. The immigrant population, originating from various regions of the country, lacked

²⁴⁸ Huque, Ashraf. "The Myth of Self-Help Housing : A Critical Analysis of the Conventional Depiction of Shanty Towns." Dissertation, s.n. 1982.

stable community-based groups, further contributing to the fragmented nature of these settlements.

The strategies implemented by the Anglo-Persian Oil Company (APOC) to integrate low-income employees into their policies proved insufficient, perpetuating extensive deficiencies and inequality within certain parts of the city. Regardless of APOC's economic growth, social harmony was not a priority, resulting in many of its employees living in abject poverty. These slums became emblematic of the people's resourcefulness in creating new forms of living spaces to adapt to the demands of a modern industrial city that had not adequately planned for their inclusion. In the process of residential segregation, the oil actors allowed low-income groups to occupy lands surrounding the city. Self-built shantytowns emerged on state-owned or collectively owned lands within the urban sphere. While individual residents held use rights, land ownership itself remained uncertain and problematic. This created a complex situation where the residents were left in limbo, lacking security and stability in their living arrangements.

The existence of slums and informal settlements highlighted the inherent social and economic disparities within Ahwaz. These marginalized communities struggled to access basic amenities, such as clean water, sanitation, and healthcare. The presence of such contrasting living conditions further emphasized the need for comprehensive urban planning and inclusive policies to address the housing challenges faced by vulnerable groups. The aerial view of Ahwaz would reveal a city marked by stark juxtapositions – the grandeur of oil industry installations coexisting with the makeshift structures of slums and shantytowns. This visual representation captures the stark realities of an urban landscape grappling with the complexities of rapid industrialization, migration, and socioeconomic inequality.

Within the sprawling slums of Ahwaz, a tale of hardship and resilience unfolds. These marginalized settlements, characterized by their cramped and substandard housing, inadequate infrastructure, and meagre public facilities, stood as stark reminders of the deep social divides within the industrial landscape. These slums were home to a significant number of labourers, many of whom were instrumental in the progress of the APOC, yet found themselves cast aside by society.²⁴⁹ One such slum, Hasir-Abad, exemplified the struggle faced by its inhabitants. While the residents of the old city constructed their modest homes with clay and mud, the people of Hasir-Abad resorted to using mats as their primary building materials. A lack of necessities, including reliable access to water, electricity, heating, and proper sanitation, marked

²⁴⁹ Neves, V. 2012. "International Encyclopedia of Housing and Home." Essay. In *Shanty Towns*, 316–20. Elsevier Ltd. <https://doi.org/10.1016/B978-0-08-047163-1.00533-6>.

their living conditions. Fire hazards loomed large, and the fragile social fabric of the community further compounded their plight.

Although these slums existed beyond the purview of the Company and the State, their impact on shaping the city of Ahwaz could not be underestimated. The people residing in these informal settlements, as creators of their own habitable spaces, played a crucial role in the city's development. The stark contrast between the opulence of the oil industry and the destitution within the slums highlighted the profound disparities within society. Addressing these inequalities and improving the living conditions of marginalized populations became imperative for achieving social equilibrium. The responsibility for managing the slums fell on the APOC, which identified land and initiated transformational efforts. Simultaneously, the central government held the key to establishing policy guidelines and regulatory frameworks for housing, aiming to alleviate poverty and create alternative housing options for employees. These initiatives sought to diminish the prevalence of slums, elevate living standards, and foster a more inclusive society.²⁵⁰

The path toward transformation was not without challenges, but it signified a commitment to overturning the cycle of neglect. By recognizing the architectural potential embedded within these settlements, it became possible to envision a future where slums could be transformed into empowered communities. This journey towards social equilibrium necessitated a collective effort to combat unfairness, elevate living conditions, and promote greater inclusiveness. Only then could Ahwaz truly realize its potential as a city that embraced all its residents, regardless of their socioeconomic background.

3.4.4.1 Case Example of Ancillary Petroleumscape

In addition to the housing developments, the Anglo-Persian Oil Company (APOC) recognized the importance of providing basic social amenities and urban infrastructure to cater to the employees' class in Ahwaz. Through available data, it is evident that these amenities manifested as a unique architectural fusion, blending elements of bungalows with traditional houses. Unlike the extroverted architectural styles typically associated with bungalows, these social amenities showcased a distinctive design. They featured a central courtyard surrounded by verandas,

²⁵⁰ Ni, Pengfei, Banji Oyelaran-Oyeyinka, and Fei Chen. 2015. *Urban Innovation and Upgrading in China Shanty Towns : Changing the Rules of Development*. Heidelberg: Springer. <https://doi.org/10.1007/978-3-662-43905-0>.

drawing inspiration from the vernacular architectural traditions that prevailed in Ahwaz. These architectural adaptations were more than mere aesthetic choices; they were a reflection of the interplay between social transformation, architectural evolution, and the provision of essential amenities. The inclusion of a central courtyard and verandas served multiple purposes. The central courtyard provided a communal space where users could gather, fostering a sense of community and social interaction. On the other hand, the verandas allowed for shaded areas where individuals could relax and enjoy the outdoors while maintaining a connection with their living and working spaces. This architectural fusion, with its emphasis on communal spaces and integration with the local vernacular, played a significant role in shaping the trajectory of Ahwaz's urban landscape. It marked a pivotal moment in the city's history, as traditional modes of living gradually gave way to a new social order dictated by the imperatives of industrialization and the influence of the oil industry.



FIG. 3.12 Ahwaz Provision Stores Interior.

Source: ArcRef: 112030, Barcode: 91998. & ArcRef: 112035, Barcode: 92003. BP Archives.

Date: 1923-24. Accessed: February 2018.

The provision of these social amenities and the integration of architectural elements that mirrored the local architectural traditions not only met the basic needs of the employees' class but also contributed to the overall quality of life in the Company town. They provided spaces for leisure, recreation, and social interaction, enhancing the well-being of the residents. Furthermore, the inclusion of these amenities showcased the commitment of APOC to invest in the welfare of its workforce and the local community. As Ahwaz underwent rapid industrialization and urbanization, these developments in social amenities and urban infrastructure became integral components of the city's fabric. They represented a conscious effort to balance the demands of industrialization with the preservation of cultural identity and community cohesion. The blending of architectural styles and the provision of essential amenities reflected a nuanced approach to urban development, acknowledging the importance of both functionality and cultural continuity.



FIG. 3.13 The central section of the Provision Stores at the Oil-Fields.

Source: Reference: ArcRef: 24931, Barcode: 22758. Company: The Anglo-Iranian Oil Co Ltd. BP Archives.

Date: 1925-1927. Accessed: February 2018.



FIG. 3.14 Courtyard of the Company's Hospital at Ahwaz with two of the Nursing Sisters on the upper verandah.

Source: *Album of photographs of Persia* (photographs of APOC publicity albums). ArcRef: 24931, Barcode: 22758. Company: The Anglo-Iranian Oil Co Ltd. BP Archives.
Date: 1925-1927. Accessed: February 2018.



FIG. 3.15 Interior of Persian Ward at the Oil-Fields Hospital.

Source: *Album of photographs of Persia*. (photographs of APOC publicity albums). arceref: 24931, Barcode: 22758. Company: The Anglo-Iranian Oil Co L
Date: 1925-1927. Access: February 2018.



FIG. 3.16 The Junior Boys of the Company's School at Ahwaz with a Youthful Instructor.

Source: ArcRef: 24931, Barcode: 22758. Album of photographs of Persia. (photographs of APOC publicity albums) Company: The Anglo-Iranian Oil Co Ltd. BP Archives.

Date: 1925-1927. Accessed: February 2018.



FIG. 3.17 The Assembly Room of the Company's Club, Ahwaz.

Source: *Album of photographs of Persia (photographs of APOC publicity albums)*. ArcRef: 24931, Barcode: 22758. Company: The Anglo-Iranian Oil Co Ltd. Date: 1925-1927. Accessed: February 2018.

3.4.5 Construction Industry

During the 1920s, the oil-rich regions experienced a remarkable construction boom, driven by the rapid urban growth and infrastructure development associated with the oil industry. The Anglo-Persian Oil Company (APOC) played a central role in facilitating these development projects, leading to a surge in construction activities in the oil fields of Ahwaz. Numerous architectural and construction firms, both international and domestic, were engaged in the ambitious projects undertaken by APOC, including the construction of housing complexes, office buildings, refineries, storage facilities, and transportation networks. The demand for skilled architects, engineers, and builders skyrocketed as APOC expanded its operations and sought to maximize oil production. International professionals were hired to design and construct various infrastructures, while domestic workers also played a vital role in shaping the urban landscape of Ahwaz.

Given the urgency to meet the production targets, there was limited time for the development of a distinctive architectural style. APOC's engineers relied on familiar architectural and construction methods and materials, drawing parallels with the colonial construction practices employed by the British in other territories. However, within individual architectural projects, a modernist approach was embraced, emphasizing functionality and industrial aspects in the designs.²⁵¹ The development of infrastructure began with the establishment of roads and railways, accompanied by the expansion of the Ahwaz docklands to facilitate international shipping and the movement of goods. These communication networks transformed Ahwaz into a significant hub for global interactions, contributing to cultural and social evolution within the city.²⁵²

The introduction of foreign expertise in architectural design and construction methods resulted in a fusion of styles, blending elements of modernist architecture with traditional Iranian architectural practices. This integration of foreign influences led to a departure from the traditional landscape of the Khuzestan region, marked by mountains and deserts. The shift towards modern construction techniques, including the use of materials like steel, revolutionized the urban landscape and fuelled the demand for building materials and skilled labour. The growth of industries related to construction, such as building material manufacturing and transportation services, offered new economic opportunities for local communities.²⁵³

The construction boom had a profound impact on the local economy, generating employment opportunities and driving growth in related industries. The demand for construction materials, such as cement, steel, and timber, soared, leading to the establishment of local factories and supply chains. Infrastructure expansion extended beyond the city limits of Ahwaz, with the construction of new roads connecting the oil fields to the refinery in Abadan and the development of rail networks facilitating the movement of goods and personnel. The expansion of the Ahwaz docklands further enhanced international trade opportunities, supporting the export and import of oil-related equipment and supplies. Overall, the construction industry played a pivotal role in shaping the physical and social landscape of Ahwaz during this period. The rapid urban growth, architectural advancements,

²⁵¹ The architecture of the British Mandate in Iraq: nation-building and state creation. Iain Jackson

²⁵² Field Main Stores, MIS, Ahwaz and Abadan stores; and Nassery Transshipment, 1924, BP Archive, ArcRef: 112035

Fields Store at MIS, Ahwaz, Nasser, Dar Khazineh and Naft khana, 1923, BP Archive, ArchRef: 112030

²⁵³ King, A. D., *The Bungalow : The Production of a Global Culture*. 1984. London: Routledge & Kegan Paul.
King, A. D., and Brunel University. 1982. "The Bungalow, 1600-1980 : A Study of the Cultural, Social, Political and Economic Factors in the Production of a Global House-Type." Dissertation, University of Brunel.

and infrastructure development not only supported the operational needs of the oil industry but also transformed Ahwaz into a thriving hub of economic activity and cultural exchange.

The expansion of the Ahwaz docklands, which supported international trade opportunities, played an essential role within the broader petroleumscape concept, particularly in its spatial and economic dimensions. The petroleumscape, extended beyond just oil production and extraction sites, encompassing the entire network of spaces and infrastructure associated with the oil industry, including transportation hubs like docklands. The expansion of the Ahwaz docklands was a vivid example of how the petroleumscape facilitates the export and import of oil-related equipment and supplies, further cementing its role as a central actor in the global oil trade. In the context of the petroleumscape, the docklands become an integral part of the spatial and logistical web that connected oil-producing regions with international markets. They serve as a crucial link in the chain of the oil industry, showcasing how the petroleumscape's influence stretched beyond the immediate oil-related facilities to include transportation and trade hubs.

Moreover, the role of the construction industry, as mentioned, in shaping the physical and social landscape of Ahwaz further exemplifies the interconnectedness of various elements within the petroleumscape. Construction, often focused on building infrastructure to support the oil industry, played a pivotal role in shaping the spatial and social dimensions of cities like Ahwaz, reinforcing the overarching influence of the petroleumscape. The expansion of the Ahwaz in these aspects was a key component of the petroleumscape, underscoring the intricate relationship between the oil industry, transportation infrastructure, and the physical and social development of oil-rich regions. It illustrated how the petroleumscape concept encompasses a wide range of spaces and elements that collectively shape the landscape and lifestyle within these areas.



FIG. 3.18 Kut-Abdulla, Exterior view of Boosting Station.

Source: ArcRef: 77523, Barcode: 69206, *The Anglo-Persian Oil Company, Limited*, BP Archives.
Date: 1920-21. Accessed: February 2018.



FIG. 3.19 Panoramic Pictures of Ahwaz's Initial Oil-related Development.

Source: Arc36183, BP Archives.
Date: 1910s. Accessed: February 2018.

3.5 Conclusion to the Chapter

The transformation of Ahwaz, from a city steeped in tradition and antiquity to a burgeoning oil city marked by informal but colonial modernity, encapsulated a significant chapter within the petroleumscape narrative. This evolution served as a potent example of how the petroleumscape concept not only encompasses physical changes in the landscape but also extends to the profound socio-cultural and political shifts brought about by the oil industry.

In the context of the petroleumscape, the hidden impacts of oil-based activities on Ahwaz's lands were a striking illustration of how the petroleumscape influenced the initiation of spatial production and the built environment. The impact of oil on the urban planning of Ahwaz cannot be understated, as it shaped and reflected the dynamics of an informal colonial city while echoing its racial biases and discriminatory practices. The construction of bungalows and separated company towns, aligned with racial and ethnic lines, was a reflection of British colonialism and the broader dynamics of social segregation. This spatial separation, evident in the physical layout of the city, reinforces the hierarchies and biases of British domination, making it an integral part of the petroleumscape's socio-spatial dimension.

The land settlement became a means of lodging imperialism and colonialism, with primitive accumulations of segregated spaces based on racial lines. This development process resulted in a scattered collection of individual neighbourhoods across the barren lands of Ahwaz, each catering to different social classes and offering diverse housing options for local workers, international employees, and managers. Furthermore, the implementation of zoning regulations upholding the principles of imperialism that segregated high-income and low-income housing reflected the petroleumscape's influence on urban planning and the social fabric of the city. The construction and design of these company towns, imported by the oil company, served as tools for exerting control over the city's inhabitants, especially the local population. This architectural and urban production became a tangible aspect of the petroleumscape, influencing the power dynamics and social structure within the oil-rich region. It also became a concrete tool for colonial oil agents, allowing them to exert control over the ethnic citizens who found themselves living in a city that no longer belonged solely to them as its original inhabitants. These structures served as explicit symbols of power, reinforcing the hierarchical dynamics of colonialism and imposing a sense of alienation on the city's inhabitants. In other

words, the architectural production undertaken by the oil company played a pivotal role in sustaining their imperial practices and ensuring their continued dominance.

In the context of Ahwaz, modernization's and globalization's emergence coincided with a landscape characterized and driven by the presence of large-scale industry and extensive investments in urban development and different facets of the petroleumscape. In this context, land ownership emerged as a critical factor in Ahwaz's growth in parallel with the emergence of APOC's dominance. The land issue became a critical factor as rapid urbanization and market dynamics presented lucrative opportunities for urban land speculation. Concentrated land ownership, coupled with large-scale industrial investments, facilitated urban land speculation, with landowners becoming influential decision-makers in shaping the city's landscape.

In this scenario, landowners assumed a position of immense influence, wielding the power to shape the urban and architectural growth of the city. They held the authority to make crucial decisions regarding the allocation of resources and the construction of oil-related spaces, including the selection of builders, architects, and engineers, thereby controlling access to the working, living, and social spaces within the city. The oil actors not only devised the extracting policies or launched the building programmes but also, as the owners of the spaces, were the primary decision-makers in choosing and inviting national or international architects, engineers and planners to design; the construction companies, materials manufacturers and property developers to build and national or foreign employees to work and live in the oil fields for determined periods. It meant they possessed the agency to decide who would have access to these spaces for work, residence, and social activities.

The main decisions made in practice were determined by the oil actors, who had the authority to engage local builders and British private companies and firms. The resulting urban landscape reflected the convergence of these varied influences, creating a complex tapestry of architectural styles, planning approaches, and social dynamics. A combination of power relations and the late development of the oil frontier assisted local societies in negotiating the terms of colonial intrusion. As colonial conservation, the response by colonized people to the commodification of conquered environments was unique.

This control over the allocation and utilization of land and built environments bestowed considerable power upon the landowners, shaping the socio-spatial fabric of Ahwaz. Decisions determined the quality, design, and functionality of the oil-related infrastructure, influencing the experiences and opportunities available

to different segments of the population. These choices had far-reaching social implications, perpetuating hierarchies and reinforcing the power dynamics inherent in colonial endeavours. Their decisions, whether to engage local builders, British private companies, or other firms, had profound and lasting social consequences. Likewise, the manner in which they constructed the urban space had intense social effects. The involvement of different actors from diverse backgrounds, be it local builders or British firms, brought together social groups derived from vastly different societies. Each of these groups possessed its own distinct cultural behaviours, civil traditions, and institutionalized practices. This diversity within the colonial city resonates with observations of Yeoh regarding the multifaceted nature of colonial cities, where social groups with distinct cultural backgrounds coexist, sometimes clashing and sometimes blending together: "These social groups are derived from vastly different societies, each with its own ingrained cultural behaviour, civil traditions and institutionalised practices".²⁵⁴ They become the primary decision-makers for the land use and the function of the urban contexts of Ahwaz in complex and often contradictory ways of interactions. The city's architectural landscape reflected the diverse societies from which these actors originated, each with its own cultural behaviours, civil traditions, and institutionalized practices. Ultimately, the method of constructing urban space in Ahwaz, driven by the decisions of the oil actors, served as a catalyst for the interaction, negotiation, and, at times, the tension between different social groups with their respective cultural identities. The resulting urban fabric became a tangible expression of this dynamic interplay, shaping the sociocultural landscape of the city and leaving a lasting imprint on its history.

The construction of buildings served as vehicles for achieving social, political, and economic objectives. The oil actors wielded significant influence in reshaping the lifestyles of the local population, leading to profound transformations in their living and working spaces, as well as their social and private lives in various aspects. The primary actions of the Company actors were supposed to transform locals -who were considered to be colonised- into the Company's properly organized employees and elevate forms of their traditional habitations into the Western norms of living in an orderly industrial fashion city. Moreover, it shaped the initial relationship between diverse factors; likewise, the co-relation between land values and the land uses that the owners decided for their properties differently. In this stage, the transformation of land ownership from local tribes to the British Company's actors in need to expand oil installations was intertwined with the escalating value of oil properties and wealth flows for the local elites: the indigenous communities could accommodate the second impact of oil, and local elites became significant beneficiaries.

²⁵⁴ Yeoh, B. S. A. *Contesting Space: Power Relations in the Urban Built Environment in Colonial Singapore*. Oxford: Oxford University Press. (1996).

However, it is important to note that during the 1920s, the APOC was far from creating a fully modern town in Ahwaz. Instead, they established distinct and separate Company towns for labourers and British employees, adjacent to the pre-existing traditional village of Ahwaz, such as Khorram-Kushk and New-Site. In this informal colonial stage, the architectural styles of these different areas did not blend harmoniously. Instead, parallel worlds began to emerge, growing side by side within the city. This segregated urban landscape not only manifested itself physically but also gave rise to a segregated society, perpetuating discrimination and prejudice within Ahwaz. The city found itself torn, grappling with internal divisions that reflected the heterogeneity of its population and the cultural differences present among its inhabitants. The urban scenes presented stark juxtapositions, serving as tangible representations of the contradictions between the informal colonizers, the colonized state, the socio-cultural and political worlds of the citizens, and their ongoing struggles for sovereignty.

Technology was the first import in the company towns “as the central places of oil modernity”. As Fuccaro contends, “Undoubtedly company towns came to symbolize the newness brought about by the oil industry, and as such contributed to popularizing the benefits and evils of oil modernity as a Western import”.²⁵⁵ It caused a process starting with the entrance of imported superficial aspects of industry and life facilities, which resulted only in the observation of functional modernity by locals; they could only see the process of change in the industrial growth of the built environment, but most of the facilities and even their city’s lands belonged merely to the British. Ahwaz became a microcosm of the complex dynamics at play in colonial contexts, where multiple forces clashed, shaping the city’s identity and its people’s quest for self-determination.

The decision-making process behind infrastructure development and social welfare provision in Ahwaz was complex and multifaceted. The concentration of power in the hands of landowners underscores the intricate interplay between economic interests, urban development, and social dynamics in Ahwaz during this period of rapid change and growth. However, the process by which the company selected planners, architects, engineers, and builders for infrastructure and social welfare provision in Ahwaz is not immediately transparent. The selection of these professionals and firms was likely influenced by various factors, including expertise, availability, cost considerations, and perhaps even personal connections.

²⁵⁵ Fuccaro, Nelida. *Histories of Oil and Urban Modernity in the Middle East*. Comparative Studies of South Asia, Africa and the Middle East, 33, 1. Durham, NC: Duke Univ. Press. 2013.

The transformation of Ahwaz, as driven by the oil industry, was intricately woven into the petroleumscape narrative. It demonstrated how the petroleumscape concept extended its influence to shape not only physical spaces but also the cultural, social, and political dynamics within oil-rich regions. The petroleumscape, as a framework, provided a holistic understanding of how the oil industry's presence redefines the landscape and life in the areas it encompassed, accentuating the interconnectedness of spatial and societal changes. The chapter paved the way for understanding how British oil activities in Iran evolved from the designation of specific oil territories to the administration of oil resources, ultimately culminating in political, military, and cultural colonialism and hegemony. It analysed the critical actors' relationships and examined their concerns in shaping building types, architectural styles, functions, and urban forms during this period. However, the precise criteria and decision-making processes remain unclear. These dynamics laid the foundation for subsequent spatial development, and architectural, urban, and infrastructural changes, which will be explored in the following chapters.²⁵⁶

²⁵⁶ Scriver, Peter, and Vikramaditya Prakash. *Colonial Modernities : Building, Dwelling and Architecture in British India and Ceylon*. The Architext Series. London: Routledge. 2007.

Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, 04. London: Routledge. 2010. P114

Yeoh, B. S. A. *Contesting Space: Power Relations in the Urban Built Environment in Colonial Singapore*. Oxford: Oxford University Press. (1996)

Jürgen, O. *Colonialism: A Theoretical Overview*, Princeton. 1997.

4 Between Transcending and Mastering Boundaries

Exploring the Dynamic Fusion of Cultures in Postcolonial Architectural Hybridity

Time frame

1926 (designating Ahwaz as the official capital of the province)-1953 (the nationalization of the oil of Iran)

Main questions

- What captivating dynamics emerged in a petroleumscape from the clashes between diverse actors, shaping the intricate tapestry of hybridity across urban, financial, cultural, and social infrastructures?
- How did the constellation of actors undergo transformative shifts, illuminating the intricate evolutions within the broader context of petroleumscape?
- How did the post-colonial patterns of development intertwine with the petroleumscape, unravelling the profound influence and significance of infrastructures?

4.1 Introduction to the Chapter

In the preceding chapter, we delved into the nascent phase of Ahwaz's informal colonial era, characterized by the transfer of ownership of oil fields from local inhabitants to the industrial properties of the Anglo-Persian Oil Company (APOC) in order to establish the authority of the petroleumscape. This phase of land use served as a catalyst for subsequent architectural and urban transformations, aiming to reshape the indigenous population—perceived as subjects of colonization—into orderly employees aligned with the Company's vision, while imbuing elements of their traditional dwellings with Western notions of structured industrial urbanity. Nonetheless, the Company's endeavours merely resulted in the creation of discrete and limited Company towns for British personnel within the context of a traditional port city, falling short of the comprehensive realization of a truly modern urban centre.

Within the annals of Ahwaz's urban development, the period spanning from 1926 (designating Ahwaz as the official capital of the province) to 1953 (the nationalization of the oil of Iran) emerged as a significant historical period, representing the second stage following the advent of oil exploration. During this era, the built environment became a focal point of conflict, propelled by the intricate political manoeuvres of the growing Iranian national State under the Pahlavi dynasty. With the ascension of Reza Shah Pahlavi, Iran, for the first time since the 19th century, emerged as a formidable power, determined to reclaim its destiny amidst the rivalry with Russia and Britain.²⁵⁷ As Iran asserted itself as a dominant national entity against Great Britain, the balance of political power in the oil fields underwent a transformative shift. The once-unchallenged informal colonialism of the British in the operations of the Anglo-Persian Oil Company (APOC) gradually waned, giving way to a rising tide of Iranian nationalism that marked an informal postcolonial phase in the region. This marked a pivotal moment when national authority reclaimed its power, countering the colonial actions of Britain. With this newfound recognition of national values, APOC realized both the importance of protecting its properties and the imperative of respecting the aspirations and requirements of the Iranian workforce. Following the granting of a new oil concession in 1933, the Oil Company's focus extended beyond the well-being of British employees, incorporating the needs of Iranian oil labourers in its plans for housing, leisure facilities, healthcare, education,

²⁵⁷ New monarch as an absolute dictator changed the country's global position from being a passive victim by foreign Russian and British plunders, to an active force for its own national ambitions. Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

and more. This chapter delves into this transformative period, examining the shifting dynamics of power, nationalism, and the evolving understanding of the built environment as Ahwaz embarked on a path of self-determination and the recognition of its own distinct identity.

By writing a short political-related history and its subsequent impact on architecture, it becomes possible to analyse the emergence of informal postcolonial architecture in this Middle Eastern model city. This exploration unveils the multidimensional effects of global intercultural relations on the built environment. The morphology of Ahwaz as an oil city, both prior to and during the Second World War, as well as in the post-war era, underwent significant transformations driven by various urban, industrial, and social infrastructures. These changes resulted in a distinctive architectural landscape that seamlessly blended pre-colonial local forms, modern European architecture, the nascent national style, and American architects' modern interpretations of traditional Iranian architecture.

Ahwaz's petroleumscape, being a melting pot of cultures and nationalities, fostered dynamic social interactions in diverse forms. Within this context, we can examine the multitude of works in Ahwaz by considering the critical actors involved. Reza Shah Pahlavi sought to shape the city's built environment according to his vision of a National Architectural Style. To realize this vision, Iranian and international architects and engineers were invited to contribute to constructing various infrastructures. These included transportation networks such as the Trans-Iranian Railway, wharf facilities, roads, and bridges (notably, the iconic White Bridge and Black Bridge). Additionally, efforts were made to establish essential economic infrastructures, such as the Ahwaz National Bank. In line with the national agenda, urban facilities were developed, featuring the creation of the first urban squares, including the Railway Square, as well as the establishment of the National Garden. Governmental buildings, such as the police station, municipality, customhouse, court building (Adliyah), and other modern structures, stood as prominent symbols of the State's presence. Military infrastructure, including the military service base and ordnance facilities, played a vital role in ensuring security. Ahwaz also witnessed the rise of retail establishments and non-oil industrial factories (including the first fabric factory situated to the east of Karun). Residential buildings catered to different needs, with railway towns and military barracks providing accommodation for thousands in organized rectangular urban forms. The national bank's residential areas and hospital accommodations were also notable contributions. Additionally, Ahwaz saw the emergence of ancillary and social buildings, including the Railway Club and the city's first cinema.²⁵⁸

²⁵⁸ Mahin cinema In 1938

This national approach to architectural development in Ahwaz encompassed various influences. On the one hand, American architects, for instance, sought to incorporate elements of Iranian traditional architectural style into their designs. On the other hand, German and other European companies brought their global modern architectural sensibilities to the city. Furthermore, Iranian architects, many of whom had studied architecture in Europe, drew inspiration from the grandeur of National style in their works. The diverse range of architectural endeavours in Ahwaz reflects the multifaceted nature of the city's urban fabric. It exemplifies the fusion of cultural and architectural influences within a national framework, as well as the interplay between local, regional, and international actors. Through this analysis, we gain insight into the intricate tapestry of Ahwaz's architectural heritage, capturing the essence of a city shaped by its rich history, multiculturalism, and the aspirations of its visionary leaders.

In contrast to the diverse array of actors involved in shaping Ahwaz's petroleumscape, the Oil Company predominantly relied on one architect, James Wilson, who served as their permanent architect. The concentrated architectural efforts of APOC, led by architect James Wilson, played a crucial role in shaping the petroleumscape in Ahwaz. Their architectural contributions facilitated the larger development of the petroleumscape in several significant ways. APOC's architectural projects covered a broad spectrum of functions, from industrial to educational, administrative, and residential. This diversification reflected the multifaceted nature of the petroleumscape, where oil-related activities coexisted with all urban components. APOC's industrial facilities, including storage areas, oil wells, pipelines, factories, and workshops, were integral to the extraction and transportation of oil. By designing and constructing these facilities, APOC ensured the efficient production and distribution of petroleum, which was at the core of the petroleumscape concept.

APOC's involvement in establishing Ahwaz's first schools and administrative buildings underscored the broader societal impact of the petroleumscape. It highlighted how the presence of the oil industry influenced educational and administrative developments in the region, connecting these aspects to the petroleumscape.

²⁵⁹ APOC's provision of urban facilities, such as medical facilities and housing arrangements, further demonstrated its role in shaping the petroleumscape. The development of medical facilities was crucial for the well-being of the oil industry's workforce, and the construction of residential buildings reflects the creation of a distinctly urban environment within Ahwaz. The less organized and comprehensive labour housing arrangements also revealed the complexities of the petroleumscape.

²⁵⁹ In 1938 first high school named Shahpur High School started to be constructed by the oil company. Source:

It showed that the development of the petroleumscape wasn't solely about grand architectural projects but also involved addressing the accommodation needs of a diverse labour force.²⁶⁰ APOC's architectural endeavours were central to the petroleumscape's growth and diversification. They facilitated not only the physical expansion of the petroleumscape but also its broader societal and educational dimensions. The presence of these facilities, designed by Wilson, influenced Ahwaz's urban and architectural landscape and the development of the petroleumscape as a whole.

Parallel to this variety of actors, the local constructors and Ahwaz's citizens continued to contribute to the city's architectural landscape through vernacular architecture. Their focus primarily centred on retail developments, reflected in the growth of the Bazar as international trade flourished in Ahwaz. Additionally, local constructors were involved in residential construction, catering to the needs of the city's inhabitants. These endeavours relied on the availability of casual local labourers who possessed experience working on railway projects or for APOC. The collaboration between the British Oil Company and James Wilson, alongside the ongoing contributions of local constructors and citizens, played a pivotal role in shaping Ahwaz's architectural fabric. Their efforts resulted in a diverse range of structures, reflecting the intersection of global influences, local traditions, and the unique socio-economic dynamics of the city.

During the first Pahlavi period, Ahwaz witnessed the convergence of various actors driven by political, economic, and urban considerations, each contributing to the city's future and its urban development plans. This period marked the emergence of a distinct architectural productivity in Ahwaz, born at the crossroads of divergent policies. The city's physical, cultural, social, and political fabric was profoundly shaped by a multitude of participants, including the National Architectural Style propagated by Reza Shah Pahlavi, the continuity of informal colonial urban initiatives of the Anglo-Iranian Oil Company (AIOC) following the 1933 oil concession, the modern and industrial architectural influences brought by German and other European companies, the vernacular traditional architectural endeavours of American actors, and the enduring vernacular architecture of the local builders. In this context, Ahwaz evolved into a space of encounter where individuals from diverse backgrounds converged and built economies around the newfound wealth of oil. The city became a dynamic milieu where architectural elements underwent constant reshaping, reconstruction, and interaction within hegemonic systems of control. Hybridity emerged as a defining characteristic of Ahwaz's postcolonial

²⁶⁰ The Anglo-Persian Oil Company Limited (APOC): Persian Compendium: Medical Services. ArcRef: 37027. Barcode: 33561. BP Archives. Date: 1928.

architecture, epitomizing a fusion of materials, forms, construction techniques, and ornamentation.²⁶¹ It stood as a testament to the impurity of cultural elements and the result of a multifaceted interplay within the realm of postcolonial cultural productivity. Within Ahwaz's urban forms, this hybridity found expression, reflecting the complex intermingling of influences, intentions, and power dynamics. The cityscape became a canvas where different architectural languages intertwined, offering glimpses of both continuity and rupture, tradition and modernity. It embodied the complexities inherent in a postcolonial context, where actors with diverse agendas left their imprints on the built environment, resulting in a tapestry of architectural expressions that defied singular categorizations.²⁶²

Through cross-disciplinary lenses, the significance of architecture as an intricate product of interrelations between nations becomes apparent, unveiling a tangible link between architectural production, representation, and the dynamics of power.²⁶³ The implications stemming from the above-mentioned trends in the oil fields were deeply intertwined with the correlation between architecture and politics. Architecture served as the primary vehicle through which the Anglo-Persian Oil Company (APOC) sought to impose a modern social and political order, maintaining control over the oil fields. Simultaneously, it became a tool to assert national influence, showcasing Iran as a rival to the Oil Company's expansions. Following the national State's arduous efforts to reclaim its federal authority, Ahwaz emerged as a nexus that catered to both the socio-political needs of the oil machinery and the aspirations of national representation. Architecture in Ahwaz was not only subject to external forces but also shaped by a complex network of powers, where the hegemony of various actors influenced one another's architectural production. The political rivalries among national and international entities opened up diverse avenues for architectural development within the city. The cross-cultural interactions engendered a transformative process, turning Ahwaz's architecture into a hybrid amalgamation of the State's requirements and the industrial necessities. On the one hand, it manifested new interpretations of ancient patterns, infusing a romantic style to establish a distinct national identity for the heart of the Iranian oil province.

²⁶¹ Chris Abel in his book "architecture and identity": Responses to Cultural and Technological Change, dedicated an entire "living in a hybrid World" chapter to the study of architectural hybridity. Abel, Chris. *Architecture and Identity: Responses to Cultural and Technological Change*. 2nd ed. Oxford: Architectural Press. 2000.

²⁶² Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, 04. London: Routledge. 2010. Djar, Kahina Amal. *Locating Architecture, Post-Colonialism and Culture: Contextualisation in Algiers*. The Journal of Architecture 14 (2): 161–83. 2009. <https://doi.org/10.1080/13602360902867392>.

²⁶³ Wigley, M. *The Translation of Architecture, The Production of Babel*, Assemblage, 8. 1989. Kahn, A. 'Representations and Misrepresentations: On Architectural Theory', Journal of Architectural Education, 47, 3, 1994. pp. 162–168.

On the other hand, the influx of modern Western architectural styles introduced by European architects profoundly altered the city's urban fabric, leaving an indelible mark on its visual landscape.

The concept of hybridity serves as a crucial link that connects architecture with political discourses surrounding the dynamics of a variety of actors, their cultural production, and their approaches to space within oil cities.²⁶⁴ This notion underscores the idea that cultural hybrids manifest in diverse and distinct ways. Building upon this framework of hybridity within the postcolonial discourse, this chapter examines the unique characteristics of the relationship between Iran's national government and international oil actors and other participating international groups, such as Germans and Americans, in the case study at hand. The central argument put forth in this chapter posits that the ambivalence and complexities observed in the context of oil fields were not solely a consequence of foreign companies exerting hegemonic control over the administration and society of the city. Rather, they were intimately tied to the conditions of national autonomy in the face of foreign domination and the attendant political implications.²⁶⁵ By exploring the intricate intersection of power dynamics with architectural and urban policies and practices, this study illuminates the complex web of relationships among unequal actors involved. Through this lens, the chapter delves into the multifaceted connections that exist between the national government, international oil actors, and other relevant stakeholders. It examines the power dynamics and their influence on the architectural landscape and urban development, ultimately shedding light on the intricate negotiations and interactions that shape the built environment. By examining the interplay between political power and architectural production, this chapter unravels the complex tapestry of forces that shape the cityscape, offering a deeper understanding of the multifaceted dynamics at play within the petroleumscape context.²⁶⁶

The chapter's contribution to the discourse on Ahwaz's architecture goes beyond the concept of hybridity, shedding light not only on the policies regarding protecting their landownership but also on the merging of different cultures involved. Through analysis of Ahwaz's architectural formation, it explores the multifaceted processes of

²⁶⁴ Abel, Chris. *Architecture and Identity : Responses to Cultural and Technological Change*. 2nd ed. Oxford: Architectural Press. 2000.

Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, 04. London: Routledge . 2010. P96

²⁶⁵ Lentner, Howard H. "Hegemony and Autonomy." *Political Studies* 53 (4): 735–52. <https://doi.org/10.1111/j.1467-9248.2005.00554.x>. 2005.

²⁶⁶ Shafiee, Katayoun, Timothy Mitchell, Frederick Cooper, Khaled Fahmy, Michel Callon, and Ervand Abrahamian. "Cracking Petroleum with Politics: Anglo-Persian Oil and the Socio-Technical Transformation of Iran, 1901-1954." 2010.

cultural exchange, adaptation, and reinterpretation that have shaped the city's built environment. One aspect that sets Ahwaz apart is the interplay between different architectural styles and influences that converged in the city. Ahwaz serves as a microcosm of cultural encounters, bringing together elements of Persian, British, and other international architectural traditions. This fusion of diverse architectural languages and aesthetics creates a distinct visual tapestry that reflects Ahwaz's complex historical and socio-political context. Moreover, Ahwaz's architectural development is not solely a product of external influences. The city's architecture is deeply intertwined with its local identity, traditions, and aspirations. It embodies the aspirations of a nation striving for independence, modernity, and self-representation. The architectural projects in Ahwaz reflected the city's desire to assert its own identity and challenged dominant narratives imposed by colonial powers. Additionally, Ahwaz's architecture serves as a tangible testament to the socio-political transformations that the city underwent throughout history. It captures the aspirations, struggles, and triumphs of the local population in their pursuit of autonomy and self-determination. The buildings themselves become witnesses to the complex dynamics of power, resistance, and agency that have shaped Ahwaz's trajectory. By examining Ahwaz's architectural heritage, we gain insights into the intricate relationships between culture, politics, and power. It showcases a community's resilience in the face of colonial impositions and the capacity of architecture to convey and preserve narratives of identity and resistance.

This chapter delves into the intricate relationship between architecture and political dynamics in modern oil cities, utilizing the theoretical framework of hybridity. Focusing on the case study of Ahwaz, it explores the multifaceted interaction between Iran's national government, international oil actors, and other participating groups. By examining the power dynamics at play, the chapter sheds light on the complex web of connections between these unequal actors within the postcolonial milieu. At the heart of Ahwaz's architectural landscape lay the convergence of diverse influences and the integration of local identity and aspirations. Hybridity emerged as a defining characteristic, manifested in the amalgamation of various elements that shaped the city's architectural and urban fabric. This postcolonial architecture served as a testament to the richness and impurity of cultural productivity, giving rise to a distinct and captivating architectural identity for Ahwaz. To provide a comprehensive understanding, the chapter investigates into lesser-known case studies that have not received international recognition despite their architectural significance. The analysed case studies offer valuable insights into the influence of design methodologies in Iran and the Middle East. By shedding light on these overlooked examples, the chapter aims to present a nuanced understanding of the ambivalence inherent in the postcolonial history of urban planning and architecture. It unravels the intricate dynamics and tensions that permeate these

architectural interventions, challenging prevailing design paradigms and shaping the evolving urban landscape of Iran and the Middle East.

In this exploration, the chapter unveils the layers of Ahwaz's architectural development, highlighting the interplay between cultural, political, and historical forces that have shaped its urban fabric. By examining the diverse influences and adaptations that have influenced Ahwaz's built environment, the chapter offers a fresh perspective on the complexities of postcolonial architectural production in the region. It underscores the importance of comprehensively analysing these lesser-known case studies to fully grasp the rich tapestry of Ahwaz's architectural heritage and its significance within the broader context of Middle Eastern urbanism. Ultimately, this chapter provides a coherent narrative that bridges the gap between architecture and politics in modern oil cities. It illuminates the intricate relationships and power dynamics at play, revealing how architectural interventions and the hybridity of cultural influences have shaped Ahwaz's built environment. Through a comprehensive analysis of case studies and an exploration of historical contexts, the chapter offers a deeper understanding of the complexities inherent in the postcolonial architecture of Ahwaz and its broader implications for the Middle East.

The methodology employed in this chapter involves a comprehensive examination of archival information related to the actors and architectural developments in Ahwaz during the specified period. The archival information includes records, documents, and other relevant sources that shed light on the multifaceted influences shaping the city's built environment. To organize the archival information, a systematic approach was adopted. This involved accessing various archives and repositories to gather primary and secondary sources pertaining to the different actors involved in Ahwaz's architectural production. The collected materials were carefully examined, categorized, and cross-referenced to ensure a comprehensive understanding of the subject matter. A comparative analysis was conducted regarding the organization of local sources versus those of foreign settlers. The aim was to identify any differences or similarities in the availability, accessibility, and content of these sources. By examining both local and foreign perspectives, a more nuanced understanding of architectural developments and their underlying dynamics can be achieved. Furthermore, in addition to archival research, other methodologies may have been employed, such as interviews with local experts or site visits to observe and analyse the existing architectural fabric of Ahwaz.²⁶⁷

²⁶⁷ Sir John Cadman's Visit to Persia 1926: Minutes and Agenda of Meetings Held at Ahwaz, Fields Statistics, and Oil Reserves. ArcRef: 71183/008, Barcode: 65196. BP Archives. Date: 1926.
Mr Jameson's Visit to Persia: November/December 1931. ArcRef: 67519. Barcode: 63062. BP Archives. Date: 1931.

4.2 Background: Forging a Modern Nation: Unravelling the Architectural Nexus of Power and Politics Under Reza Shah

During the tumultuous years of the Constitutional Revolution²⁶⁸ in Iran and the subsequent First World War, the country grappled with a vague and unstable political landscape, particularly concerning the tribes that constituted a significant portion of the population. With the looming threat of self-fragmentation and the encroaching influence of British informal colonization, Iran stood on the precipice of potential disintegration.²⁶⁹ The presence of British military forces in the Iranian oil fields persisted for three years after WWI, ostensibly to safeguard British oil facilities.²⁷⁰ However, this prolonged presence fuelled the suspicions of Iranian nationalists, who increasingly believed that the Anglo-Persian Oil Company (APOC) harboured intentions of transforming Iran into a British imperial and colonial territory.²⁷¹ In 1924, a pivotal figure emerged in the form of Reza Khan, who, initially serving as the Minister of War and later ascending to the position of Prime Minister, embarked on creating a unified national army. This crucial step marked a significant turning point in Iran's journey towards reclaiming control over its oil-rich regions. Reza Khan's adeptness in developing and organizing a modernized army proved indispensable in reestablishing Iran's sovereignty, particularly at a time when preserving national unity and independence was paramount.²⁷² Notably, the newly formed national army effectively curbed the ethnically motivated campaigns of autonomous tribes and ended the semi-independence enjoyed by indigenous magnates.²⁷³ The nationalists firmly believed that the reassertion of government

²⁶⁸ The Iranian Constitutional Revolution, 1905-1911. The revolution led to the establishment of a parliament in Persia during the Qajar dynasty to open a way for fundamental changes in Iran for its modern era.

²⁶⁹ Cronin, Stephanie. *The Making of Modern Iran : State and Society Under Riza Shah 1921-1941*. RoutledgeCurzon/Bips Persian Studies Series. London: RoutledgeCurzon, 2003. <https://doi.org/10.4324/9780203423141>.

Cronin, Stephanie. *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

²⁷⁰ Ehsani, K. 2015. *Oil, state and society in Iran in the aftermath of the First World War*. edited by Thomas Fraser, published by the Gingko Library

²⁷¹ Mojdehi, Hassan. 1974. "Arthur C. Millspaugh's Two Missions to Iran and Their Impact on American-Iranian Relations." Dissertation. Ball State University. pp 38-41.

²⁷² Bayat, K. *RIZA SHAH AND THE TRIBES An overview*, chapter in book *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

²⁷³ Ibid.

authority in a military form would pave the way for the eventual repossession of the country's oil fields from Britain. Moreover, they anticipated utilizing the newfound wealth derived from oil resources to catalyse the comprehensive modernization of the entire nation. In this transformative era of Iran's history, Reza Khan's military reforms and the nationalist quest for control over the oil fields represented pivotal steps towards consolidating Iranian sovereignty and realising a modern and prosperous nation.²⁷⁴

In his quest for national power, Reza Khan found himself buoyed by two crucial sources of support. Firstly, the newly empowered Iranian national elites rallied behind him in the aftermath of the war.²⁷⁵ They viewed him as the last hope for realizing the cherished national project of consolidating power within a modern and centralized federal state. This endeavour necessitated dismantling tribal autonomies and feudal authorities, integrating them into the fabric of a settled society.²⁷⁶ Secondly, British diplomats, recognizing Reza Khan's potential to bring stability to the oil fields by removing undesirable local powers, encouraged him to overthrow Ahmad Shah Qajar and declare himself as the Shah of Iran. The convergence of these two pillars of support paved the way for Reza Khan's ascent to power, as he was elected as the country's king by the Iranian national parliament in 1925, granting him absolute authority to depose local tribal elites.²⁷⁷

During the reign of Reza Shah Pahlavi, a visionary leader propelled by an unwavering commitment to moving his nation into the modern era, Iran witnessed a profound metamorphosis in its architectural landscape. With a firm determination to liberate the country from foreign influences and dismantle internal tribal powers, Reza Shah embarked on an ambitious journey to modernize Iran politically and economically.²⁷⁸ His grand vision aimed to position Iran as a beacon of progress and prosperity on the global stage. At the heart of this transformative agenda was Tehran, the capital city, which served as the initial epicentre of Reza Shah's vision. Old houses were forcefully demolished to make way for modern structures, centuries-old trees were uprooted to widen and pave streets, and European-style boulevards were constructed,

²⁷⁴ Cronin, Stephanie. "Riza Shah and the Disintegration of Bakhtiari Power in Iran, 1921-1934." *Iranian Studies* 33 (3-4): 349-76. 2000.

²⁷⁵ Ehsani, K. *Oil, state and society in Iran in the aftermath of the First World War*. edited by Thomas Fraser, published by the Gingko Library. 2015.

²⁷⁶ Bayat, K. *RIZA SHAH AND THE TRIBES An overview*, chapter in book *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

²⁷⁷ Ford, Roger. *Eden to Armageddon : The First World War in the Middle East*. London: Weidenfeld & Nicolson, 2009.

²⁷⁸ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

transforming the city's urban fabric. The creation of distinct urban districts, squares, streets, and alleys facilitated the advent of automobile-based urban transportation, symbolizing the country's leap into the modern age. The impact of his modernization agenda forever altered the country's built environment, serving as a tangible manifestation of Iran's pursuit of progress and its projection of national strength. The legacy of this transformative era is evident in the architectural landscapes that have endured to this day, serving as a testament to the visionary aspirations and resolute determination of Reza Shah Pahlavi.

Amidst this sweeping wave of modernization, the region of Khuzestan emerged as a critical focal point. With its intertwining of foreign influences, mainly the British, and its significant role in the oil industry, Khuzestan held strategic importance for the national State. Recognizing the immense value of the oil trade as a crucial national wealth source, Reza Shah directed his attention towards the oil-rich province, specifically selecting Ahwaz as his political centre within the oil fields. This decision not only aimed to assert Iran's power and dominance over its British rivals but also left an indelible mark on the architectural and urban fabric of the region.

In the vibrant city of Ahwaz, the visionary ambitions of Reza Shah's comprehensive modernization efforts converged with the urban activities spearheaded by the Oil Company. However, as these two forces unfolded, they found themselves intermittently at odds with each other. Reza Shah's grand infrastructural projects, propelled by collaborations with American, German, and other European actors, posed a formidable challenge to the existing concessionary framework underpinning urban developments within the city's British colonial and oil-centric industrial context. This clash of visions gave birth to a complex and multifaceted hybrid nature of hegemony, with profound implications for the urban landscape of Ahwaz.²⁷⁹

As noted in the previous chapter, the Bakhtiaries and Arab tribes had emerged as prominent actors within the oil fields. These tribes were initially under the protection of British agents affiliated with the Anglo-Persian Oil Company (APOC), safeguarding them from potential threats posed by the central government.²⁸⁰ However, Reza Shah

²⁷⁹ Mafela, Lily. "Hegemony and Accommodation in the History Curriculum in Colonial Botswana." *Journal of Educational Administration and History* 46 (4): 424–42. 2014.

²⁸⁰ The Bakhtiari tribes operated under a confederate structure, which bestowed them with significant political power. The region ruled by Sheikh Khazal, on the other hand, comprised calm yet formidable Arab tribes. Through their control over vast territories and landed properties within the confederation, the Bakhtiari khans rose to become one of the wealthiest and most influential tribal leaderships, particularly after their concessions with APOC. Despite their political clout and wealth, the Bakhtiari's political leader, Sardar As'ad, did not opt to challenge the emerging national orders. Instead, he readily yielded to Reza Shah, extending crucial support to their imperial benefactor in the 1920s to safeguard a portion of their power and

successfully persuaded British authorities to withdraw their support for the tribes in order to maintain amicable relations with the new monarch.²⁸¹ Consequently, contrary to APOC's initial concessions to the tribes, British agents refrained from backing local elites against the encroachment of the national army, instead advising them to comply with the central State.²⁸² This coordinated alignment between the APOC and the Pahlavi-controlled government aimed to eliminate future instability within the oil fields, ensuring a more harmonious and controlled environment.²⁸³

Before national control over the oil fields, the tribesmen, under the guidance of their leaders, were enlisted to serve APOC. However, a new challenge emerged with the establishment of modern state institutions and the diminishing influence of the khans as hereditary rulers and landlords. In the late 1920s, the tribespeople spearheaded a radical anti-landlord movement, adding to the pressures faced by the Khans, who were already grappling with threats from various directions. Weakened and unable to preserve their waning authority, they found themselves defenceless when the regime turned against them, resulting in a military confrontation.

The destruction of tribal power and the establishment of centralized control over the oil fields became imperative for the early Pahlavi regime's state-building efforts and political survival.²⁸⁴ Reza Shah, the new monarch, recognized the need to strengthen his initial power and assert state control over the oil-rich lands. Thus, from the moment Reza Shah ascended the throne, his regime embarked on a relentless

wealth. This course of action eventually led to the downfall of the khans, not solely due to the irresistible rise of the new state power but also owing to internal developments within the Bakhtiari confederation itself. These internal dynamics signaled the erosion of traditional tribal organization and relationships, culminating in the decline of the khans. The downfall was a consequence not only of external pressures but also of shifts occurring within the fabric of the Bakhtiari confederation itself.

Bayat, K. *RIZA SHAH AND THE TRIBES An overview*, chapter in book *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

²⁸¹ As Kaveh Bayat defined the situation of any local power, "assumed to be a homogeneous entity, engaged in a fixed and eternal conflict with any sort of central authority."

Bayat, K. *RIZA SHAH AND THE TRIBES An overview*, chapter in book *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

²⁸² Considering the benefits of having a robust national state providing the safety of the oil fields, the British started an ambiguous attitude towards tribal elites.

Bayat, K. *RIZA SHAH AND THE TRIBES An overview*, chapter in book *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

²⁸³ Persia 1929. ArcRef: 36150. Barcode: 32668. 1929. BP Archives.

Cronin, Stephanie. *Tribal Politics in Iran : Rural Conflict and the New State, 1921-1941*. Royal Asiatic Society Books. London: Routledge/Taylor & Francis Group. 2007.

²⁸⁴ Bayat, K. *RIZA SHAH AND THE TRIBES An overview*, chapter in book *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

campaign to establish military and administrative dominance over the tribes.²⁸⁵ Swift military invasions were launched to occupy strategic locations such as Ahwaz and other oil fields, albeit at high social, political, and economic costs. The regime took decisive actions, including the arrest, deposition, and execution of Bakhtiaris and Arab leaders or sentencing them to lengthy imprisonments. Moreover, the government occupied their shares in APOC, effectively terminating the tribes' agreements with the Company.²⁸⁶

The Anglo-Persian Oil Company (APOC) severed its once-strong ties with the local communities by dismantling the entrenched power structures of hereditary Sheikhs and Khans.²⁸⁷ The removal of tribal apex figures facilitated the ascendancy of military officers who assumed control over the tribespeople, enabling the regime to undertake extensive social engineering and urban settlements.²⁸⁸ With strategic alterations in the power hierarchy, the entirety of the oil fields fell directly under the dominion and authority of the new monarch.²⁸⁹ Key government officials were strategically appointed to pivotal tribal centres, thereby consolidating control over both the populace and the lands they inhabited. The Company, faced with the deposition of local entrepreneurs, begrudgingly entered into a tenuous collaboration with the national State to compensate for the loss.²⁹⁰

During that time, the reorganization of oil properties entailed the introduction of new federal laws governing mineral rights and private property registration. Under Reza Shah's transformative rule, the rules of land ownership and the mineral rights system underwent significant changes. These new regulations explicitly declared that mineral resources and the infrastructure above and below the land belonged to the State, representing a profound shift from local to national ownership.²⁹¹

²⁸⁵ Cronin, Stephanie. *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

²⁸⁶ <https://www.britannica.com/biography/Reza-Shah-Pahlavi>

²⁸⁷ Ehsani, Kaveh. *Oil, state and society in Iran in the aftermath of the First World War*. edited by Thomas Fraser, published by the Gingko Library. 2015.

²⁸⁸ Cronin, Stephanie. *The Making of Modern Iran: State and Society Under Riza Shah 1921-1941*. Routledge Curzon/Bips Persian Studies Series. London: Routledge Curzon, 2003. <https://doi.org/10.4324/9780203423141>.

²⁸⁹ Cronin, Stephanie, *The making of modern Iran: state and society under Riza Shah 1921-1941* (Routledge, 2003);

²⁹⁰ Ehsani, Kaveh. "The Social History of Labor in the Iranian Oil Industry: The Built Environment and the Making of the Working Class (1908-1941)." Leiden, The Netherlands., Universiteit Leiden. PhD. 2014.

²⁹¹ Shafiee, Katayoun. *Machineries of Oil: An Infrastructural History of BP in Iran*. Infrastructures Series. Cambridge, Massachusetts: MIT Press. 2018.

Wilber, Donald Newton. *Riza Shah Pahlavi: The Resurrection and Reconstruction of Iran*. 1st ed. An Exposition-University Book. Hicksville, N.Y.: Exposition Press. 1975.

Over time, the national State made a deliberate shift away from a purely military approach, embracing less coercive means to foster national modernization. The burgeoning international maritime trade associated with oil activities that converged upon the shores of Karun rendered Ahwaz an increasingly suitable location for the provincial capital and the seat of government within the oil fields. In 1926, Reza Shah officially designated Ahwaz as the capital of the province, supplanting Shushtar. This political transformation heralded a new phase of construction endeavours and urban developments within the city. Ahwaz assumed greater significance for the national State and the Oil Company, which recognized the necessity of establishing infrastructure to meet its expanding requirements. Given its size, strategic importance, and proximity to the epicentre of the Company's operations, the city of Ahwaz demanded special attention. In response to the national State's competition with APOC's activities, the municipality of Ahwaz was established for the first time, charged with organizing the city's urban development in accordance with the State's preferences. Acting upon the Shah's directives, it diligently pursued the modernization of the capital of the Persian oil fields, striving to create a modern, dignified, and aesthetically pleasing oil city. The Company's demands did not solely drive the construction projects of this era but also aimed to fulfil the requirements of a thriving centre within the oil provinces.

Ahwaz came under the jurisdiction of a government-established municipality, which, although not independent from the Company, played a vital role in facilitating the partnership between APOC and the State. This municipality served as a conduit for the government to effectively enhance the city's social services and amenities in collaboration with the Company. The harmonious integration of these three entities was crucial to the development of Ahwaz as a township. Their joint endeavours yielded significant improvements for both the government and the Company, with the cooperation further streamlined through the establishment of a municipal council representing both parties. The initial step involved the creation of a municipal engineering department headed by a chief civil engineer, operating in a manner similar to local authorities. The governmental aim was to establish conditions that would allow the State, in conjunction with municipal and other authorities, to undertake the overall development of Ahwaz. While the responsibility for these initiatives primarily rested with the State, the Company made substantial voluntary contributions to support their implementation. It was recognized that optimal results could only be achieved through close coordination between the government and the Company, requiring jointly prepared plans and synchronized efforts.²⁹²

Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

²⁹² P 68: Explanatory notes in regard to certain measures undertaken voluntarily by the Anglo Iranian Oil Co. Ltd in Iran, 1948.

Extensive efforts were undertaken to enhance the visual appeal of Ahwaz as the oil capital underwent significant transformations. The municipality played a crucial role in mapping out the necessary roads and streets for the city, as well as identifying lands earmarked for urban infrastructure development. In cases where lands needed to be repurposed for urban functions, landowners were given a three-month period to vacate their properties and allow for the planned transformations to take place. If the value of a land increased due to its proximity to newly constructed roads, landowners were obligated to transfer one-third of the increased value to the municipality.²⁹³ The town plans and the current State of the city had to undergo revision and approval by the State as part of the modernization process. This process involved the forced demolition of old houses, making way for the construction of new and modern buildings.

Additionally, old trees were uprooted to widen and pave streets, creating European-inspired boulevards catering to pedestrians and motorists. Pahlavi-era regulations dictated that all cities, including Ahwaz, had to incorporate distinct urban districts, squares, streets, and alleys to facilitate automobile transportation. This entailed the potential demolition of gardens, farms, and even existing structures within these lands. The road network in Ahwaz necessitated transshipment from the right bank of the Karun River to the left bank, either via the road bridge or the railway bridge, in order to bypass the rapids. In 1931, property taxes saw a significant increase of 60 per cent annually, placing financial strain on many landowners and prompting them to relinquish ownership in exchange for limited compensation. These landowners were compelled to witness the demolition of their houses, replaced by modern government-owned structures. The destruction of old buildings extended to various sections of Ahwaz, notably the bustling shopping district and densely populated slum areas in the city's central part. In adherence to urban design principles, some old mud walls were replaced with brick walls. Modern governmental buildings were erected throughout Ahwaz to complement the city's evolving landscape, and efforts were made to create small landscaped parks in local squares.

As mentioned earlier, Ahwaz was designated by the Shah to be one of the symbols of the State's power, second only to Tehran. However, in the years leading up to the 1930s, Iran faced numerous daunting economic and political challenges, which hindered significant urban progress and impeded Reza Shah's ambitious goals of modernizing Ahwaz. While some minor developments did occur, initiated by local entities, the national government, and the Oil Company, the city's transformation was

²⁹³ Ettelaat newspaper , 1941 2 tir 1320 NO 4573

limited.²⁹⁴ Various motivations prompted the city's construction and development. However, historical archives from 1934 reveal that Ahwaz's overall image and infrastructure had not undergone substantial changes. The prevailing economic and political hardships of the time undoubtedly influenced the pace of progress, making it challenging to fully realize the grand vision envisioned by Reza Shah for Ahwaz. Despite these obstacles, efforts continued, albeit at a more modest scale, laying the groundwork for future actions towards the modernization and growth of the oil capital.

Following the suppression of tribal political leadership, whether through military force or alternative methods, the central State embarked on a series of initiatives aimed at transforming the tribal way of life to align with modern social and political norms. For Reza Shah and other Iranian nationalists, the tribes' archaic, exotic, and picturesque appeal clashed with the image they sought to present to the Western world.²⁹⁵ While each tribe in Iran possessed unique tribal, political, and social characteristics, they were perceived as both inherently primitive and representative of Iran's perceived backwardness, thus conflicting with the concept of modernity.²⁹⁶ Driven by these political perspectives, the tribes and their way of life became targets of the rapidly modernizing urban forces. Reza Shah sought to curtail the power of the Arab and Bakhtiari tribes in the oil-rich regions by disarming them and relocating them to cities such as Ahwaz, thereby removing any obstacles hindering the collection of oil revenues and the establishment of a modern State.²⁹⁷ In 1932, the Ministry of the Interior devised a comprehensive settlement plan for the tribes, originating in Tehran, but it lacked a deep understanding of the tribes' actual circumstances.²⁹⁸ This plan designated specific locations for their resettlement. However, the State's policy of eliminating tribal and pastoral lifestyles was implemented with minimal preparation and little consideration for the potential long-term urban consequences. This resulted in a lack of adequate housing, immediate and sustainable employment opportunities, and provisions for education

²⁹⁴ In 1926 local citizens themselves brought the industry of pumping water into the city. Source: BP Archive

²⁹⁵ Cronin, Stephanie. *The Making of Modern Iran: State and Society Under Riza Shah 1921-1941*. Routledge Curzon/Bips Persian Studies Series. London: RoutledgeCurzon, 2003. <https://doi.org/10.4324/9780203423141>.

²⁹⁶ Bayat, K. *RIZA SHAH AND THE TRIBES An overview*, chapter in the book *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

²⁹⁷ Sir John Cadman's Visit to Persia 1926: Minutes and Agenda of Meetings Held at Ahwaz, Fields Statistics, and Oil Reserves. BP Archive, ArcRef: 71183/008

²⁹⁸ Bayat, K. *RIZA SHAH AND THE TRIBES An overview*, chapter in the book *The Making of Modern Iran: State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

that aligned with modern urban life.²⁹⁹ The forced resettlement, which took place between 1933 and 1937, employed severe measures to overcome the tribes' resistance to relinquishing their traditional ways of life. Eventually, the tribes had no choice but to accept the imposed changes. While this transformation effectively altered Iran's tribal landscape in a relatively short period, it did not lead to the idyllic urban lifestyle envisioned by the national government or the Oil Company during its conception.³⁰⁰



FIG. 4.1 Reza Shah's Visit to the Oil Fields.

Source 1: National Oil Archive of Iran.

Source 2: Photographs for The History of British Petroleum Company. ArcRef: 115883. Barcode: 96039. BP Archives.

Date: 1920s. Accessed: February 2018.

²⁹⁹ Cronin, Stephanie. *The Making of Modern Iran : State and Society Under Riza Shah 1921-1941*. RoutledgeCurzon/Bips Persian Studies Series. London: RoutledgeCurzon, 2003. <https://doi.org/10.4324/9780203423141>.

³⁰⁰ Bayat, K. *RIZA SHAH AND THE TRIBES An overview*, chapter in book *The Making of Modern Iran : State and Society Under Riza Shah, 1921-1941*. London: Routledge. 2005.

4.3 The Iranian Government's National Style: Reviving Cultural Identity in Architecture as Emerging Hybrids

As the activities of the Anglo-Iranian Oil Company (AIOC) gained momentum, Iran entered a new era closely connected to modern societies and capitals. At the centre of the various political, economic, and urban endeavours of the time was Reza Shah, who declared himself as the “supreme head of the oldest cultural nation of the East.”³⁰¹ One of Reza Shah's objectives was to garner cultural and historical support for his autocratic government. He sought to establish a new era of modernity in Iran, rooted in the timeless history of a civilization that once ruled an empire for thousands of years.³⁰² In this regard, Reza Shah utilized “nationalism” as a tool to establish political legitimacy during his reign. Nationalism and democracy gained significant importance in Iran during this period. Nationalism became a trend to emphasize the historical continuity between contemporary Iran and the ancient Persian Empire, transforming history, culture, and language into tools for constructing a modern national identity that was Persian and secular.³⁰³

This coincided with the excavation of historical sites such as Persepolis and Pasargadae by French archaeologists in the early 1930s, which ignited a new wave of national pride throughout the country. Reza Shah and his advisors held the belief that Iranian architecture from the pre-Islamic era possessed a distinct character of its own, which should be developed and enhanced. They emphasized the importance of avoiding the mere reproduction of Western styles and instead encouraged the cultivation of an independent architectural identity for Iran. This approach reflected a desire to establish a cultural foundation that celebrated the country's unique heritage while embracing modernity.³⁰⁴

As the national State sought to establish modern institutions such as banks, the judiciary, and governmental agencies, a need arose for new buildings that could

³⁰¹ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

³⁰² Ibid.

³⁰³ Iran and Persepolis, ArcRef: 36535. Barcode: 33091. 1925-6. BP Archives.

³⁰⁴ Wilber, Donald Newton. *Riza Shah Pahlavi : The Resurrection and Reconstruction of Iran*. 1st ed. An Exposition-University Book. Hicksville, N.Y.: Exposition Press, 1975. Grigor, Talinn. *The Persian Revival : The Imperialism of the Copy in Iranian and Parsi Architecture*. University Park, Pennsylvania: Pennsylvania State University Press. 2021.

cater to these novel requirements. This demand for functional spaces and efficient infrastructure led to the emergence of new architectural forms. These innovative designs aimed to align with the changing societal needs, embracing contemporary aesthetics and technological advancements. Architects and designers embraced a more progressive approach, departing from traditional styles and experimenting with novel materials, spatial arrangements, and architectural concepts. This evolution in architecture mirrored the nation's shift towards modernization and its aspirations for a dynamic and forward-looking identity. The new buildings became emblematic of the nation's determination to adapt and excel in the modern era, reflecting a fusion of functionality, aesthetics, and the spirit of the times.³⁰⁵

Reza Shah commissioned notable architects such as Andre Godard, a French architect and archaeologist, and Viollet Henry in response to this emerging trend.³⁰⁶ Moreover, Iranians who had received education in Europe or the United States returned to their homeland with visions of a more liberal and socially-oriented future for the country and initiated a particular tendency in the Iranian architectural tradition. These national and international architects influenced the development of a new architectural style known as “Sabk-e Melli”, translated into “the National style”, referencing Iranian history as well as addressing modern needs. The National style emerged as a reaction by nationalists who harboured concerns about the potential dilution of their distinctive “national” identity amidst the influx of foreign architectural influences. Architecture came to symbolize the essence of the nation and its narratives, serving as tangible proof of ancient Persia’s historical prominence and exerting a positive influence on the nation’s unity, prosperity, and authority. The emphasis on public buildings as magnificent embodiments of Iran’s greatness primarily reflected a sense of national romanticism. They embraced the inspiration of Sassanid architecture in their projects in Iran. Recognizing the significance of Sassanid architecture, known for its grandeur and historical importance in Iranian

³⁰⁵ Iran and Persepolis. ArcRef: 36535. Barcode: 33091. BP Archives. Date: 1925-26

³⁰⁶ VIOLLET, Henry (b. Paris, 1880; d. Paris, 1955), French archeologist and architect. Henry Viollet was a student at the École des Beaux-Arts from 1901 to 1911. Graduating from the École des Beaux-Arts on December 28, 1911, Henry Viollet, accompanied by Comte Jean de Moustier, a young cavalry officer, was chosen by the Ministry of Public Instruction to lead an archeological mission to Persia to carry out research on the origins of Islamic Art. From January 24 to April 23, 1912, Viollet and Moustier traveled much of Persia and explored archeological sites in the central and southern parts of the country. Almost a year after this first mission, carried out as a part of the program of the Délégation Archéologique Française en Iran, Henry Viollet was again designated to return to Persia. For this second archeological mission, he was requested to specify new excavations that could be undertaken in Persia from the point of view of Islamic Art. Viollet, accompanied by his wife Madeleine Besnard, reached Ahvāz on June 5, 1913 and examined and photographed Islamic monuments and ancient ruins in Persia from the southwest to the northeast until December 13th of that year. In 1937, Viollet was in charge of the construction of the Pavilion of Iran for the World Exposition in Paris. Source: <https://www.iranicaonline.org/articles/viollet-henry>

culture, they incorporated elements and motifs from this ancient era into their designs. By drawing inspiration from Sassanid architecture, these architects aimed to create a visual connection between contemporary Iranian buildings and the glorious architectural heritage of the past. Moreover, they still kept their background of design based on European architectural patterns. Inspired by the remains of ancient palaces in line with Shah's radical modernisation, this architecture was a combination of historical Persian architectural symbols with European neoclassical elements and modern Western structure technology.³⁰⁷

While it had no experiential, theoretical, or ideological basis in Iran, it flourished as a key basis for using modern architectural elements and the urban renewal program. It combined Persian and European elements to create a unique synthesis. It drew inspiration from ancient Greek and Roman architecture and Persian ancient themes, focusing on regularity, symmetrical organization, and classical ornament, featuring grand scale, classicizing forms, and enduring materials. Iranian architects incorporated Western ideas such as Doric, Ionic, and Corinthian porticos, layered engaged pillars, and various ornamental features.

Nationalism impacted the architectural profession and construction methods, leading to the use of new materials and techniques, employing both traditional and modern construction methods. This approach involved using a mix of older materials like brick, wood, and stone, as well as newer materials like iron, steel and reinforced concrete. These buildings incorporated traditional materials and local craftsmanship with Achaemenid motifs and elaborate stone and brickwork in the Islamic architectural style. However, this approach was characterized by the repetition or imitation of architectural elements. It was rooted in the tendency to replicate or mimic architectural elements, often drawing inspiration from historical precedents or established design conventions. By adhering to established architectural styles and motifs, practitioners sought to evoke a sense of familiarity and continuity, aligning their creations with the established aesthetic sensibilities and cultural heritage of the nation. While this approach may have been perceived as a means to honour and preserve architectural traditions, it also posed a challenge in terms of fostering innovation and pushing the boundaries of architectural expression.³⁰⁸

³⁰⁷ Grigor, Talinn. *The Persian Revival : The Imperialism of the Copy in Iranian and Parsi Architecture*. University Park, Pennsylvania: Pennsylvania State University Press. 2021.

Bani-Masoud, Amir. *Contemporary Architecture in Iran : From 1925 to the Present* Second ed. Place of publication not identified: Independently published. 2021.

³⁰⁸ Azarafrooz, Hedyeh and Ghorbani Param, Afshin, 1397, Factors and backgrounds of the emergence of national architectural style, Second National Conference on Architecture, Urbanism and Geography, Shirvan, <https://civilica.com/doc/757640>

In the oil fields, the prioritization of national welfare and security served to mitigate the potential risks associated with informal colonial activities and discriminatory practices towards ethnically diverse populations. The Iranian politicians, in opposition to the British, advocated for the improvement of living conditions for Iranian workers who endured low wages, substandard housing, and limited facilities while their British counterparts enjoyed better circumstances.³⁰⁹ In safeguarding the well-being and safety of all individuals involved in the oil industry, They took measures to prevent any forms of aggression or racism based on ethnic differences. This approach aimed to foster a harmonious and inclusive environment, promoting equitable treatment and respect for workforce diversity. By actively addressing these issues, the aim was to create a conducive atmosphere that prioritized collaboration, understanding, and mutual respect among all individuals, irrespective of their racial backgrounds.

The emergence of the national architectural style took on a distinct character, characterized by a blend of influences resulting from the impositions imposed by the new central government system on the Oil Company. These architectural creations can be seen as “hybrid” spacious and fashionable buildings, incorporating elements and features that reflect both the national identity and the evolving political dynamics of the time.³¹⁰ The architectural designs were influenced by the government’s directives and regulations, which sought to assert its authority and establish a sense of national pride and cohesion. This fusion of architectural styles can be viewed as a response to the changing socio-political landscape, reflecting the negotiation between the aspirations of the central government and the historical presence and influence of the Oil Company. The resulting “hybrid” buildings embody a unique architectural expression that mirrors the complex relationship between the state, the Oil Company, and the broader national context.

The oil industry’s solid and continuous chain of modernity, which initially exhibited a strong adherence to Western architectural tendencies, experienced disruption due to the rise of nationalism. This shift in perspective challenged the prevailing Western-centric approach and called for a renewed emphasis on national identity and cultural heritage within architectural expressions. The influence of nationalism led to a re-evaluation of architectural styles, prompting a departure from the strict adherence to Western design principles and fostering a desire to incorporate local elements and traditions into architectural creations. This disruption marked a significant turning point, as it emphasized the need to reconcile the modernity associated with the oil

³⁰⁹ Ehsani, Kaveh. “The Social History of Labor in the Iranian Oil Industry : The Built Environment and the Making of the Working Class (1908-1941).” Leiden, The Netherlands., Universiteit Leiden. PhD. 2014.

³¹⁰ Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, 04. London: Routledge. 2010. p 80-1

industry with the aspirations of the nation and its quest for a distinct architectural language that represented its unique cultural identity.

During that period, the construction of various buildings was carried out according to designs stipulated by the municipal planning commission. These designs were implemented as part of a comprehensive urban planning framework aimed at regulating and harmonizing the cities' architectural landscape. The municipal planning commission, composed of professionals and experts in the field, played a crucial role in overseeing the adherence to designated architectural guidelines and ensuring the cohesiveness of the city's built environment. By prescribing specific designs, the commission sought to achieve a unified and aesthetically pleasing urban fabric that aligned with the overall vision for the city's development. This approach aimed to create a sense of order, functionality, and visual harmony, reflecting the concerted efforts to shape the city's architectural character in a deliberate and organized manner. Architects in Ahwaz faced the national challenge of designing functional buildings while still reflecting the country's distinctive Iranian identity. To achieve this, some architects embraced Islamic revivalism, blending Neoclassical design principles with traditional Iranian elements derived from Sassanid architecture. It resulted in a hybrid architecture that blended classical styles with Persian traditions. By incorporating Islamic architectural forms and motifs, while also borrowing some Western elements like column orders and functional organization, architects sought to create a unique architectural style. They exemplified classical leanings with symmetrical designs, rich decorations, and a combination of traditional and modern structural systems.³¹¹

³¹¹ Bani-Masoud, Amir. *Contemporary Architecture in Iran : From 1925 to the Present* Second ed. Place of publication not identified: Independently published. 2021.



FIG. 4.2 Ahwaz. Pahlavi Square Statue of the Shah, Symbolizing his National Power against the Oil Company.

Source 1: The Organization for the Cultural Heritage of Iran, Tehran, FOI. 2587.

Source 2: ArcRef: 129358. Barcode: 109866. BP Archives.

Date: 1950s. Accessed: February 2018.

4.3.5.1 Resplendent Reflections: Unveiling the National Style of Iran through the Case Example of Reza Shahi Palace

The Reza Shahi Palace held a significant position among the governmental buildings in Ahwaz, serving as a prominent symbol of Reza Shah's rule. Situated on the western bank of the river, it occupied a detached location within a spacious garden. Its strategic placement provided a commanding view of the Karun River, further enhancing its prominence and aesthetic appeal. As the most important governmental building in Ahwaz, the Reza Shahi Palace embodied the authority and power of Reza Shah's leadership. Its architectural design and grandeur were meticulously crafted to convey a sense of strength, stability, and influence. The palace's location on expansive grounds allowed for ample space, contributing to its imposing presence. The carefully curated garden surrounding the palace added a touch of natural

beauty and provided a serene environment for the seat of power. This combination of architectural significance, strategic positioning, and scenic surroundings rendered the Reza Shahi Palace an iconic governmental landmark in Ahwaz, representing the era and legacy of Reza Shah's rule.

Indeed, the emergence of the “national style” becomes particularly evident in the incorporation of Sassanian architectural elements, blue tiles, and brick façades in the design of the Reza Shahi Palace. These features draw inspiration from the rich cultural heritage of ancient Persia, specifically the Sassanian era, known for its distinctive arches and intricate tile work. The utilization of Sassanian arches, characterized by their graceful curves and elaborate ornamentation, lends a sense of historical continuity and national pride to the palace's architectural design. These arches, often adorned with intricate patterns and motifs, evoke a connection to Iran's glorious past, symbolizing the greatness of its ancient civilization. The inclusion of blue tiles further exemplifies the influence of the “national style” in the palace's aesthetics. Blue, a colour often associated with Iranian tile work, represents both tranquillity and spirituality. The intricate patterns and designs crafted from blue tiles add a sense of elegance and sophistication to the palace's façade, elevating its visual impact and reinforcing its status as a symbol of national identity. Additionally, the use of brick façades, a prevalent building material in Iran's architectural history, contributes to the authenticity and coherence of the “national style.” The brickwork's warm tones and textured surfaces create a visually appealing and harmonious composition that complements the other elements of the palace's design. Overall, the incorporation of Sassanian arches, blue tiles, and brick façades in the Reza Shahi Palace exemplifies the expression of the “national style,” showcasing a deliberate homage to Iran's architectural heritage and fostering a sense of cultural continuity and national identity.



FIG. 4.3 Shah's Palace.

Source: Photo by Charles Schroeder, 2007, <https://iranian.com/Abadan/2007/July/Khuzestan/43.html>.

Date: Unknown. Accessed: June 2023.

An intentional design feature of the Reza Shahi Palace was the implementation of a palm axis, which served to create a sense of reverence and respect for the visitor. This palm-lined pathway invited individuals to traverse a significant distance while maintaining a direct line of sight towards the palace situated at the end. This elongated approach heightened the anticipation and awe-inspiring effect, emphasizing the grandeur and importance of the palace as the ultimate destination. In addition, the entrance to the palace was marked by a double-height arch, intentionally designed to evoke a sense of smallness for the visitor. The scale and proportion of the entrance arch dwarfed the individual, creating a deliberate contrast between the visitor's presence and the majestic scale of the palace. This architectural technique was employed to further emphasize the significance and power associated with the palace, reinforcing the impression of entering a space of

great importance and prestige. The palm axis and the double-height entrance arch worked harmoniously to shape the visitor's experience, heightening their sense of respect and humility in the face of the grandeur and authority represented by the Reza Shahi Palace.

The Reza Shahi Palace, with its intentional design features, can be analyzed within the context of the petroleumscape, primarily in terms of its political significance and its role in reflecting the power dynamics associated with the oil industry. This building was a symbol of authority in the petroleumscape but challenged the power of oil actors. The deliberate use of architectural techniques to create a sense of reverence and smallness in the visitor emphasized the authority and power associated with the palace. The deliberate shaping of the visitor's experience through architecture highlighted the role of architecture in influencing behaviour and perceptions. The palace's location and design influenced the surrounding area's urban planning and architectural choices. The presence of the grand building of the Reza Shahi Palace drove urban expansion and development as it became a focal point in the city's layout.

In the petroleumscape's context, such a grand structure symbolised the national state's economic and political influence against the oil company. The Reza Shahi Palace's grandeur reflected the economic prosperity of the national government competing with the foreign oil industry. In the petroleumscape, we often observe a distinctive architectural style associated with oil wealth and the desire to showcase it. However, in this case, as it emerged indirectly because of oil, it was a representation against the oil industry. In the petroleumscape, this architectural design feature conveyed a message about the other powers involved rather than the oil industry. It was a significant element in the petroleumscape, reflecting the power dynamics associated with the oil industry's impact on the region's built environment and urban development.

The design of the Reza Shahi Palace adopted a modernist approach that drew inspiration from the historical arches of Iranian architecture. This modernist interpretation reimagined and reinterpreted the traditional arches to create a contemporary architectural expression. The historical arches served as a foundation and reference point, with their distinctive characteristics informing the design language of the palace. In this modernist interpretation, the historical arches were redefined and reimagined through a lens of innovation and experimentation. The design sought to capture the essence and elegance of Iranian architectural arches while embracing contemporary construction techniques and spatial concepts. By incorporating elements of modernism, such as simplicity, clean lines, and functional considerations, the design of the palace achieved a harmonious blend of tradition

and progress. The Reza Shahi Palace honoured Iran's rich architectural heritage while embracing the forward-looking aspirations of the era. Its visually striking and culturally significant architectural composition exemplified the spirit of innovation and cultural continuity.

To address the heat-related challenges, porches facing the river were thoughtfully incorporated into the design of the Reza Shahi Palace. While fulfilling a functional purpose, these porches also reflected elements of traditional local architecture, adding a touch of familiarity and cultural resonance to the overall design. The materials chosen for these porches included a combination of stone and brick, which not only provided durability and structural integrity but also contributed to the aesthetic appeal of the palace. By integrating porches facing the river, the design sought to mitigate the impact of the intense heat in the region. These shaded areas offered a respite from the sun's rays and facilitated natural ventilation, allowing for a more comfortable environment within the palace. Incorporating traditional architectural elements, such as the style and layout of the porches, created a visual connection to the local context and demonstrated an appreciation for the area's vernacular architecture. The use of stone and brick as construction materials further enhanced the design's compatibility with the local environment. These materials possess excellent thermal properties, providing insulation and effectively reducing the transfer of heat into the interior spaces. Additionally, the combination of stone and brick added a distinct textural quality to the palace's façade, contributing to its overall aesthetic charm and blending harmoniously with the surrounding landscape.

The plan of the Reza Shahi Palace was probably inspired by the typical pattern of villas and pavilions found in contemporary Europe during the 1930s and 1940s. This European influence is evident in the overall layout and arrangement of the building. However, it is important to note that there is currently no available information regarding the specific architect responsible for the design of the palace. The adoption of European architectural influences during this period was not uncommon, as many architectural trends and design concepts from Europe found their way into various regions around the world. This cross-cultural exchange often resulted in a fusion of architectural styles, creating unique and eclectic designs. While the specific architect's identity remains unknown, the influence of European villa and pavilion patterns is evident in the creation of the Reza Shahi Palace. This blending of architectural inspirations reflects a broader trend of embracing and adapting international design movements to local contexts. The legacy of the Reza Shahi Palace endures as a testament to the architectural and cultural exchange between Iran and Europe during that era.

The palace, alongside the neighbouring National Bank and Railway complexes, formed a cohesive ensemble of structures that symbolized the modernization and development efforts spearheaded by Reza Shah's government. According to Ruhollah Mojtahedzadeh and Zahra Namavar in their book "In Search of the Urban Identity of Ahwaz," the Reza Shahi Palace is considered one of the strategic urban points that played a significant role in shaping the distinctive geometric layout of Ahwaz during the reign of Reza Shah Pahlavi.³¹² The authors assert that the city's urban development followed a "baroque" system³¹³ characterized by intricate and elaborate architectural compositions. Their analysis highlights the pivotal position of the Reza Shahi Palace within the urban fabric of Ahwaz. As a strategic point, the palace's design and location influenced the surrounding urban development, contributing to the overall geometric arrangement of the city. This "baroque" system suggests a complex interplay of architectural elements, urban planning, and spatial organization, resulting in a visually striking and harmonious urban environment. The research by Mojtahedzadeh and Namavar sheds light on the role of the Reza Shahi Palace as a key component in defining Ahwaz's urban identity. They likely refer to the intricate and carefully planned geometric arrangement of the city's urban development during the time of Reza Shah Pahlavi. The building suggests a sophisticated and visually captivating urban layout characterized by a deliberate composition of architectural elements and an overall sense of grandeur and complexity. It underscores the architectural significance of the palace and its impact on the city's overall urban fabric, reinforcing its status as an important landmark within the cityscape.

The utilization of these architectural features in a symmetric manner aimed to create a sense of order and balance in the building's design. By employing such classical

³¹² Mojtahedzade, R. & Namavar, Z. *In search of urban identity of Ahwaz: Dar Jost-ejooye hovviat shahri e Ahwaz*. Road, Housing and Urban Development Research Center. 1394/2015.

³¹³ In the context of urban planning, the term "baroque system" refers to a particular approach or style characterized by intricate and elaborate designs, often associated with the Baroque architectural and artistic movement. While the Baroque style is most commonly associated with the 17th and 18th centuries, its principles and influence can also be observed in later periods, including urban planning. In the realm of urban planning, a "baroque system" typically refers to a layout or arrangement that emphasizes intricate geometric patterns, spatial complexity, and ornate design elements. It often involves a deliberate and elaborate arrangement of buildings, streets, squares, and other urban elements, creating a visually captivating and harmonious composition. This system of urban planning may prioritize visual symmetry, grandeur, and theatricality, often incorporating elements such as curvilinear forms, dramatic architectural features, and carefully orchestrated vistas. It aims to create a sense of awe, monumentality, and sensory richness within the urban environment.

elements, architects sought to instil a sense of timelessness and cultural resonance, adding an air of dignity and sophistication to the overall architectural aesthetic.³¹⁴

4.4 From Function to Form: Unveiling the Essence of German Modern Industrial Architecture

4.4.1 Unveiling the Economies of Architecture and Urbanism: Exploring the Intersection of Design, Financial Realities, and Development

In the aftermath of World War I, Iran found itself in a vulnerable position, yearning for progress and modernity. Embracing a grand vision to revitalize the nation, the Shah embarked on a mission to propel Iran from its agrarian roots into an independent and sophisticated kingdom.³¹⁵ To achieve this ambitious transformation, oil revenues played a pivotal role in the Shah's modernization strategy. He saw them as a means to entice foreign investors and forge economic partnerships essential for the exploitation and industrialization of the country. The first step in this pursuit was to unify the nation, but the Shah's aspirations did not stop there. He aimed to challenge the long-standing British and Russian privileges over Iran's valuable national resources. In his quest for new alliances, Reza Shah looked beyond the confines of traditional partners and turned his gaze to Germany. The choice was deliberate and weighed carefully. Germany stood out as a nation that had achieved its own development through hard work, untainted by the colonial practices of overpowering weaker countries. This growth model resonated deeply with the Shah's vision for the future of Iran.³¹⁶

³¹⁴ Photographs of Iranian Operations. ArcRef: 182461. Barcode: Z01522685. 1947-51. BP Archives.

³¹⁵ Iran and Persepolis, ArcRef: 36535. Barcode: 33091. 1925-6. BP Archives.

³¹⁶ O'Sullivan, Adrian Denis Warren. *German Covert Initiatives and British Intelligence in Persia (Iran), 1939-1945*. Pretoria: Released and distributed by the author. 2012.



FIG. 4.4 Documents Revealing Germany's Interest in Establishing Industrial Interactions in Iran.

Source: "Seneja Alman Wa Scharq", in German & Farsi. Iranian National Archives.

Date: 1923 to 1941. Accessed: February 2017.

Jones, Geoffrey. *Banking and Empire in Iran*. The History of the British Bank of the Middle East, Vol. 1. Cambridge etc.: Cambridge University Press. 1986.

Moreover, Germany's commitment to non-interference in Eastern countries' affairs provided an additional layer of assurance. The country's advanced industrial activities and prowess in production set it apart from other European nations. As Germany sought global markets for its economic growth and industrial exports, it found an alluring opportunity in Iran, brimming with potential as an emerging market.³¹⁷ Notably, Iran's oil reserves had already captured Germany's attention during World War I, adding to its fascination with the nation's economic potential. This confluence of factors propelled Germany's inclination towards Iran in the vast landscape of the global economy. As the world witnessed the rise of Germany's cultural and business influence, Iran stood at the cusp of a momentous era. The intertwining destinies of these two nations sparked a remarkable chapter in history as they embarked on a journey of partnership, growth, and mutual prosperity.

The bond that formed between Iran and Germany transcended mere diplomatic ties, extending to profound levels of influence. Driven by the Pahlavi potentate's deep affinity for Germany, a transformative event took place—the name “Persia” underwent a profound metamorphosis, giving birth to the evocative appellation “Iran.” The significance behind this shift was deep, for it symbolized a declaration of Iranian identity as the ancestral home of the noble Aryans. This political inclination towards Germany rippled across numerous facets of Iranian society. The German Foreign Office seized the opportunity to foster closer ties, actively encouraging German companies to immerse themselves in the realm of Persia.³¹⁸

Germany's impact on Iran's landscape grew increasingly palpable as their collaboration spanned a vast spectrum of undertakings, encompassing economic, industrial, and urban initiatives. In 1928, the sensible German entrepreneur Otto Schniewind, accompanied by a team of astute financial experts, assumed the mantle of senior advisor to the Persian Ministry of Finance. Their counsel would prove invaluable in shaping the country's financial trajectory.³¹⁹ To further fortify the foundations of Persian-German economic affairs, the year 1936 marked the establishment of the German-Persian Chamber of Commerce (Deutsch-Iranische Handelskammer). Within the bustling corridors of this institution, the seeds of

³¹⁷ From 1923, a magazine named “German and east industry” was published in Persia? to introduce the most important German industrial activities and materials to the eastern countries.

³¹⁸ Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia* [in English]. London: I.B. Tauris.. 2013. p 64

³¹⁹ Küntzel Matthias. “Hidden Diplomacy: The German-American Dispute Over Iran.” *American Foreign Policy Interests* 36 (4): 225–33. 2014. <https://doi.org/10.1080/10803920.2014.947873>.

progress were sown, fostering an environment where Iranian and German enterprises could flourish side by side.³²⁰

Financial matters stood at the very core of the intricate tapestry of German-Iranian relations. The focal point of German entrepreneurs' strategic approach towards Persia manifested in none other than the esteemed National Bank of Persia, known today as Iran's Bank Melli. In the economic sector, notable individuals such as Kurt Lindonblatt and his accompanying group played a pivotal role in introducing modern banking practices to Iran. Birthed in 1927, this financial institution assumed a paramount role in the annals of Berlin's endeavours to forge political and economic sway over Persia.³²¹ German nationals were entrusted with numerous prestigious positions within the bank, further solidifying Germany's imprint on the Persian financial landscape.³²² Empowered with the ability to finance audacious industrialization endeavours, the Germans found themselves wielding substantial influence. The government of the Shah, aware of the National Bank's potential, leaned heavily on its financial resources to fuel the fires of industrialization and modernization that blazed within their ambitious plans.³²³ The enticing prospects promised by the National Bank beckoned many German enterprises to converge upon Persia, particularly the vibrant city of Ahwaz, the epicentre of sprawling oil fields.³²⁴

During the period of the first Pahlavi government in Iran (1925-1941), two distinct categories of architecture emerged, influenced by German architects. The first category focused on adopting the national style, which sought to reflect Iran's cultural heritage and identity. German experts significantly constructed various official and governmental buildings, including municipalities, police stations, and

³²⁰ Hirschfeld, Yair P. *Deutschland Und Iran Im Spielfeld Der Mächte : Internationale Beziehungen Unter Reza Shah, 1921-1941*. Schriftenreihe Des Instituts Für Deutsche Geschichte, Universität Tel Aviv, Bd. 4. Düsseldorf: Droste. 1980.

³²¹ Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia* [in English]. London: I.B. Tauris. 2013.

³²² In a moment of historical significance, Kurt Lindenblatt ascended to the position of chairman of the National Bank in 1928—a distinction never before bestowed upon a German resident in Iran. Hirschfeld, Yair P. *Deutschland Und Iran Im Spielfeld Der Mächte : Internationale Beziehungen Unter Reza Shah, 1921-1941*. Schriftenreihe Des Instituts Für Deutsche Geschichte, Universität Tel Aviv, Bd. 4. Düsseldorf: Droste. 1980. p. 321

³²³ Many major industrial German companies become involved in the Iranian industry, including Junkers, Siemens, Holzmann, Krupp, I.G. Farben, and AEG. The ultimate reason for the decline of German economic involvement in Persia, Khatib shahidi suggests, was caused by more structural forces— namely, the involvement of other European powers.

³²⁴ Khatib-Shahidi, Rashid Armin., *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia* [in English]. London: I.B. Tauris. 2013.

national bank structures. Their expertise contributed to incorporating Iranian architectural elements and preserving the country's historical legacy. German architects played a pivotal role in adopting and incorporating the national style into Iranian architecture. During this period, which coincided with Hitler's rule in Germany, political ideas found expression through art, and architecture became a powerful tool for conveying concepts such as greatness, authority, and stability of the Nazi government. The presence of German engineers and specialists in Iran resulted in a clear manifestation of these ideas in designing and implementing various buildings across the country. This attitude was significantly linked to the presence of German archaeologists and historians in Iran, who greatly contributed to the recognition and understanding of ancient Iranian art. This recognition served as a catalyst for the utilization of ancient Iranian themes and patterns by both Iranian and German architects, particularly in administrative buildings like municipalities and banks. Elements derived from the Persepolis collection, such as column capitals and ornamental motifs, were prominently incorporated into the architecture, highlighting the rich cultural heritage of Iran. The use of ancient themes and patterns in architecture served multiple purposes, including legitimizing the Pahlavi dynasty and creating a sense of historical and cultural continuity. German architects were at the forefront of embracing these ancient motifs, drawing inspiration from archaeological discoveries in Iran. Numerous major buildings in Iran were constructed under the guidance of German engineers and companies, with a particular focus on a neoclassical orientation, reflecting a deliberate alignment with the country's national style and historical heritage. Overall, Germans helped nationalism and its influence on architecture in Iran, reflecting a desire to establish a modern national identity rooted in the country's history and culture. They left a lasting architectural legacy in Iran, reflecting a fusion of Persian and Western influences in creating a distinct national identity.³²⁵

The second phase unveiled itself in the form of industrial production and trade. As these intricate associations took root, Germany emerged as Persia's most prominent trading partner, casting a towering shadow over the economic landscape. Eager to tap into Persia's vast business prospects, German companies eagerly seized the opportunity to construct industrial plants within its borders. This burgeoning trade relationship between Germany and Persia witnessed a remarkable upswing as prominent German industrial entities fervently immersed themselves in Iran's industrial landscape, dispatching their own permanent representatives to cement their presence. This category of architecture in this period was characterized by industrial architecture and influences from Art Deco. Germany's involvement in

³²⁵ National Bank of Iran Ltd. ArcRef: 18949. Barcode: 16488. BP Archives. Date: 1933-54.

establishing industries and factories in Iran led to the construction of numerous industrial buildings. German architects, known for their proficiency in the Art Deco style, brought modernity and sophistication to these structures through the use of sleek lines, geometric patterns, and decorative elements. The combination of industrial functionality and aesthetic appeal created a distinctive architectural language that represented the progressive industrialization of Iran.

Education was also crucial in shaping architectural developments as the third German architectural mission. Germany and Iran collaborated to establish high schools that followed German methods, focusing on engineering sciences and vocational training. The Industrial School of Iran and Germany, founded in 1925, exemplified this collaborative effort, providing a curriculum that integrated scientific knowledge, industrial practices, and vocational skills. The influence of German engineering education in Iran during this period laid the foundation for the training of skilled engineers who contributed to the country's architectural advancements.³²⁶

The Fourth German mission unfolded with resolute determination, focusing on the construction of pivotal infrastructure projects spanning railways, roads, bridges, and even aviation—a concerted effort to introduce a fleet of motor vehicles that would, in turn, usher in an era of expedited travel.³²⁷

A remarkable migration transpired, with over 3000 German experts and engineers, armed with their economic and financial acumen, receiving a gracious invitation to Persia. Their arrival heralded an influx of raw building materials, a wealth of infrastructural expertise, and the establishment of new commercial foundations—essential ingredients imported from the industrious heartland of Germany, infused

³²⁶ S. A. Sklyarov. "Ussr and Problem of German Influence in Iran in Second Half of 1930s (Foreign Policy Archive of the Russian Federation)." *Научный Диалог*, no. 11: 451–67. 2021. <https://doi.org/10.24224/2227-1295-2021-11-451-467>.

Nasre Esfahani, Mohammad, and Ehsan Rasoulizadeh. "Iran's Trade Policy of Asianization and De-Europeanization Under Sanctions." *Journal of Economic Studies* 44 (4): 552–67. 2017. <https://doi.org/10.1108/JES-05-2016-0101>.

Michael, Leonard Willy. "National Socialist Propaganda in Late Reza-Shah Iran: The Case of Khaterat-E Hitler by Mohsen Jahansuz." *British Journal of Middle Eastern Studies* 50 (1): 180–98. 2023. <https://doi.org/10.1080/13530194.2021.1945430>.

Jenkins, Jennifer. "Iran in the Nazi New Order, 1933–1941." *Iranian Studies* 49 (5): 727–51. 2016. <https://doi.org/10.1080/00210862.2016.1217636>.

³²⁷ DeNovo, John A. *American Interests and Policies in the Middle East, 1900–1939*. Minneapolis: University of Minnesota Press. 1963.

Karimi, Z. Pamela. *Domesticity and Consumer Culture in Iran : Interior Revolutions of the Modern Era*. Iranian Studies, 16. London: Routledge. 2013. <https://doi.org/10.4324/9780203072905>.

Daniel, Elton L. *The History of Iran (Greenwood Histories of the Modern Nations)*. Greenwood Publishing Group. 2012.

into the very fabric of Iranian progress.³²⁸ The employment of German architects by the government further cemented the relationship between Iran and Germany in the field of architecture. Notable architects such as Karl Frisch, Heinrich K., Max Otto Schünemann, and others were involved in designing and constructing official buildings. Their expertise and architectural vision contributed to the development of urban landscapes, bringing modern design principles and innovative approaches to the construction of governmental structures and public spaces in Iran.³²⁹ Philip Holzmann³³⁰ and Hochtief³³¹ were prominent German construction companies that had undertaken numerous projects in Iran before WWII. Their involvement in the country's construction sector significantly impacted its architectural landscape and infrastructure development. The participation of these esteemed German construction companies in Iran reflects a strong collaboration between nations, bringing together German engineering expertise and Iran's development goals. Their presence has not only left a tangible impact on the country's physical infrastructure but has also fostered knowledge exchange and technological advancements in the construction industry.³³²

In a quest to vie with their German counterparts and partake in the bountiful spoils of Iran's wealth, the Americans made a calculated move—an alliance with German companies specializing in the construction of grand infrastructures, exemplified by the forthcoming trans-Iranian railway project that shall be expounded upon in the following pages. This strategic manoeuvre forged a closer bond between Germany and the United States and constituted a subtle contestation against British dominance, thereby muddying the waters of Iranian-British relations. Iran deftly sought to recalibrate its political prowess by cultivating ties with these newfound

³²⁸ Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia* [in English]. London: I.B. Tauris. 2013, p 65.

³²⁹ Karl Frisch, city designer regarding urbanism, Heinrich K., architect of Iran's National Bank, Max Otto Schünemann -the teacher of Art school by Berlin in Rezaeehe and the architect of the "Susik" factory, and the a great carpentry and furniture-building factory, Schünemann & Wüsten architect of Vitreous enamel factory in Isfahan, Schulz architect of Shahpoor school in Rasht, Eric Rosher architect of Tobacco Complex, Fischer constructor of the Tobacco Complex, Krafter German engineer who built the Engineering Faculty in the yard of Darolfonun school, Moser constructor of the University of Tehran, Mr. Hartman architect of the first modern Steel Factory in Iran, Mr Heinrich Halbeub a specialist architect of the textile factory, and Ernst Herzfeld architect of Tabriz Municipality.

³³⁰ the Tehran railway station, which was built between 1935 and 1936, the Tehran Hospital (Imam Khomeini), another project of this company, completed in 1941, other works The company is a German embassy in Ferdowsi Street, built in 1941 (Pohl, 1999, 189), The Shah's port and the Aliabad railway were constructed between 1929 to 1931 by this company which can be placed in this list.

³³¹ Tehran's Radio Transmitter and Guilan Tea Factory

³³² Mirzahosseini, M., Soltanzadeh, H. & Alborzi, F. The role of German engineers on contemporary Iranian architecture (With emphasis on the first Pahlavi period between 1925 and 1941). *Bagh-e Nazar*, (2019). 16 (74):57-76. DOI: 10.22034/bagh.2019.142486.3708 URL: http://www.bagh-sj.com/article_92106.html

international partners, progressively eroding the foundations of British informal colonialism while nurturing the nascent seeds of nationalism. This bold step signalled a challenge to the deeply entrenched dynamics of concession-based economic relationships.³³³ The British, acutely aware of the shifting tides, endeavoured to maintain their sway over Persia as the unrivalled great power, keenly safeguarding their twin pillars of interest: the precious oil fields and unfettered access to the prized jewel of India. As long as these vital lifelines of British influence remained intact within the tapestry of Iran's modern international affairs, the British could, albeit begrudgingly, tolerate the emergence of these new contenders in other arenas within the Iranian realm.³³⁴

In the annals of history, the machinations of German agents in Persia during the crucible of World War I was sowing seeds of discord that unsettled the Allied headquarters. These agents deftly fanned the flames of anti-British sentiments, bolstering local khans and goading them into launching attacks on British properties. Their concerted efforts cast a foreboding shadow, underlining the magnitude and peril of the German presence within Persian territories. Fast forward to the tumultuous epoch of World War II, and the significance of German involvement in Persia assumes even greater prominence. By meticulously highlighting Persia's tangible and formidable German stronghold, the Allies sought to rationalize their fateful decision to invade Persian lands in August 1941.³³⁵ This act of justification was an attempt to curtail the pervasive influence of Germany, entailing the expulsion of international engineers, with a particular emphasis on the German contingent, from the realm of Iran's industrial and environmental development. In the wake of this momentous event, the landscape of Iran underwent a seismic shift. The absence of these skilled engineers, particularly those hailing from Germany, left a void in the realm of Iran's progress and advancement. Their invaluable expertise, once intertwined with the nation's endeavours, was abruptly severed, upending the trajectory of Iran's industrial and environmental aspirations.

In a dramatic turn of events, the close ties forged between Iran and Germany during the Second World War became a contentious pretext for British intervention,

³³³ Daniel, Elton L. *The History of Iran* (version Second edition.) Second ed. The Greenwood Histories of the Modern Nations. Santa Barbara, California: Greenwood. 2012. P.141.

³³⁴ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

³³⁵ For that reason, the allied propaganda heavily overestimated the number of Germans present in Persia. The Soviets sometimes came up with numbers as high as 5,000 to 10,000 men (Hirschfeld, p. 275-76; Madani, p. 266, who repeats the Soviet figures without question). The actual figure seems not to have exceeded 1000 including women and children. Internal documents of the German legation from August 1941 mention 1,052 Germans, 567 of which were men (Hirschfeld, p. 276). There was only a remote potential danger emanating from those Germans, if indeed there was any at all.

ultimately leading to the removal of Reza Shah from power. The stage was set on August 25, 1941, as British and Soviet forces descended upon Iranian soil, effectively occupying the nation from both the southern and northern fronts. Astonishingly, despite the formidable reputation of Shah's national army, which substantial oil revenues had purportedly bolstered, it offered minimal resistance against the invading forces. The post-World War II era ushered in a new chapter, marked by the British alliances exerting their influence and compelling Reza Shah to relinquish his position. In this final phase, Iran found itself stripped of its acquired power, yielding to the dominance of British authority. With the invaders coercing the Shah to depart Iran aboard a British vessel, September of 1941 witnessed the ascension of his son to the throne, thereby perpetuating the legacy of the Pahlavi dynasty.³³⁶

4.4.1.1 Case Example I from German Contributions in the Petroleumscape of Ahwaz: Modern Industrial Factories in Ahwaz and their Impact on the Region's Development

The advent of railway infrastructure paved the way for a surge in industrialization around Ahwaz, resulting in the establishment of numerous factories alongside dedicated labourer settlements³³⁷ Inspired by the successful implementation of railways in Iran, the German Foreign Office enthusiastically urged German industrial companies to actively participate in the burgeoning Iranian market, with Ahwaz emerging as a prime destination.³³⁸ A dedicated shipping company was established to facilitate this flourishing trade, forging a regular freight shipping route connecting Germany and Iran, fuelling the growth of harbour cities and ports, including the

³³⁶ Majd, Mohammad Gholi. *Great Britain & Reza Shah: The Plunder of Iran, 1921-1941*. Gainesville, FL: University Press of Florida. 2001.

Christensen, Peter H. *Germany and the Ottoman Railways: Art, Empire, and Infrastructure*. New Haven: Yale University Press. 2017.

Köll, Elisabeth. "Iran in Motion: Mobility, Space, and the Trans-Iranian Railway. by Mikiya Koyagi.. Stanford: Stanford University Press, 2021. 296 Pp. Hardcover, \$65.00. Isbn: 978-1-5036-131-33." *Business History Review* 96 (3): 686-88. <https://doi.org/10.1017/S0007680522000708>. 2022.

Koyagi, Mikiya. *Iran in Motion : Mobility, Space, and the Trans-Iranian Railway*. Stanford, California: Stanford University Press. 2021.

Lemańczyk, Szczepan. 2013. *The Transiranian Railway - History, Context and Consequences*. Middle Eastern Studies 49, no. 2. Pp. 237-45.

Iran. Ministry of Railways and Communications. 1938. *Transiranian Railway*. Teheran.

³³⁷ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

³³⁸ Junkers, Siemens, Holzmann, Krupp, I.G. Farben, AEG, ICrupp, I . G. Farben, A.E.G. and Siemens-Schuckert Werke. Other German companies, including Wönlclhaus & Co., Undutsch & Co Steffen & Heymann, Riedel & Haen A.G. and Deutsches Magazin (Tehran).

thriving Ahwaz.³³⁹ Textile mills, equipped with state-of-the-art looms, sprouted across various cities, Ahwaz being no exception, unleashing a transformation that allowed Iran to gradually reduce its reliance on Western textile industries.³⁴⁰ Notably, in Ahwaz, a magnificent sugar refinery was erected on the eastern bank of the Karun River, masterfully constructed by the renowned Skoda of Pilsen and equipped with cutting-edge Czechoslovakian machinery, standing as a testament to the city's industrial progress.³⁴¹

The architectural design of factories exuded a distinctively modern aesthetic that reverberated across numerous Iranian cities as a testament to the progressive industrialization taking place in Iran during that era. German industrial architecture in Ahwaz witnessed the incorporation of significant elements, drawing inspiration from similar examples within Germany. The prominent trend in industrial architecture has been the infusion of Art Deco elements, resulting in visually striking and contemporary industrial buildings. In other words, the Art Deco attitude, known for its sleek and streamlined aesthetic, particularly influenced the design of industrial facilities. Germanic architects, in particular, have shown a preference for this style when creating industrial structures.

Constructed with a focus on functionality and efficiency, these modern structures were characterized by their innovative use of materials, particularly brick, which offered durability and flexibility in design. The architects have skilfully utilized a combination of glass, iron, and concrete in their constructions, as these materials are emblematic of modern architecture. The high and narrow windows, strategically placed along the facades, not only allowed ample natural light to flood the interiors but also created an engaging rhythm that punctuated the buildings with a sense of dynamism.

This architectural style, accompanied by the pervasive influence of Art Deco, has propelled Iran into a new era of industrial construction, marked by the widespread use of modern materials such as concrete, rebar, and iron, as well as the emergence of a novel way of brick architecture. The adoption of these materials signifies a departure from traditional construction practices and reflects the country's embrace of modernization and technological advancements. The incorporation of Art Deco elements adds an element of elegance and sophistication to industrial structures,

³³⁹ Hansa Line and a newly formed German logistics company Pers-Express A.G.

³⁴⁰ Essad Bay Mohammad, Maerker-Branden Paul, and Branden Elsa. *Reza Shah*. London: Hutchinson, 1938. Wilber, Donald Newton. *Riza Shah Pahlavi: The Resurrection and Reconstruction of Iran*. 1st ed. An Exposition-University Book. Hicksville, N.Y.: Exposition Press. 1975.

³⁴¹ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

further enhancing the visual appeal and distinctiveness of Iran's industrial architecture. This convergence of international design influences and the utilization of modern construction materials has reshaped the industrial landscape, creating a bold and progressive architectural identity.

At the same time, in line with the prevailing architectural trends of the time, these factories embraced simplicity and functionality, reducing ornate ornamentation of the Art Deco Style in favour of a minimalist aesthetic. This minimalist approach was not only visually appealing but also aligned with the pragmatic needs of industrial production. The streamlined design of these factories emphasized their purpose as centres of manufacturing and production, reflecting a shift towards a more mechanized and efficient mode of operation.

The architectural style of these factories, with its fusion of European and Middle Eastern influences, represented a remarkable hybridization of architectural traditions. Drawing inspiration from European modernism, these structures incorporated elements of simple ornaments and functionalism, reflecting the technological advancements and design philosophies prevalent in Europe during that period. Simultaneously, they retained a sense of connection to their Middle Eastern context through the use of Brick and an appreciation for the region's architectural heritage.

As these factories proliferated across the city, they not only reshaped the physical landscape but also transformed the socio-economic fabric of the country. They became hubs of industrial activity, attracting skilled workers and fostering the growth of manufacturing sectors such as textiles, sugar refining, and more. The adoption of modern machinery and techniques allowed Iran to reduce its reliance on imported goods and develop a more self-sustaining industrial base. Moreover, the architectural influence of these factories extended beyond their immediate surroundings. The simple yet elegant design principles employed in their construction became a source of inspiration for subsequent industrial complexes and residential developments throughout Ahwaz. The clean lines, functional layouts, and use of local materials became defining features of Iranian modernist architecture, serving as a visual manifestation of the country's aspirations for progress and development.

In conclusion, the architecture of these factories symbolized the transformative era of industrialization in Iran. They embodied a harmonious blend of European current styles and Middle Eastern architectural traditions, paving the way for a new architectural identity in the country. Through their innovative designs and functional

aesthetics, these factories played a crucial role in shaping the urban landscape and propelling Iran towards a more self-reliant and prosperous future.



FIG. 4.5 Brick Making Plant.

Source: *Brick Kiln Ahvaz Ahwaz Iran*, Axel von Graefe - ORIGINAL PHOTOGRAPH IR1. Available at: <https://www.periodpaper.com/products/1937-brick-kiln-ahvaz-ahwaz-iran-axel-von-graefe-original-photograph-012231-ir1-048>.

Date: 1937. Accessed: June 2018.



FIG. 4.6 Fabric Factory in Ahwaz.

Source: Mojtahed zade, R. & NamAvar, Z. 1394/2015. *In search of urban identity of Ahwaz: Dar Jost-ejooye hovviate shahri e Ahwaz. Road, Housing, and Urban Development Research Center.*

Date: Unknown. Accessed: February 2022.

4.4.1.2 Case Example II from German Contributions in the Petroleumscape of Ahwaz: The White Bridge

The construction of the “White Bridge,” Iran’s first suspended bridge, marked a significant milestone in the development of Karun’s infrastructure, following the earlier construction of the “Black Bridge.” The project came to fruition through a contract between the Iranian Minister of Water and Wastewater and a Swedish company representative.³⁴² Historical documents and records provide evidence of German expertise and involvement in the construction of the bridge, affirming the contribution of German engineers and architects during that time.

The National Bank of Iran provided the funding for the bridge, while the German/Swedish Company supplied the necessary bridge-building materials. At this time, AIOC initially agreed to help by providing engineering facilities and equipment such as cranes. A German engineer and his wife took charge of the bridge’s

³⁴² Document 426/330, 1939, National Library and Archives of Iran.

construction. Initially, progress on the bridge was going well, with half of the suspension bridge successfully under construction. However, a complication arose when the Anglo-Iranian Oil Company (AIOC) refused to continue its cooperation with German engineers.

There is a narrative about this unforeseen turn of events, which indirectly impacted the German engineer, causing him to suffer a heart attack due to the stress of the unfinished job. His resilient wife stepped in and took over the construction, determined to see the bridge through to completion. Undeterred by the setback, the engineer's wife ingeniously used the limited tools and resources available to her. She devised a method to construct the second arch of the bridge, substituting a few ships for the crane that was no longer accessible.³⁴³ With her determination and resourcefulness, she successfully completed the construction of the bridge, ensuring its functionality as a vital link for both cars and pedestrians, connecting the city's west and east.

The "White Bridge" not only served as a practical infrastructure for transportation but also played a significant role in shaping the future urban landscape of the city. Its presence influenced the design and layout of the streets, squares, and buildings, paving the way for further economic progress and development in the region. The bridge stood as a testament to the resilience and ingenuity of those involved in its construction, lasting and impacting the city's history and its journey towards urban and economic prosperity.



FIG. 4.7 Photos of the process of building the White Bridge in Ahwaz by German engineers.

Source: Iranian Oil Museum Archives.

Date: 1936. Accessed: February 2017.

³⁴³ <https://web.archive.org/web/20180911002500/http://www.motala-industrimuseum.com/show.php?special=true&pictures=Fo-821%20Fo-822%20Fo-823>



FIG. 4.8 Photos of the Process of Building the White Bridge in Ahwaz by German Engineers.

Source: Iranian Oil Museum Archives.

Date: 1936. Accessed: January 2017.

4.4.1.3 Case Example III from German Contributions in the Petroleumscape of Ahwaz: The National Bank of Persia: A Case Example of Architectural Legacy and Financial Sovereignty

In 1928, a significant development took place as Reza Khan, recognizing the importance of establishing National Bank branches across Iran, decided to establish one in Ahwaz. This move brought a wave of highly skilled German professionals to the city, as they were invited to assume prominent positions within the bank. These individuals became residents of Ahwaz, contributing their expertise to the city's burgeoning financial landscape.³⁴⁴ The construction of the main building for the National Bank and the accompanying residences was financed by the bank itself. The first owner of this impressive structure was Dr Shon, a German national who served as the head of the first National Bank of Khuzestan. In 1929, this building

³⁴⁴ Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia* [in English]. London: I.B. Tauris. 2013.

proudly stood as the headquarters of the central bank in Ahwaz, symbolizing the growing economic and financial aspirations of the region. Over time, the purpose of the building underwent a transformation. In 1932, it transitioned from being the province's governmental headquarters to serving a different function. Yet, its historical significance as the initial home of the National Bank in Ahwaz remained, reflecting the intertwining of Iranian and German influence in the city's financial landscape during that period.³⁴⁵

The identity of the architect behind the National Bank building in Ahwaz remains a subject of debate and speculation. Given the influence of German professionals in establishing the National Bank and its branches in Iran, it is natural to consider the involvement of German architects and engineers in its design. Additionally, the presence of the Bauhaus School of Design and the German engineer Hartmann further fuel these conjectures.³⁴⁶ Even the French architect Andre Godard, known for his interest in Iranian architecture and historical monuments, has been suggested as a potential architect for the building. However, recent findings of Mojtahedzade from the Armenian archives in Iran shed new light on this matter.³⁴⁷ These documents lead us to consider the possibility that the architectural masterpiece was the work of Christopher Tadossian, an Iranian-Armenian architect. Tadossian had received professional architectural training at the office of renowned architect Le Corbusier in Germany and returned to Iran in 1928.³⁴⁸ The discovery of his research of these archival records provides a compelling basis to rely on the possibility that Tadossian, with his architectural expertise and international training, played a pivotal role in designing the National Bank building in Ahwaz. This highlights the talent and contribution of Iranian-Armenian architects to the architectural landscape of Iran during the Reza Shah era, adding a new layer of richness and diversity to the city's architectural heritage.³⁴⁹

³⁴⁵ According to ISNA

³⁴⁶ In 1924, the German engineer Hartmann became head of the arsenal in Tehran, which he successfully led until 1932

Hirschfeld, Yair P. *Deutschland Und Iran Im Spielfeld Der Mächte : Internationale Beziehungen Unter Reza Schah, 1921-1941*. Schriftenreihe Des Instituts Für Deutsche Geschichte, Universität Tel Aviv, Bd. 4. Düsseldorf: Droste. 1980. pp. 41-42, 125

³⁴⁷ R. MojtahenZade (1400). What time does this building belong to? A short essay on the dating of historical monuments; Under the pretext of the history of the Ahvaz triangle building. Access online: <https://asmaneh.com/posts/rc9h/>

³⁴⁸ This document relates to the biography of an Armenian architect named Christopher.

³⁴⁹ Lazarian , Jeanette D. *Encyclopaedia of Armenian Iranians* . Tehran: Hirmand Publications. (2003). p. 266. ISBN 964-6974-50-3

R. MojtahenZade (1400). What time does this building belong to? A short essay on the dating of historical monuments; Under the pretext of the history of the Ahvaz triangle building. Access online: <https://asmaneh.com/posts/rc9h/>

The National Bank building in Ahwaz was envisioned as a symbol of Iranian power, modernism, and artistic expression within the architectural landscape of the Pahlavi era. The intricate architectural details of the building itself reflect the careful study of Khuzestan's indigenous architecture, which served as a foundation for its design. Drawing inspiration from brick architecture, the architect chose brick as the primary material, imbuing the structure with a sense of local identity.

The design of the National Bank building also paid homage to the grandeur of ancient Iran, particularly the splendid Sassanid architecture. The high arches surrounding a central courtyard mirror the architectural marvels of the Sassanid era, connecting the contemporary structure to the glorious historical heritage of the region. However, what sets this building apart from others of its time in the national style is its incorporation of Persian Islamic ornaments. One notable characteristic of this building is the combination of brick and tile in its decorative elements. The delicate brickwork, adorned with blue turquoise tiles and wooden ornaments, reflects the influence of Islamic architecture that flourished throughout Iran's history. The intricate interplay of these materials, along with the incorporation of brick arches, contributes to the distinct aesthetic of the structure. This amalgamation of styles signifies a harmonious fusion of past and present, showcasing the nation's rich cultural heritage.

Moreover, the meticulous attention given to the ornamental elements and unique design of the National Bank building speaks to a burgeoning economic boom in Ahwaz. It signifies a shift towards considering the structure's functionality and its aesthetic appeal, highlighting the importance placed on design and artistic expression during that period. In essence, the National Bank building in Ahwaz stands as a testament to the architectural vision of its creator. It captures the essence of Iranian identity by blending local influences, historical references, and Islamic motifs while also embodying the aspirations of a rapidly developing city. The notion that its architectural forms and symbols bridged gaps between different cultures and ideologies was pertinent in the context of Ahwaz's petroleumscape. It became a space of various cultures and ideologies due to the presence of international oil companies and workers, contributing to the cultural dynamics of the petroleumscape.

Situated on the picturesque west coast of the Karun River, the National Bank building in Ahwaz spanned an impressive area of approximately 3,000 square meters.

Faces introduced in the exhibition of Iranian Armenian artists, Peyman Cultural Quarterly - Number 64 - Year 17 - Summer 2013. Online access: <https://web.archive.org/web/20150207204643/http://www.paymanonline.com/article.aspx?id=24002A8D-F6B1-40D2-9B3D-755D471DD121>

What made this architectural marvel truly captivating was its unique triangular shape, carefully designed to harmonize with the surrounding site where two streets converged. Within the expansive plot, three enchanting courtyards adorned the landscape, one at the centre and the other gracefully occupying the corners. These serene oases provided tranquil spaces for reflection and respite, adding to the overall allure of the building. The main structure itself rose to three floors, each boasting lofty ceilings that served a practical purpose. The height allowed for effective temperature regulation within the interior spaces, promoting natural ventilation and ensuring a comfortable atmosphere. A remarkable architectural aspect of the building was the presence of dual-door access in each room at its core. These intelligently positioned doorways served a functional purpose: one opened to the corridors while the other led to the central courtyard. This ingenious design facilitated optimal airflow throughout the building, harnessing and channelling the cooling breezes into the inner spaces. Such meticulous attention to detail and thoughtful implementation of vernacular solutions showcased the architect's ingenuity in addressing the region's climatic considerations. By incorporating elements that enhanced air ventilation and circulation, the National Bank building provided its occupants with a comfortable and refreshing environment. Furthermore, the building's structural integrity is enhanced by the use of an iron frame, showcasing a fusion of traditional construction methods with modern engineering techniques.

Overall, the triangular form, strategically placed courtyards, multi-story structure, and intelligent ventilation system collectively contributed to the architectural splendour of the National Bank building in Ahwaz. It stood as a testament to the fusion of form and function, embracing both aesthetics and practicality in its design. It served as a powerful testament to the concept of hybridity and the exchange of architectural influences on an international scale. It stood as a vivid example of diverse architectural patterns that harmoniously blended aesthetic shapes with practical functionality. In its design, the building embraced a national style that sought to revive and reassert Iranian identities within the context of a new era of federal development. It embodied the synthesis of various architectural elements and symbols, transcending cultural boundaries and engaging in a vibrant dialogue between different traditions. The architectural language employed in the National Bank building represented a convergence of diverse influences, resulting in a unique fusion of forms and concepts. It was an architectural tapestry woven with threads from different cultures, where traditional Iranian motifs intertwined with contemporary design principles. By incorporating elements of Iranian architecture, the building aimed to convey a sense of national pride and identity. It symbolized a conscious effort to preserve and showcase the rich cultural heritage of Iran within the context of modern development.

This distinctive feature not only added to its aesthetic allure but also contributed to its prominence within the cityscape. The bank, along with the Reza Shahi palace and Railway complexes, filled the mentioned puzzle in a cohesive ensemble of structures and symbolised the modernization and development efforts spearheaded by the National Urbanism style.

The mention of the National Bank building serving as a hub for economic and financial activities ties indirectly into the petroleumscape concept by highlighting the central role of oil revenues in shaping cultural exchanges and diversity. The oil-rich region of Ahwaz experienced an influx of foreign people and capital, leading to increased cultural diversity and economic activities. This amalgamation of architectural styles and symbols became a visual representation of the country's multifaceted history and aspirations for the future against British power on the city's shape. Moreover, the National Bank building in Ahwaz was not simply a structure of bricks and mortar; it embodied political significance and carried symbolic weight. It served as an emblem of the solid political foundations upon which the nation was built, serving as a central hub for economic and financial activities. In this way, the National Bank building in Ahwaz stood as a testament to the transformative power of architecture, transcending borders and facilitating cultural exchange. It celebrated the beauty of diversity and showcased the ability of architectural forms and symbols to bridge gaps between different cultures and ideologies.³⁵⁰

³⁵⁰ National Bank of Iran Ltd. ArcRef: 18494. Barcode: 16488. 1933-54. BP Arives.



FIG. 4.9 National Bank of Iran Ltd..

Source: ArcRef: 18494, Barcode: 16488. BP Archives
Date: 1933-1954. Accessed: February 2017.

4.4.1.4 Case Example IV from German Contributions in the Petroleumscape of Ahwaz: Government Secondary School

Iran and Germany reached an agreement to establish high schools in Iran that would follow German educational methods. These schools were specifically designed to provide education in engineering science and foster the development of engineering centres for ambitious students. In 1925, the joint venture resulted in the establishment of a modern school known as “The Industrial School of Iran and Germany.” This unique educational institution offered a curriculum that encompassed the teaching of science, industry, and vocational training concurrently. The aim was to provide students with a well-rounded education that combined theoretical knowledge with practical skills, equipping them for future professional endeavours.³⁵¹

The construction of the government secondary school in Ahwaz exemplified the adaptation and combination of national architectural style and modern building type to address the region’s unique conditions. These adaptations were necessary to accommodate the local climate and incorporate the specificities of the industrial and economic landscape shaped under British authority. The design and architectural choices for the school took into account the specific needs and considerations of Ahwaz, creating a building that harmonized with its surroundings while responding to the educational requirements of the community. Adapting the architectural style to the local climate and incorporating industrial and economic specificities reflect how the petroleumscape concept encompasses not only physical infrastructure but also socio-cultural and environmental considerations. The oil industry’s influence on the region necessitated changes in architectural design and urban planning to accommodate the unique conditions of the time.

This approach aimed to instil a sense of cultural identity and heritage while embracing contemporary advancements. Incorporating local materials and both ancient Iranian and European design features ensured that the school resonated with the unique characteristics and aspirations of the era.³⁵² The architects of the governmental buildings in Ahwaz drew inspiration from the Doric style, which is evident in their incorporation of column shapes and other elements reminiscent of this ancient Greek architectural order. At the front entrance, which serves as the defining feature of the main façade, a pediment – a triangular architectural feature

³⁵¹ Yar-Shater, Ehsan, and Encyclopaedia Iranica Foundation. 2005. *Encyclopædia Iranica*. Vol. Volume Xiii, Fascicle 2, Industrialization II-Iran II /. New York: Encyclopaedia Iranica Foundation. P. 211)

³⁵² DeNovo, John A. *American Interests and Policies in the Middle East, 1900-1939*. Minneapolis: University of Minnesota Press. 1963.

typically located above the entry and adorned with decorative motifs- was employed. This triangular gable formed the end of the roof slope over a portico and was supported by columns, resulting in a symmetrical façade. It served as a prominent visual element, emphasizing the grandeur and importance of the building. The triangular shape of the pediment added a visual focal point, drawing attention to the entrance and creating a harmonious composition with the surrounding architectural elements. The entrance is also approached via a set of stairs, adding a sense of elevation and ceremonial significance. The use of a pediment, stairs and columns in the design of the entrance façade conveyed a sense of grandeur and formality, evoking classical architectural traditions.

The combination of simple brick walls alongside stone columns resulted in a distinct visual contrast and shape in the architecture of the buildings. The juxtaposition of these materials created a unique architectural composition, highlighting the interplay between solidity and texture. This arrangement followed classical architectural principles, emphasizing balance and proportion. The structural elements of the building were designed using modern construction techniques and solutions. The facade decorations, columns, capitals, and stone carvings were crafted to reflect this fusion of influences, resulting in a style that blended modern construction techniques with nods to ancient architectural motifs.



FIG. 4.10 Ahwaz School.

*Source: Middle East Oil Development. ArcRef: 134844C. Barcode: Z01622274. 1956. BP Archives.
Date: 1956. Accessed: February 2017.*

The resulting designs resembled the majestic palaces of Persepolis, reflecting a connection to Iran's rich historical heritage. While the overall design may evoke a sense of ancient Iranian architecture, specific adjustments were made to the facade decorations, columns, capitals, and stone carvings to create a distinct aesthetic. By incorporating Western and ancient design elements, architects sought to create a unique architectural language that reflected a departure from the prevailing Islamic architectural tradition. This departure allowed for a fresh interpretation of Iran's historical architectural heritage, drawing inspiration from ancient forms

while adapting them to the contemporary context. These design choices not only pay homage to Iran's architectural legacy but also convey a visual language that speaks to the significance and authority of the government institutions housed within these structures.

Moreover, the construction of institutions like schools was part of the broader urban development influenced by oil wealth and corporate influence. Considering the community's needs, the school's design and architectural choices highlighted the community's social dimensions of the petroleumscape. The oil company significantly shaped the physical landscape and the social and educational infrastructure to support the local population. It served as an example of how the petroleumscape concept extended to various aspects of architectural adaptation in oil-rich regions, where the presence of the oil industry fundamentally shapes the physical, cultural, and economic landscapes of the area.

4.5 Bridging Traditions: The Americans' Resurgence of Vernacular Architecture in Ahwaz

4.5.1 Forging Connections: The Magnificent Iron Belt of the Trans-Iranian Railways

Under the visionary leadership of Reza Shah, Persia experienced a paradigm shift as he embarked upon the ambitious endeavour of constructing an extensive network of modern roads and railways. Similar to international chariots, these pathways seamlessly integrated automobiles, trucks, and wagons, breathing new life into the ancient Silk Road. Recognizing the paramount importance of a modern transportation system, Reza Shah foresaw its pivotal role in fostering the nation's future development. As the motor vehicle made its grand entrance, it catalyzed the pace of urban transformation and ushered in a wave of unprecedented facilitation.³⁵³ However, Iran still found itself ensnared in the clutches of foreign interests, impeding its ability to achieve genuine political independence. The grand objective of the Pahlavi dynasty, namely attaining autonomy in commercial affairs, remained an elusive dream. Entangled in their self-interests, Great Britain and Russia wielded their influence over Iran's transportation development. Their rivalry over Iranian assets obstructed the construction of the trans-Iranian railways, further prolonging the nation's struggle.

Between the two World Wars, spanning from 1927 to 1938, the monumental Trans-Iranian Railway emerged as a powerful symbol of modernization, a testament to the unwavering determination of the Iranian monarch, Reza Shah Pahlavi. Above all else, the gigantic iron belt of the Trans-Iranian line stood as a profound testament to the unwavering determination of the Pahlavi Dynasty to position Iran among the ranks of modern nations.³⁵⁴ Beyond the realm of commercial advantages, a deep sense of national pride fuelled the construction of this monumental railway. Tasked with dismantling Russia's domineering grip, he embarked on the mission of seamlessly connecting the Caspian Sea in Northern Persia to the Persian Gulf in the south via

³⁵³ Boyle, John Andrew, and William Bayne Fisher. *The Cambridge History of Iran*. Cambridge: University Press. 1968. P 552

³⁵⁴ <https://www.webuildgroup.com/en/projects/railways-underground/trans-iranian-railway>

rail. This ambitious feat aimed to grant Tehran direct access to global markets, liberating Iran from the shackles of dependence on Russian exports and effectively dismantling Russia's stronghold on the nation. Through this transformative endeavour, Persia endeavoured to reclaim its rightful place as a beacon of prosperity and progress.³⁵⁵ It emerged as a pinnacle of engineering prowess, a dazzling spectacle that earned its place as one of the most unique railway systems in the Middle East. The functioning of the new railway in Iran marked a significant milestone in the country's modernization process. It stood as the foremost enterprise in national infrastructure, a remarkable endeavour that Essad Bey aptly likened to the monumental feats of the Suez or Panama Canal.³⁵⁶

In 1926, the Iranian National Assembly granted approval for the construction of railways by an international consortium, featuring the participation of an American company called "Pumm"³⁵⁷ in the south and three German companies - "Julius Berger, Philip [Holzman ?], and Siemens" - in the north of Iran. Until then, Iran remained devoid of any notable railway lines.³⁵⁸ On the momentous day of October 16, 1927, Reza Shah inaugurated the Trans-Iranian railroad, marking a historic milestone in the nation's progress.³⁵⁹ The American contingent extended the line from Bandar Shahpur, skilfully traversing the oil-rich fields of Ahwaz until reaching Dezful. Meanwhile, the German group commenced their construction journey from the newly established harbour of Bandar Shah on the Caspian coast, forging ahead into the foothills of the magnificent Alborz Mountains in northern Iran. The arduous task of crossing 1450 kilometres of treacherous terrain lay before them.³⁶⁰ A diverse array of actors joined forces to bring this extraordinary vision to life. The American-German consortium embarked on their construction endeavours in the lowlands of the north and south, commencing their work in 1927. The project attracted a workforce of twenty thousand individuals, including Iranians, Arabs, and European labourers, engineers, and supervisors. These dedicated professionals

³⁵⁵ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938. A brief history of the Iranian State Railway - "RAI" Long-time silent - then a masterpiece of engineering. Wilber, Donald Newton. *Riza Shah Pahlavi: The Resurrection and Reconstruction of Iran*. 1st ed. An Exposition-University Book. Hicksville, N.Y.: Exposition Press. 1975.

³⁵⁶ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938. Essad Bey argues it was "a project of so great a scope as to be comparable to the building of the Suez or the Panama Canals" and "one of Asia's outstanding politico-economic achievements of the post-War period."

³⁵⁷ Ulen & Company. *Ulen & Company*. Lebanon, Ind.: Ulen. 1929.

³⁵⁸ Sadka, Nancy Leila. *German Relations with Persia, 1921-1941*. Ann Arbor, Mich.: University Microfilms International. 1988. p.81

³⁵⁹ Wilber, Donald Newton. *Riza Shah Pahlavi: The Resurrection and Reconstruction of Iran*. 1st ed. An Exposition-University Book. Hicksville, N.Y.: Exposition Press. 1975.

³⁶⁰ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

resided in humble huts adjacent to the construction sites, united in their mission to realize this monumental undertaking. ³⁶¹

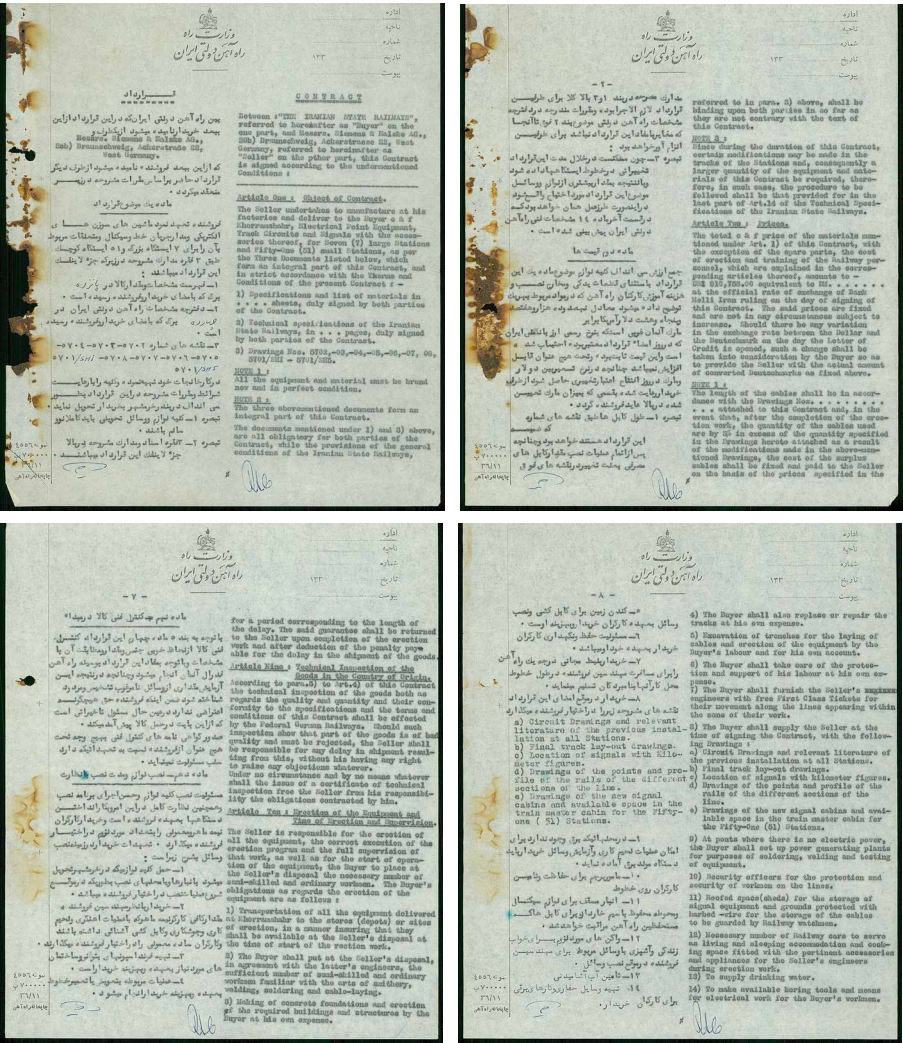


FIG. 4.11 Document in the Iranian National Archive revealing the National Railways of Iran contract between the Iranian Government and Hesers, Siemens & Halske, a German company.
Source: The Iranian National Archive.
Date: 1940. Accessed: January 2017.

The discussion about the expansion of railway networks and their influence on architectural trends and urban planning was tied back to the broader context of the petroleumscape as the expansion of the railway networks helped Ahwaz's petroleumscape's development. This included not only railway tracks and stations but also roads, ports, and other transportation-related infrastructure that played a crucial role in supporting the oil industry.

The railway networks in the petroleumscape were closely linked to transportation and mobility as one of the key functions of railways in regions for the transportation of oil and related products. The ability to transport oil, goods, and people was essential for the oil industry's growth. The construction of railways facilitated the movement of both raw materials and finished products, making it an integral part of the petroleumscape's logistical and transportation systems. The railway network played a vital role in facilitating oil movement from the Abadan refinery to the ports and other distribution points in the north and south of Iran during WWII. This ensured the efficient flow of oil, a fundamental element of the petroleumscape.

As railway networks expanded across regions and nations, they necessitated the construction of railway stations, bridges, tunnels, and other infrastructure, which in turn influenced architectural trends and urban planning. The convergence of diverse participants engendered a remarkable fusion of architectural styles, leaving an indelible mark on the 95 railway station buildings scattered across Iran, spanning from the northern reaches to the southern expanses. The advent of the Trans-Iranian Railway and the construction of this monumental railway system brought forth a synthesis of architectural styles, reflecting the cultural influences and aspirations of the time.³⁶²

The American buildings in the southern region of Iran showcased a harmonious blend of traditional and vernacular architectural elements intricately woven with the local environment aesthetics, drawing inspiration from the captivating ambience of the Middle East. These stations often featured ornate facades adorned with intricate geometric patterns, arches, and minaret-like structures, exuding a sense of timelessness and cultural heritage. Meanwhile, the German-influenced stations in the northern parts of Iran embraced a more modern architectural approach. Inspired by the prevailing trends of the early 20th century, these stations showcased sleek lines, clean geometries, and functionalist design philosophy. Embracing a minimalist aesthetic, these architectural marvels often incorporated elements such as large glass windows, steel structures, and innovative materials, presenting a departure

³⁶² Persian State Railway from BunderShahpour, Ahwaz, Salehabad, to Tunnel, Sixty-Four views. ArcRef: 36183. Barcode: 32701. 1933. BP Archives.

from the ornate motifs of traditional architecture. This amalgamation of architectural styles demonstrated the broader influence of international architectural trends on the railway's design. The contrasting architectural expressions within the Trans-Iranian Railway highlighted the diversity and richness of Iran's cultural landscape while symbolizing the nation's aspiration to embrace both tradition and modernity.³⁶³

Moreover, the architectural legacy of railways extended beyond the stations themselves. Railway lines often spurred the growth of new towns and cities along their routes, leading to the development of surrounding infrastructure and urban centres. These urban areas, influenced by the presence of railways, often showcased a blend of architectural styles, combining elements of traditional, colonial, and contemporary designs. The fusion of architectural styles in railway station buildings reflected the cultural diversity and influences in the regions where they were constructed. It was in parallel with the presence of the international oil company and a diverse workforce that led to the amalgamation of architectural styles and cultural influences. The petroleumscape was marked by a blending of various architectural elements as a result of global interactions. The expansion of railway networks and its impact on architecture and urban planning was related to the petroleumscape by highlighting the parallel development of transportation infrastructure, cultural influences, and economic aspirations integral to the railway and oil industries in various regions.

In 1929, the Trans-Iranian Railway reached the city of Ahwaz under the skilful guidance of the American construction teams. This momentous achievement became a defining factor in shaping the urban landscape of Ahwaz, profoundly influencing its growth and development. As the railway traversed through the city's heart, Ahwaz emerged as the primary urban hub in the interior of Khuzestan, where the newly constructed railway intersected the majestic Karun River. This convergence of transportation routes positioned Ahwaz as a bustling commercial crossroads, seamlessly linking river and rail traffic.³⁶⁴

The railway also had military significance, bolstering the central government's ability to exert control and defend strategic areas. It enhanced the country's defence capabilities and facilitated the movement of troops and supplies, strengthening national security. Its impact on Ahwaz, in particular, was profound. The expansion

³⁶³ No 1 Ahwaz to Tehran by Rail. ArcRef: 72357/001. Barcode: - . 1940. BP Archives. Lemańczyk Szczepan. 2013. "The Transiranian Railway - History, Context and Consequences." *Middle Eastern Studies* 49 (2): 237–45. <https://doi.org/10.1080/00263206.2012.759102>.

³⁶⁴ Mojtahed zade, R. & NamAvar,Z. *In search of urban identity of Ahvaz: Dar Jost-ejooye hovviat shahri e Ahwaz*. Road, Housing and Urban Development Research Center. 1394/2015. P.177

of the railway network and its significance in bolstering the central government's control and defence capabilities were linked to the petroleumscape situation, especially in the context of Ahwaz and its connection to the oil industry. The city experienced a surge in industrial growth, becoming a focal point for economic and military progress. It played a crucial role in promoting industrial development, enabling rapid economic growth, and establishing the central government's control over peripheral areas. Railways in the petroleumscape had strategic importance. They contributed to the central government's ability to control and protect critical areas as a priority for national security against British involvement in those locations. Recognizing its potential, Reza Shah embarked on a journey in December 1929, including visiting Ahwaz. His purpose was twofold: to assess the state of local tribes and to inspect the progress of the railway construction led by the Americans. The visionary monarch envisioned Ahwaz as a vital railway junction and a central hub for automobile traffic, underscoring its role as a pivotal centre of infrastructural advancement.³⁶⁵

Moreover, the construction of railway networks, much like oil infrastructure development, was driven by the national development and economic aspirations. Once again, the government of Iran played a central role in funding various infrastructure projects, including railways, as an interplay of the petroleumscape. The presence of a well-developed railway system enhanced economic growth in Ahwaz, much like the presence of the oil industry. The two were interconnected, as railways facilitated the transport of not only oil but also the workforce, equipment, and supplies required for oil production. Reza Shah's vision of Ahwaz as a central hub for transportation, both railways and automobiles, underscores the role of the city in supporting the oil industry. The growth of Ahwaz's infrastructure, including transportation networks, was driven by the need to support the oil industry's operations and the movement of people and goods related to oil production. Ahwaz's transformation into a pivotal centre of infrastructural advancement emphasized the interconnectedness of various spaces and regions linked to the petroleum industry. Ahwaz became a central point in the web of oil-related activities, including extraction, transportation, and distribution.

The significance of the railway extended beyond its practical function of facilitating fast transportation, distribution and military. As Ahwaz embraced its newfound status as a nexus of transportation, it became a focal point for further infrastructural development.³⁶⁶ It spurred the growth of ancillary industries and

³⁶⁵ Wilber, Donald Newton. *Riza Shah Pahlavi: The Resurrection and Reconstruction of Iran*. 1st ed. An Exposition-University Book. Hicksville, N.Y.: Exposition Press. 1975.

³⁶⁶ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

services. Warehouses, storage facilities, and workshops catering to the railway and river transportation needs flourished along the city's bustling waterfront. The amalgamation of the railway at the intersection of the Karun River and the progressive urban planning endeavours bestowed upon Ahwaz a unique character, fostering its rise as a thriving centre of commerce and cultural exchange.³⁶⁷ As the railway became operational in 1929, Ahwaz experienced a surge in commercial activity, attracting merchants, traders, and travellers from far and wide. As trade networks expanded, Ahwaz became a melting pot of cultures and influences as diverse communities settled in the city, bringing their customs, traditions, and architectural styles with them. It stood as an emblem of modernization, a tangible symbol of progress and transformation. It profoundly transformed the city's urban fabric and socio-economic dynamics.³⁶⁸

When the petroleumscape concept emphasized the interconnectedness of spaces that were shaped by the presence of the petroleum industry, in the case of Ahwaz, the railway project's development was influenced by the economic and logistical needs of the oil industry. The railway served not only as a means of transportation but also as an essential part of the infrastructure supporting oil extraction, refinement, and distribution. It facilitated the movement of both oil-related goods and the workforce needed for oil operations.

Edward Miles Crawford, an American engineer and photographer, played a significant role in the construction of the Trans-Iranian Railway as Acting Assistant Chief Engineer and Office Engineer for the Imperial Railways of Persia.³⁶⁹ In 1928, Crawford joined the Imperial Railways of Persia, an enterprise established to oversee the construction and management of the railway network in Iran.³⁷⁰ Until 1932, Crawford held this position, overseeing extensive infrastructure projects. His expertise and supervision were instrumental in designing and procuring

³⁶⁷ Boyle, John Andrew, and William Bayne Fisher. *The Cambridge History of Iran*. Cambridge: University Press. 1968. P 552

³⁶⁸ Hashemi, Manata. *Coming of Age in Iran : Poverty and the Struggle for Dignity*. Critical Perspectives on Youth. New York: New York University Press. 2020.
Lemańczyk, S. *The Transiranian Railway – History, Context and Consequences*. Middle Eastern Studies 49(2): 2013. 237-245.

³⁶⁹ Born in 1888, Crawford received his engineering education at the University of Michigan and began his professional career as a civil engineer in the United States.

³⁷⁰ His expertise and experience in engineering and railway projects made him a valuable addition to the team. Crawford's appointment as Acting Assistant Chief Engineer and Office Engineer for the Imperial Railways of Persia in 1930 placed him in a position of responsibility, overseeing critical aspects of the Trans-Iranian Railway project.

approximately 250 kilometres of railroad.³⁷¹ Under Crawford's guidance, substantial infrastructure works were undertaken, with a particular focus on the southern region of Iran. His responsibilities included designing, procuring, and managing railway segments, ensuring that the construction proceeded smoothly and adhered to technical standards.³⁷²

During his tenure, Ahwaz became a city where Crawford dedicated much of his time. In this vibrant Iranian city, he captured the remarkable work of the American engineers involved in the construction of the Trans-Iranian Railway. Crawford meticulously documented their efforts in a photo album showcasing various locations in southern Iran, including Ahwaz, Bandar Shapour, and other sites. Within the album, Crawford's photographs reveal the extent of the Americans' involvement in the construction process. Particularly noteworthy are the images depicting the engineers working on tunnels in the vicinity of Ahwaz. The photographs showcase the machinery used, including a crane that Crawford mentioned had been borrowed from APOC. Beyond his work on the Trans-Iranian Railway, Crawford's expertise extended to other transportation projects in Iran. He was involved in designing and constructing roads, bridges, and other infrastructure that aimed to modernize the country's transportation network. His contributions fostered economic growth and facilitated better connectivity within Iran.

It is worth noting that Crawford's album goes beyond showcasing the American engineers' work. It also includes photographs of the engineers in their offices and in the field, offering a glimpse into their daily routines and interactions. Interestingly, approximately half of the individuals captured in the photographs were Iranian, underscoring the project's collaborative nature and local personnel's participation and their contributions to the railway's construction. Crawford's impact and contributions were recognized and documented, with his photographs and records finding their way into the British Petroleum archives. This archival preservation underscores a unique perspective on the social and cultural dimensions of the

³⁷¹ following which he began work as Chief Engineer for both the Santa Marta Railroad Co. and the Magdalena Fruit Co. in South America.

³⁷² The estimated value of the infrastructure projects under his supervision amounted to approximately 20 million dollars, a substantial investment at that time.
<https://www.jamesarsenault.com/pages/books/5094/edward-miles-crawford-photographer-and-compiler/construction-of-the-trans-iranian-railway?soldItem=true>
[MIDDLE EAST & ISLAMIC WORLD - IRAN - TRANS-IRANIAN RAILWAYS] [Wheeler, Geoffrey Edleston, CIE, Lt. Col.] (1897-1990)
<https://www.wayfarersbookshop.com/pages/books/567/geoffrey-edleston-wheeler-lt-col-cie-middle-east-islamic-world-iran-trans-iranian-railways/historically-significant-photo-album-with-100-original-gelatin-silver-mounted-photos-one-real>

railway project and serves as a valuable resource for understanding the historical context of that time.³⁷³

Americans commenced the construction of stations – architectural masterpieces crafted with magnificent bricks– on the western side of the Karun River, solidifying Ahwaz's position as a binding site along the Trans-Iranian Railway line. The railway's presence brought enhanced connectivity and economic opportunities, leaving an enduring architectural legacy that added to the city's allure and visual splendour. The construction of the Trans-Iranian Railway introduced a new genre of architecture that blended local traditions with modern influences, which is visible in railway stations, turning into notable features of Ahwaz's urban fabric. Along its route, the railway stations and associated landmarks became significant elements in Ahwaz's physical identity and urban planning. They served as gathering points and focal points for urban activities, further enhancing the city's connectivity and facilitating economic and social interactions. The railway stations and staff houses were designed to harmonize with the local climate and architectural traditions while incorporating elements of modern Western architecture. This fusion of traditional and modern influences gave rise to a unique architectural hybrid that left a lasting imprint on Ahwaz's architectural landscape.³⁷⁴ These stations, designed with a blend of functionalism and regional aesthetics, served as architectural landmarks in Ahwaz. The railway's presence and its linked architectural landmarks contributed to the legibility and recognition of Ahwaz as a distinct city with a rich architectural heritage.

³⁷³ Persian State Railway from BunderShahpour, Ahwaz, Salehabad, to Tunnel, Sixty-Four views. ArcRef: 36183. Barcode: 32701. 1933. BP Archives.

Crawford, Edward Miles. *Construction of the Trans-Iranian Railway*. 1 album (photographic prints) : black and white ; 30 x 23 cm. 1930.

³⁷⁴ <https://whc.unesco.org/en/tentativelists/6195/>

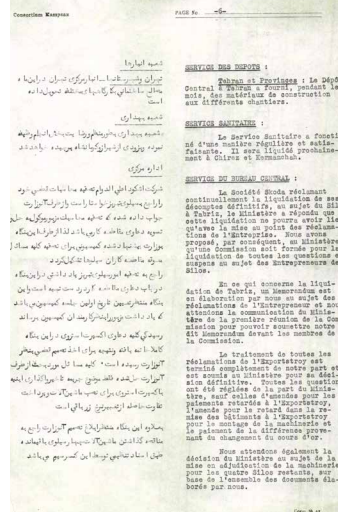
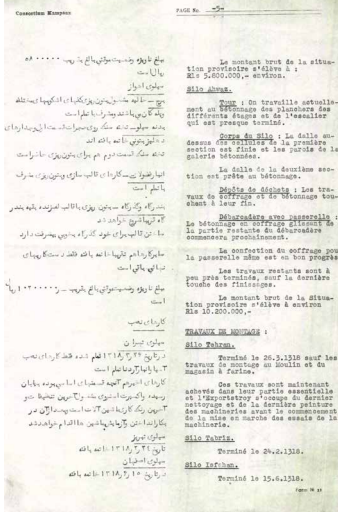
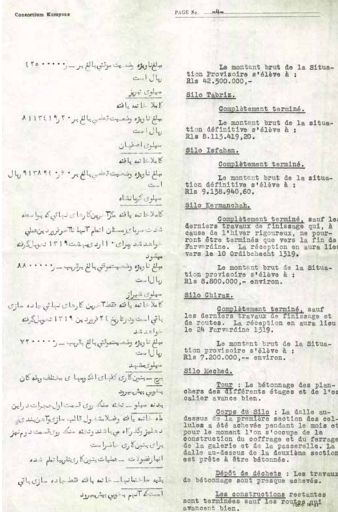
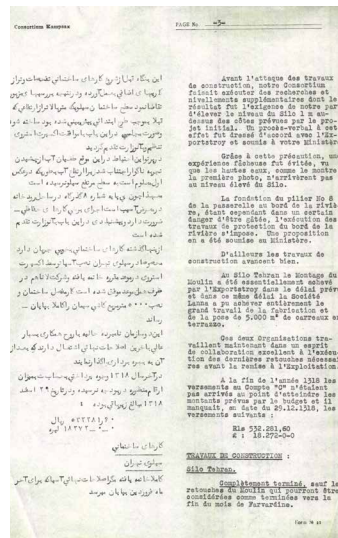
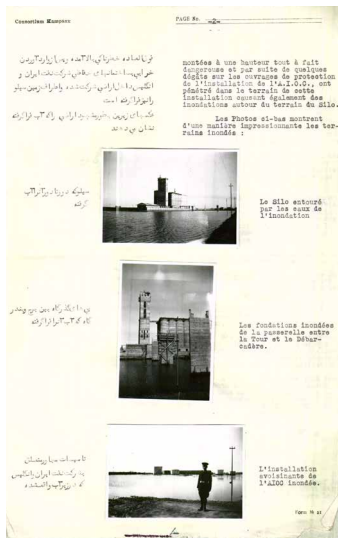
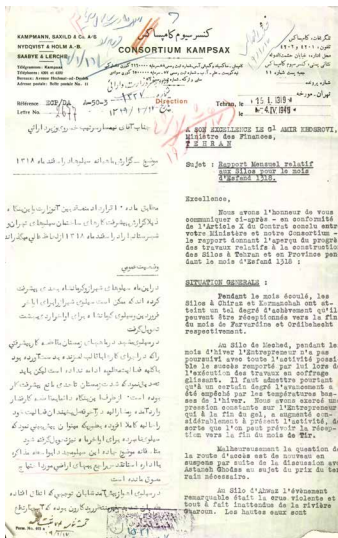


FIG. 4.12 Document in the Iranian National Archive revealing Consortium Kampsax.

Source: The Iranian National Archive.

Date: 1940. Accessed: January 2017.

4.5.1.1 Case Example I from American Contributions in the Petroleumscape of Ahwaz: Railways stations

The architectural impact of the Trans-Iranian Railway transcended the boundaries of the railway stations themselves, permeating the very fabric of Ahwaz's urban landscape. The establishment of the railway stations spurred the creation of the city's first grand urban square, an emblematic testament to Ahwaz's growing significance. This central square, situated in front of the central railway station, radiated with a vibrant atmosphere, serving as a bustling hub for both residents and visitors alike. Encircled by lively shops, charming cafes, and cultural venues, the square emerged as a vibrant epicentre for social interactions, commercial exchanges, and cultural festivities. Public events further animated the square, infusing it with the city's spirit and contributing to Ahwaz's dynamic allure.



FIG. 4.13 Ahwaz East Station.

Source: Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Accessed: February 2017.

Beyond the transformational influence on the railway stations and urban square, the introduction of the railway as a prominent axis within the city brought forth an array of urban activities and breathed new life into Ahwaz. The trajectory of the railway line within the cityscape necessitated substantial alterations in urban planning and landscape design along its path. The intersections of the railway with other major urban arteries, such as the river and main roads, gave birth to distinct urban

nodes that quickly became celebrated landmarks throughout Ahwaz. These iconic structures, including bridges and urban squares, played pivotal roles in shaping the city's physical identity and enhancing its visual appeal.

The urban development that unfolded along the railway's axis and the creation of these urban landmarks engendered a profound impact on Ahwaz's overall urban planning and spatial organization. The railway acted as a catalyst, fueling growth and development and facilitating the emergence of new neighbourhoods, commercial zones, and public spaces that intricately intertwined with the railway infrastructure. Its commanding axis, intertwined with the nodes formed at intersections with other urban arteries, not only guided the city's expansion but also bestowed a distinct visual character upon Ahwaz's architectural landscape. Moreover, the presence of the railway acted as a transformative force, propelling urban expansion and giving rise to new neighbourhoods in Ahwaz. The city experienced a surge in residential construction, with housing complexes, vibrant neighbourhoods, and bustling commercial districts sprouting up along the railway line. This symbiotic relationship between the railway and urban growth fostered a sense of connectivity, as the railway became an essential lifeline for transportation, commerce, and community interaction.



FIG. 4.14 Ahwaz Terminal Station.

Source: Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Access: February 2017.

In other words, the architectural impact of the Trans-Iranian Railway extended far beyond the railway stations themselves. It fostered the creation of a lively urban square, invigorated urban activities, and contributed to the evolution of Ahwaz's urban planning and spatial organization. The railway's prominent axis and the landmarks formed at its intersections shaped the city's growth, while the railway's presence acted as a catalyst for urban expansion and the emergence of new neighbourhoods and commercial areas. In the wake of the railway's arrival, Ahwaz flourished as a vibrant cityscape where architectural landmarks and interconnected urban nodes wove together a captivating tapestry of growth, culture, and community.

In 1933, a significant accident occurred to the Shah during the inaugural day of the royal train, which led to a notable shift in the contractors involved in

the construction of the Trans-Iranian Railway.³⁷⁵ The accident prompted the transformation of the construction consortium, resulting in the establishment of a cooperative venture known as “KAMPSAX.”³⁷⁶ This new consortium brought together construction companies from various countries, including Great Britain, Italy, Belgium, Czechoslovakia, Denmark, and Sweden. Under the leadership of KAMPSAX, the construction efforts focused on the challenging mountainous sections of the railway, which accounted for approximately 1,000 kilometres of the overall line. KAMPSAX further subcontracted numerous Austrian, German, and Italian companies to undertake the construction tasks within these sections. The southern parts of the railway, located in the Khuzestan region, presented particular challenges to the constructors. Ahwaz, situated over 1,000 kilometres from the capital, was characterized by rugged mountains and a torrid desert climate. The extreme temperatures, often reaching 40-50 degrees Celsius during the day, necessitated that construction work be carried out primarily at night. Such conditions demanded considerable efforts from the approximately 900 European workers and the 12,000 local workers involved in the project.

In an impressive display of efficiency and commitment, KAMPSAX completed the entire railway line by 1938, several months ahead of schedule and below the projected costs. This achievement underscored the collective capabilities and determination of the multinational consortium and marked a significant milestone in the realization of the Trans-Iranian Railway. Completing the railway line connected various regions of Iran and contributed to the nation's economic development and improved transportation networks. The railway became a vital artery for commerce, facilitating the movement of goods, people, and ideas across the country. The project's success served as a testament to the collaborative efforts, technical expertise, and relentless dedication displayed by the international teams involved in constructing the Trans-Iranian Railway. This project witnessed extensive international involvement, as indicated by the diverse locomotives used. Of the total 42 locomotives in Iran, the majority (29) were of German origin, followed by three from Britain, six from the United States, and four from Sweden. This international collaboration showcased the significant participation of foreign companies in the railway's construction between 1927 and 1938, elevating it to a project of global significance.³⁷⁷

³⁷⁵ Christensen, A. *Det Gamle og det Nye Persien*. København: Folkeoplysning Fremme. 1930. p.180.

³⁷⁶ Sadka, Nancy Leila. *German Relations with Persia, 1921-1941*. Ann Arbor, Mich.: University Microfilms International. 1988.

³⁷⁷ Ibid.

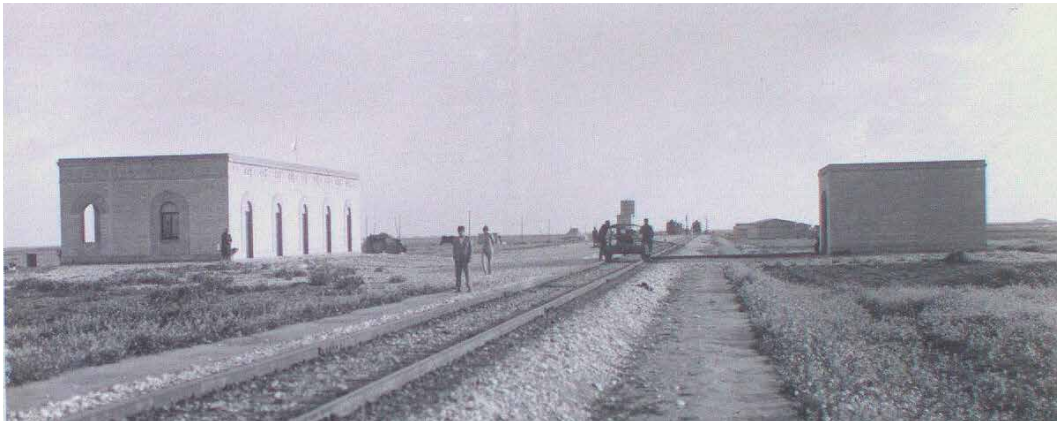


FIG. 4.15 Standard - Section House, Tool House, etc.

Source: *Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views*. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Access: February 2017.

Ahwaz's railway infrastructure underwent a new phase of development with changes in contractors and construction companies, bringing forth significant transformations in architectural styles. As American involvement decreased and European participation increased, the railway buildings in Ahwaz witnessed notable architectural shifts. Following the railway's opening, noteworthy developments emerged, including dedicated facilities for railway leaders, such as the establishment of the prestigious Railways' Club, catering to the social needs of the railway community. During this transformative period, the multinational consortium KAMPSAX, responsible for constructing the challenging mountainous sections of the railway, likely played a pivotal role in shaping these modernized structures. Their expertise and innovative design approach resulted in architectural features that set these buildings apart from their predecessors. Reflecting a more contemporary and

progressive aesthetic, the new railway buildings showcased the evolving nature of the project and the influence of international actors involved.

These architectural changes within Ahwaz's railway buildings serve as compelling evidence of the dynamic nature of the railway project and its profound impact on the city's architectural landscape. The infusion of European expertise and design principles breathed new life into the railway infrastructure, providing functional spaces for railway operations while symbolizing progress and modernity. These architectural transformations reflected broader shifts taking place in Iran during that era, where international collaboration and the influence of foreign expertise left an indelible mark on the country's architectural heritage, combining industrial architecture and modernity.

The significant changes in the socio-economic landscape of Ahwaz led to substantial urban growth and a transformation of the local labour market. This economic transformation attracted a large influx of rural migrants seeking employment opportunities and a better quality of life.³⁷⁸ As the railway project progressed, the demand for skilled workers and professionals increased, attracting individuals from various regions of Iran to contribute their expertise to the burgeoning cities along the railway line.³⁷⁹ While the influx of workers and professionals contributed to Ahwaz's rapid urbanisation, it also impacted local self-sufficiency. As more people migrated to the city to participate in the construction of the railway project and its opportunities, the reliance on local resources and the indigenous workforce decreased. The need for specialized skills and expertise often led to importing labour from other regions, which affected traditional self-sufficiency and local employment patterns.

To accommodate the growing workforce, labourer accommodations and settlements emerged in the vicinity of the railway buildings surrounding Ahwaz. These areas became hubs of activity, with temporary housing, dining facilities, and other amenities catering to the needs of the labour force. These settlements played a crucial role in supporting the construction efforts and facilitating the smooth functioning of the railway project. The presence of a diverse workforce from different regions of Iran in Ahwaz resulted in a rich tapestry of cultures and contributed to the city's cultural and social fabric. While it brought about economic opportunities and a sharing of knowledge and experiences, it also presented challenges in maintaining

³⁷⁸ Essad, Bey & Maerker-Branden, Paul & Branden, Elsa. *Reza Shah*. London: Hutchinson. 1938.

³⁷⁹ Ibid.

a balance between the influx of outsiders and the preservation of local identities and traditions.

As mentioned, the contributions made by different countries and companies advanced transportation infrastructure and left a lasting impact on Ahwaz's urban fabric. The construction of the Trans-Iranian Railway in Ahwaz catalysed urbanization and economic growth, reshaping the city's demographics and impacting local self-sufficiency. Surrounding the railway buildings, labourer accommodations, and settlements emerged, reflecting the transient nature of the workforce involved in the project and underscoring the dynamic and evolving urban landscape in Ahwaz during that period. This interplay between architecture, urbanization, and the railway project further exemplified the profound impact of the Trans-Iranian Railway, which not only shaped Ahwaz's physical and demographic transformation but also left a lasting imprint on the city's social and economic fabric.

The integration of modern architectural elements and the construction of essential facilities exemplify the enduring influence of the Trans-Iranian Railway on Iran's development and global relations. Beyond transportation and architecture, the awe-inspiring Trans-Iranian Railway transformed Iran's physical landscape, stimulated economic growth, facilitated cultural exchanges, and established Ahwaz as a vibrant regional centre. The railway became an emblem of progress and modernization, shaping the city's landscape and propelling it towards a thriving metropolis. It epitomized the transformative power of transportation infrastructure, inspiring architectural expressions aligned with the nation's aspirations and cultural identity.

4.5.1.2 Case Example II from American Contributions in the Petroleumscape of Ahwaz: The Black Bridge

Among the notable infrastructural achievements during the extension of the Trans-Iranian Railway, several bridges played a crucial role, particularly across the Karun River. One such prominent bridge was known as the "Black Bridge" or the "Steel Bridge," also known as "Pol-e Siah", which served as a vital link connecting the national railway to Shahpur Port during that time. It was a prominent architectural landmark that spanned the Karun River, connecting the two banks of the city.

Given the historical involvement of German industrial companies in railway bridge construction, this text suggests that the German engineering firm MAN (Maschinenfabrik Augsburg-Nürnberg) is a potential candidate for the

construction of the bridge in Ahwaz during the 1930s.³⁸⁰ MAN was responsible for the design and construction of the bridge, showcasing their expertise in bridge engineering at the time. Constructed in the early 1930s, the Black Bridge was an engineering marvel of its time. Its architecture reflects the influence of modernist design principles, characterized by clean lines and a functional aesthetic. The bridge showcases a combination of steel and concrete elements, which were commonly used in the construction of bridges during that era. The bridge stood as an impressive engineering feat. It spanned the Karun River with a length of approximately 1050 meters and a width of 6 meters. The bridge was supported by 52 metal constructional piles set on concrete foundations, firmly anchored into the Karun stone ground. The Black Bridge accommodated two railway lines, enabling the efficient passage of trains while also providing two pedestrian walkways of one-meter width for foot traffic. Additionally, controller stations were situated at both ends of the bridge, ensuring smooth operations and facilitating the safe passage of trains.



FIG. 4.16 Karun Railway Bridge.

Source: *Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views*. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Access: February 2017.

³⁸⁰ MAN, founded in 1758, initially focused on manufacturing machinery and industrial equipment. Over the years, they expanded their expertise to include engineering and construction services.

<https://www.deutsche-digitale-bibliothek.de/item/QY3OH7GWASECXGGHDPSTW3SRI5DNPA3N>.

Bazazzadeh, Hassan. *The Black Bridge of Ahwaz*. TICCIH Bulletin 80:11. 2018.



FIG. 4.17 The Railway Bridge Over the Karun: it is Built on the Foundation of the Ancient Dam.

Source: Iran and Persepolis. ArcRef: 36535, Barcode: 33091. BP Archives.

Date: 1925-26. Access: February 2017.

The significance of the Black Bridge extended beyond its functional purpose. It became a vital connection between the two sides of the city, playing a pivotal role in shaping the future urban expansion of the region. The bridge served as a catalyst for the growth and development of transportation networks and facilitated increased connectivity within the city and its surroundings. During World War II, the Black Bridge assumed even greater importance. It was used to transport petrol from Abadan to Russia to support the war effort, particularly aiding the Allied forces and their efforts. This pivotal role led to the bridge being titled the “Victory Bridge,” as its contributions played a part in the eventual triumph of the Allies in the war. Beyond its practical function, the Black Bridge held cultural significance for Iran. It became an emblem of the city’s identity and heritage, representing the resilience and progress of its inhabitants. It stood as a testament to the stability, engineering prowess, and historical significance associated with the construction of the Trans-Iranian Railway. Its sturdy construction, strategic location, and wartime contributions have left a lasting legacy, symbolizing the progress of Iran’s transportation infrastructure and its role in global historical events.

4.5.1.3 Case Example III from American Contributions in the Petroleumscape of Ahwaz: Labours Housing

In Ahwaz, the American construction teams implemented housing initiatives to accommodate the workers involved in the Trans-Iranian Railway project. These residential quarters, constructed with simplicity and functionality in mind, took the form of attached row houses. The design prioritized efficiency and affordability, providing bare living spaces for the workers and their families. These buildings aimed to meet the essential residential needs of the workers, offering modest and compact living spaces. The emphasis was placed on functionality rather than elaborate design. The architecture of these family quarters reflected a utilitarian approach, with minimal vernacular touches added to the design. One such architectural feature was the incorporation of arches above the windows, paying subtle homage to local architectural elements while maintaining a practical and straightforward aesthetic.

The construction of these family quarters demonstrated the commitment to providing suitable accommodation for the workers and their families amidst the ongoing railway project. While the residential quarters may have lacked extensive urban facilities, they served as a crucial provision for the workers during their time in Ahwaz. These modest homes provided a sense of stability and community, allowing the workers to focus on their roles in the railway construction while maintaining a semblance of comfort and domesticity.

The construction of these family quarters not only addressed the immediate housing needs of the workers but also left a lasting impact on the urban landscape of Ahwaz. The row houses, with their simple yet functional design, stood as tangible reminders of the transformative period when the Trans-Iranian Railway was being constructed, reflecting the human element and the collective effort that went into building this monumental transportation infrastructure. The modest architecture of these family quarters, with its subtle incorporation of local influences, added to the diverse architectural tapestry of Ahwaz, embodying the convergence of different cultures and design sensibilities within the city.



FIG. 4.18 Family Quarters No.2, Ahwaz.

Source: *Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views*. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Access: February 2017.

4.5.1.4 Case Example IV from American Contributions in the Petroleumscape of Ahwaz: Eight Bungalows

In contrast to the simple row houses provided for the workers, a different approach was taken to accommodate high-ranking European specialists and qualified Iranian personnel involved in the Trans-Iranian Railway project. These individuals, with their specialized skills and positions, required more sophisticated residential projects that could cater to their needs. One notable example is the “Eight Bungalows” complex, which stands as a significant architectural achievement in Ahwaz. This complex comprises eight remarkable buildings that were designed to harmonize with the local climate and reflect the traditional architectural style of the area. The buildings not only served as residential spaces but also symbolized the status and importance of the railway staff who resided in them. The “Eight Bungalows” complex represents a convergence of architectural excellence and functional design, providing the railway staff with an elevated standard of living. These structures, built in accordance with

the traditional architecture of Ahwaz, showcase the blending of European expertise and local aesthetics, resulting in a harmonious architectural ensemble. ³⁸¹

The historical significance of the “Eight Bungalows” complex is highlighted by its inclusion in the BP (British Petroleum) archive of the Oil Company. This archival presence suggests two possible scenarios regarding the complex. Firstly, it implies a transformation in the ownership of the bungalows, potentially transferring them from the Anglo-Persian Oil Company (APOC) to the railway staff. Secondly, it hints at the involvement of APOC in the construction or development of these exceptional residential buildings. Given the striking resemblance between these bungalows and the ones previously constructed by APOC, both scenarios appear to hold great plausibility. ³⁸²

These elegant residential buildings not only served as a testament to the importance of the railway project but also left a lasting architectural legacy in Ahwaz. The presence of such distinguished structures further enriched the city’s urban fabric, showcasing the diversity of architectural styles and reflecting the fusion of different cultural influences. The “Eight Bungalows” complex stands as a reminder of the collaboration between international specialists, Iranian professionals, and the oil industry, encapsulating the multifaceted nature of the Trans-Iranian Railway project and its impact on Ahwaz’s development and architectural landscape.

The “Eight Bungalows” complex and the broader architectural legacy left by the railway project in Ahwaz can also be linked to the petroleumscape concept. The “Eight Bungalows” complex, a product of collaboration between international specialists, Iranian professionals, and the oil industry, represented the fusion of cultural influences in Ahwaz. This multicultural aspect was a hallmark of many regions with a strong petroleumscape. In this way, the railway’s associated architectural developments were part of the larger petroleumscape in Ahwaz. They were interconnected elements in the urban fabric influenced by the presence of the oil industry. While the focus of this section may be on the railway, it’s essential to view it as an integral component of Ahwaz’s larger petroleumscape, which encompassed diverse architectural styles and reflected the global nature of the oil industry’s influence on the city.

³⁸¹ Persian State Railway from BunderShahpour, Ahwaz, Salehabad, to Tunnel, Sixty-Four views. ArcRef: 36183. Barcode: 32701. 1933. BP Archives.

³⁸² Dr Young’s Photographs: Persia Miscellaneous. ArcRef: 36144. Barcode: 32662. 1907-37. BP Archives



FIG. 4.19 The AIOC Bungalow at Ahwaz.

Source 1: ArcRef: 36183. Persian State Railway; BP Archive.

Source 2: Iran and Persepolis. ArcRef: 36535. Barcode: 33091. BP Archives.

Date: 1925-26. Access: February 2017.



FIG. 4.20 Shah's Bungalow, Ahwaz.

Source: Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Access: February 2017.

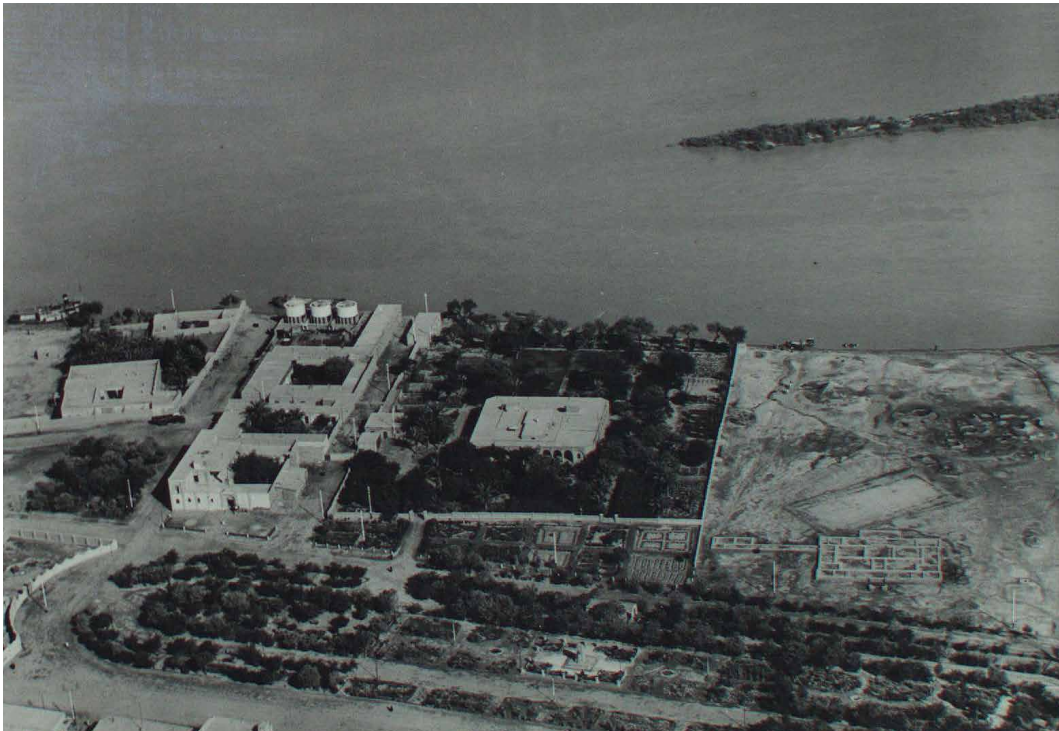


FIG. 4.21 The AIOC Bungalow at Ahwaz.

Source: Aerial Survey. ArcRef: 36524. Barcode: 33080. BP Archives.

Date: 1935. Access: February 2017.

4.6 Unconventional Legacies: The Enduring Impact of British Informal Colonial Architecture

4.6.1 Evolving Dynamics of petroleumscape: From APOC to AIOC

In 1932, a deep-seated disagreement arose between the Iranian government and the Anglo-Persian Oil Company (APOC), stemming from the belief that D'Arcy's concession, granted during the era of the unwise Qajar monarchy, did not serve Iran's national interests. Despite attempts at negotiation, tensions escalated to the point where the Company withheld Iran's rightful share of profits in 1932, prompting Iran to express its dissatisfaction.³⁸³ Reza Shah, eager to shift the nation's strategy towards consolidating national control over oil revenues, took decisive action by consigning the papers of the previous contract to the flames and dismantling the 1901 D'Arcy's Concession. Concurrently, APOC decided to change its management approach and took positive steps towards improving the conditions of Iranian employees. After three weeks of negotiations, a revised concession agreement, known as the new settlement, was signed on April 30, 1933. It was subsequently ratified by the national parliament on May 28, 1933. Persia officially became Iran with this new agreement, and APOC underwent a transformation, reemerging as the Anglo-Iranian Oil Company (AIOC).³⁸⁴

However, despite the aspirations of the Iranian nation for a more equitable contract, the terms of the new settlement leaned towards Britain's colonial interests. Compared to the previous D'Arcy concession, the financial terms of the revised agreement favoured Britain more than Iran. Under the D'Arcy Concession, Iran had a 10 per cent ownership in APOC, which was relinquished for a mere £1 million in the new settlement, equivalent to just 1 per cent of Iran's stock ownership. The cancellation of the D'Arcy Concession allowed Britain to deprive Iran of its ownership share in APOC and its subsidiaries, marking the first benefit for Britain. Furthermore, the new agreement relieved AIOC of the obligation to share its profits with Iran indefinitely. While the new contract initially suggested an increase in

³⁸³ Torfi, Abbas. *Modiran e Sanat e Naft e Iran " the managers of the Oil Industry of Iran"* 2004.

³⁸⁴ Mr Jameson's Visit to Persia. November/December 1931 ArcRef: 67519. Barcode: 63062. 1931. BP Archives.

royalty payments from the previous 16 per cent profit, in reality, Iran traded its permanent profit share for a flat and frozen income rate, which proved to be nothing more than an illusory step towards economic progress. Iran did not anticipate any oil price increases or the Company's future profits over the duration of the contract. Consequently, the Anglo-Iranian Oil Company profited immensely from this arrangement, while Iran's share amounted to less than 7 per cent each year.³⁸⁵

The extension of the concession period for an additional thirty-two years, surpassing the termination of the D'Arcy Agreement by twenty-eight years, was another facet of the revised agreement. This extension effectively updated the concession's duration for a new 60-year period. Furthermore, an expansive area of one hundred thousand square miles, believed to harbour significant oil potential, was added to the designated oil exploration zone. The Company gained exclusive rights to conduct oil operations within these areas, encompassing all possible oil fields in Iran. Moreover, under the 1933 concession, the Anglo-Iranian Oil Company enjoyed a thirty-year exemption from charges for export and import taxes imposed by the Iranian government. AIOC was also granted the freedom to import necessary facilities for its operations in Iran without incurring tax charges. Moreover, all oil product exports were exempted from taxation, further favouring the Company.

In summary, the 1933 concession agreement demonstrated a stark disparity between national aspirations and the outcome of negotiations. Iran's position was weakened financially, with its ownership share significantly reduced and its profits limited. The extended concession period and the inclusion of additional oil-rich territories further favoured the Anglo-Iranian Oil Company. These terms allowed the Company to curtail its payments to Iran, minimizing its obligations and maximizing its own gains.

The 1933 concession brought about significant changes in the laws and regulations governing the relationship between the Anglo-Iranian Oil Company (AIOC) and Iran.³⁸⁶ These new laws, however, diminished the authority of the Iranian court in adjudicating future conflicts between the Iranian state and the British Company as the primary shareholders.³⁸⁷ One of the key aspects addressed in these rules was land ownership. The Company was required to select the desired lands before 1938 and inform the Iranian government of its choices. This process

³⁸⁵ Majd, Mohammad Gholi. *Great Britain & Reza Shah : The Plunder of Iran, 1921-1941*. Gainesville, FL: University Press of Florida, 2001.

³⁸⁶ Yaghoubinejad, Ali. *Rais naft*, "the manager of Oil" 1994.

³⁸⁷ Torfi, Abbas. *Modiran e Sanat e Naft e Iran " the managers of the Oil Industry of Iran"* p78 , 2004. P 706

involved marking the designated lands on maps and submitting them to the Iranian government. If the national government had no objections to the proposed use of those areas for oil operations, it was obliged to accept the Company's request within three months. The government's silence would be interpreted as a positive response. In cases where the lands were privately owned, the Company had to engage in negotiations with the owners for the purchase, with the price being set at the prevailing local market rate. However, certain sites of religious or historical significance were not available for sale or use by the Company. Any lands not required for Iranian governmental public facilities could be transferred to the Company at no cost. If the government owned the lands, the Company had to purchase them at a fair price mutually agreed upon by both parties. The construction of railways and new ports also required specific permissions and agreements between the Iranian government and the Company. Additionally, the Company needed the Iranian government's authorization for telephone, telegraph, wireless telegraph, and air transport services. In the interest of safety, the Company was obligated to inform the Iranian government of any hazardous zones that required the relocation of inhabitants. If the Iranian government needed to transport military equipment or other goods, it committed to minimizing disruptions to the Company's operations and compensating for any potential damages. The Company was also granted free access to geological materials such as soil, limestone, stones, and other construction materials sourced from the lands.³⁸⁸

Another notable development resulting from the AIOC's presence was the Iranian state's legal protection of its employees. However, Reza Shah preferred hiring non-Persian officials and relied primarily on foreign specialists, whose expertise was indispensable. An incidental benefit for Iran was the opportunity to educate and train young Iranians who would eventually contribute to the country's oil industry. Yet, when evaluating the overall impact of this contract change on Iran's political and economic situation, Majd asserts that the 1933 Agreement amounted to a complete sell-out and considers it Reza Shah's most significant betrayal of Iran.³⁸⁹

The distribution of revenues and royalties generated by the Anglo-Iranian Oil Company underwent a significant shift during Reza Shah's monarchy, spanning from 1927 to 1941. Prior to this period, these funds were primarily allocated towards the military and, to a lesser extent, infrastructural development projects. However, under Reza Shah's rule, Iran's oil revenues, recognized as the nation's

³⁸⁸ The Anglo-Persian Oil Company Limited (APOC) Persian Compendium: Transport Department. ArcRef: 37066. Barcode: 33599. 1927. BP Archives.

³⁸⁹ Majd, Mohammad Gholi. *Great Britain & Reza Shah : The Plunder of Iran, 1921-1941*. Gainesville, FL: University Press of Florida. 2001.

most valuable economic asset, were not placed under the control of the Iranian government nor included in its regular budget. Instead, they were solely overseen by Reza Shah himself. This arrangement established a unique dynamic in which the management and utilization of the oil revenues fell under the personal purview of Reza Shah. The exclusion of these funds from the government's regular budget meant that they were subject to his direct supervision and decision-making. Consequently, the allocation and utilization of Iran's oil revenues were guided by Reza Shah's personal judgment and strategic considerations. This system, in which the control of oil revenues rested with the monarch rather than being integrated into the government's broader financial framework, had significant implications. It concentrated power in the hands of Reza Shah, granting him significant influence over the nation's most valuable economic resource. However, it also meant that the Iranian government had limited authority and oversight over allocating and managing these crucial funds.³⁹⁰

An examination of a new approach in Ahwaz reveals the unique requirements of the Iranian people and the need for the British experiment in modernization. AIOC recognized that allocating a small portion of the oil wealth could shape an ideal city that catered to the aspirations of the local population. These activities of AIOC, as highlighted by J. Ockman in her book "Architecture Culture, 1943–1968," significantly influenced architectural and urban policies, emphasizing a new functionalist approach.³⁹¹ As discussed by Norbert Elias in his book "The Civilizing Process: The History of Manners and State Formation and Civilization," architecture played a pivotal role in the representation of political and social progress. It served as a visible symbol of societal advancement and served as a significant measure for assessing the level of social esteem. The admiration and respect of the citizens were closely tied to their willingness to obey societal leaders and contribute effectively to the region's industrial development. In this postcolonial trial, AIOC aimed to create a city that not only met the functional needs of the population but also conveyed a sense of social progress and modernization. The architectural and urban policies implemented by the Company were intended to establish a harmonious relationship between the British experiment and the aspirations of the Iranian people. By investing in the city's development, AIOC sought to foster a sense of respect and loyalty among the citizens, encouraging their active participation in Ahwaz's industrial and societal endeavours. In other words, the postcolonial approach adopted by AIOC in Ahwaz aimed to address the specific requirements of the Iranian people and the need for post-modernization. By leveraging the wealth generated

³⁹⁰ Ibid.

³⁹¹ Ockman, J. *Architecture Culture, 1943–1968*. New York, Columbia University Press/ Rizzoli. 1993. p. 13.

from the oil industry, the Company embarked on architectural and urban initiatives that aligned with new functionalist principles. The role of architecture as a symbol of progress and social esteem further reinforced the importance of these initiatives in shaping the city and fostering societal cohesion.³⁹²

The British approach continued to endure even after the removal of Reza Shah at the conclusion of World War II., partially due to his collaborations with Germans. Furthermore, the British solidified their control by placing Reza Shah's son on the throne, a position he held until the momentous oil nationalization event in 1953. As the youthful Mohammad Reza Shah Pahlavi assumed the mantle of leadership, it became evident that external forces eclipsed his authority. He had received a comprehensive education in various European countries, fostering a distinct character that diverged from his father's. The prevailing circumstances provided a golden opportunity for the British Empire to expand its dominion over the abundant Iranian oil fields. Unchallenged and unhindered, the Oil Company capitalized on this favourable moment to consolidate its power within the oil-rich lands, establishing itself as the preeminent landowner in the region. With a stranglehold on the central territories, the Company wielded absolute authority in shaping the urban landscape, constructing structures that served its own hegemonic interests. In this pursuit, it prioritized the welfare of its British employees, perpetuating a trend of favouritism that further underscored its control.

However, this state of affairs ignited a groundswell of national political movements spearheaded by Iranians who sought to reclaim their rightful share of the oil wealth. From the mid-1940s to 1951, these movements gained momentum, culminating in the official nationalization of Iranian oil. Faced with mounting pressure, the British embarked on a campaign to pacify Iranian employees, quelling any potential unrest that could jeopardize their vested interests in Iran's oil. Consequently, their plans and endeavours during this period underwent a profound shift from their initial stance in the early 1940s. The British, compelled to safeguard their position, undertook a strategic recalibration as they recognized the need to assuage the concerns of the Iranian workforce. Therefore, the trajectory of their construction and development projects experienced setbacks and deviations from their earlier intentions. The unfolding events and the burgeoning demand for justice and autonomy instigated a profound transformation in the relationship between Britain

³⁹² Ahrari, M. E. *Change and Continuity in the Middle East : Conflict Resolution and Prospects for Peace*. London: Palgrave Macmillan Limited. <https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=5661758>. 2016. P22

Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, 04. London: Routledge . 2010. P121

Criver, Peter, and Vikramaditya Prakash. *Colonial Modernities : Building, Dwelling and Architecture in British India and Ceylon*. The Architext Series. London: Routledge. 2007.

and Iran, signalling a turning point in the struggle for control over the nation's oil resources.



FIG. 4.23 Railway Bridges in Ahwaz in different styles. This is an original 1937 photogravure of the railway bridge over the Karun River near Ahwaz, Khuzestan Province, Iran (Persia).

Source: Photograph by Axel von Graefe.

Date: 1937. Accessed: February 2017.

4.6.2 The Dynamics of Landownership: AIOC's Impact on Ahwaz's Urban Landscape

In 1938, the Anglo-Iranian Oil Company (AIOC) approached the Ahwaz “Kholesat” Office with a request to acquire specific parcels of land.³⁹³ AIOC claimed that these unused lands should be transferred to the Company without any financial compensation. However, this proposal diverged from the original agreement between AIOC and the Iranian State, leading to the subsequent rejection of the request. The Ahwaz “Kholesat” Office, represented by the manager of the Oil Incomes Office, conveyed the rejection to AIOC on behalf of the Iranian authorities. At the same time, the Ministry of Foreign Affairs (F.A.) voiced its strong opposition to the ceding of the lands to the Company. However, the situation became more complex as the lands in question were already occupied by the United States Army due to the ongoing war. As a result, the Ministry of Foreign Affairs found itself in a delicate position, as it needed to cooperate with and support the U.S. Army until the conflict's conclusion. This circumstance led to an understanding that Iran would not take any actions contrary to the interests of the U.S. Army unless AIOC obtained the necessary agreement from the military authorities.³⁹⁴

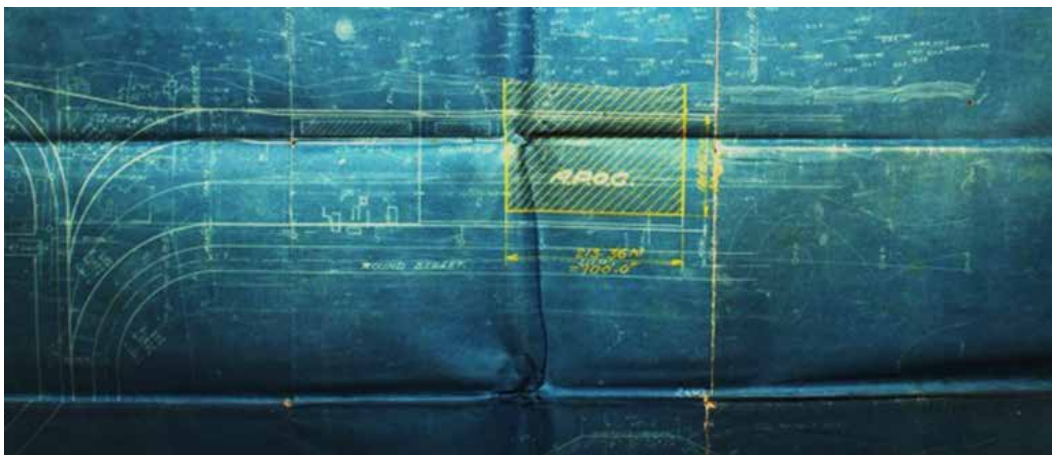


FIG. 4.24 Proposed layout of new Ahwaz. Maps Showing AIOC Properties & Land Purchases.

Source: *Ahwaz Land Purchases*. ArcRef: 102204. Barcode: 84347. BP Archives.

Date: 1932. Accessed: February 2017.

³⁹³ Source: Iranian national archives.

³⁹⁴ General Plan; Working Drafts. ArcRef: 9254. Barcode: 8197. 1948. BP Archives.

Land Acquisition Ahwaz. ArcRef: 68939. Barcode: 63971. 1933-47. BP Archives.

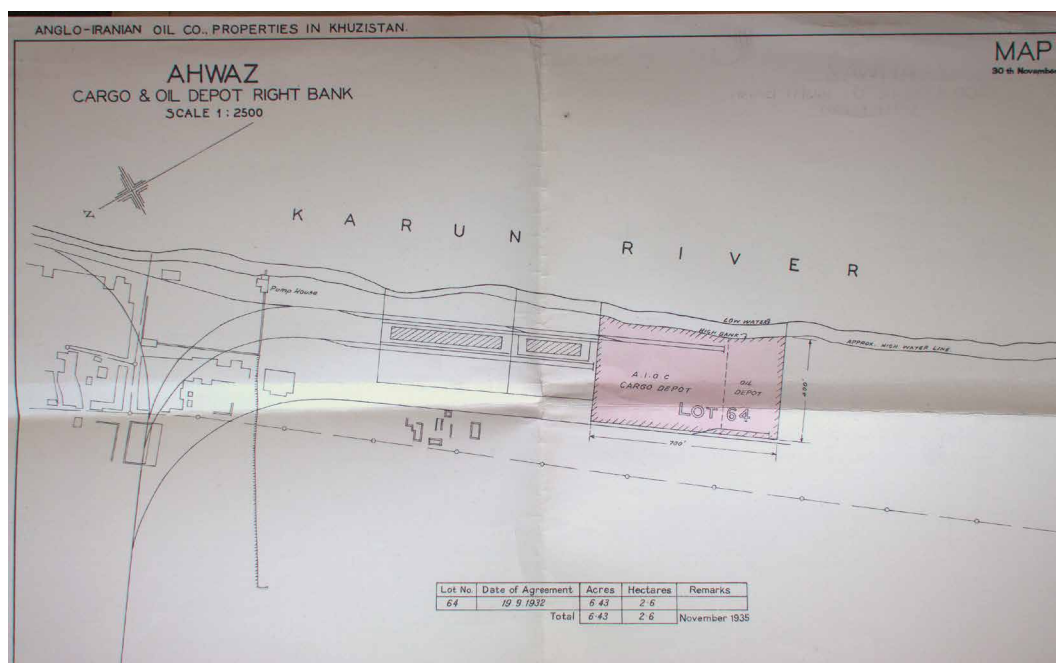


FIG. 4.25 Ahwaz Cargo & Oil Depot Right Bank.

Source: ArcRef: 102204. Ahwaz Land Purchases. Barcode: 84347.

Date: 1935. Accessed: February 2017.

Consequently, the Ministry of Finance assumed responsibility for handling the necessary procedures related to the land dispute. Their involvement aimed to facilitate the resolution between AIOC and the Iranian government. In 1946, as negotiations progressed, AIOC made an offer to transfer approximately 26.88 acres of land for the construction of 1,000 tiny houses intended for labourers associated with the oil industry. This proposal aimed to provide housing solutions and improve the living conditions of the labour force. After careful consideration, a decision was made to separate the designated lands for the labourer housing project from the remaining portions. The separated lands were then allocated to AIOC as part of the agreed-upon session, enabling the Company to utilize the land for its operations.³⁹⁵

³⁹⁵ 39 Sanads and Title Deeds for land at Ahwaz, Abadan, Southern Area. ArcRef: 100516. Barcode: 82597. 1942-3. BP Archives.

Ahwaz Land Purchases. ArcRef: 102204. Barcode: 84347. 1909-32. BP Archives.

The intricacies of the land acquisition process underscored the complex dynamics that characterized the relationship between AIOC and the Iranian government. The presence of foreign military forces, the constraints imposed by the ongoing war, and the need for collaboration among different government ministries further compounded the negotiations. Ultimately, the land dispute resolution reflected the complexities inherent in the interaction between AIOC and the Iranian state during this period.³⁹⁶

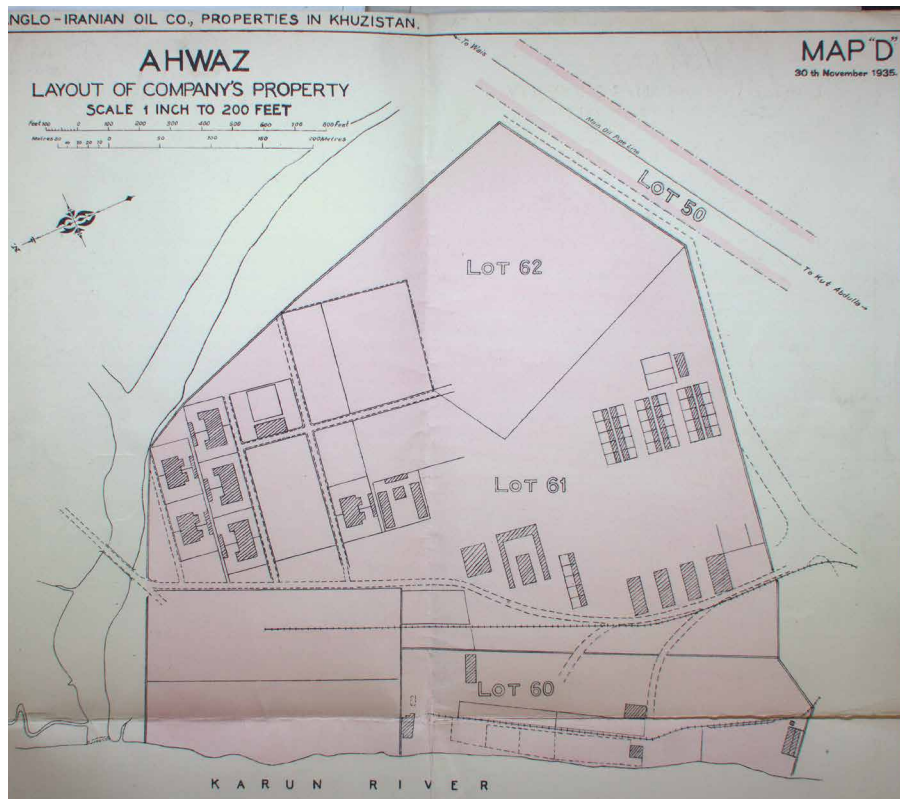


FIG. 4.26 Layout of Company Property in Ahwaz.

Source: Middle East Oil Development. ArcRef: 134844C. Barcode: Z01622274. 1956. BP Archives.
Date: 1956. Accessed: February 2017.

³⁹⁶ Resume of Construction in hand at the time of the Evacuation, August, September 1951. ArcRef: 72168. Barcode: 65873. 1951. BP Archives.
Forward Programmes. ArcRef: 72339. Barcode: 66004. 1944-50. BP Archives.

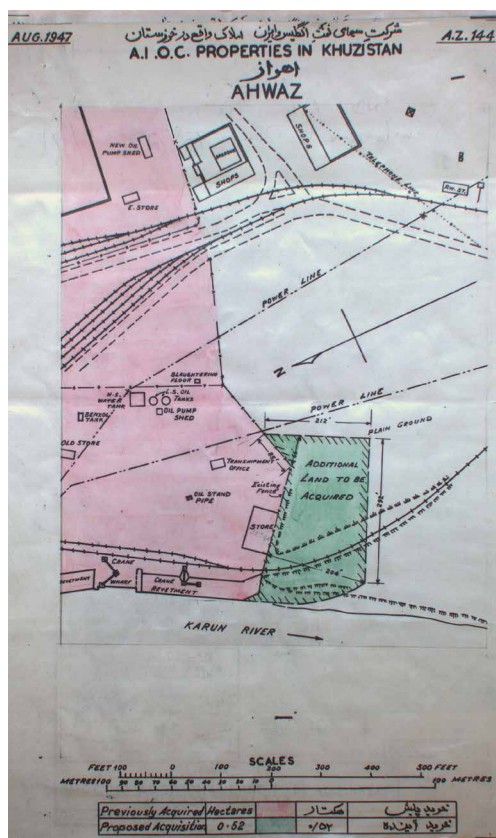
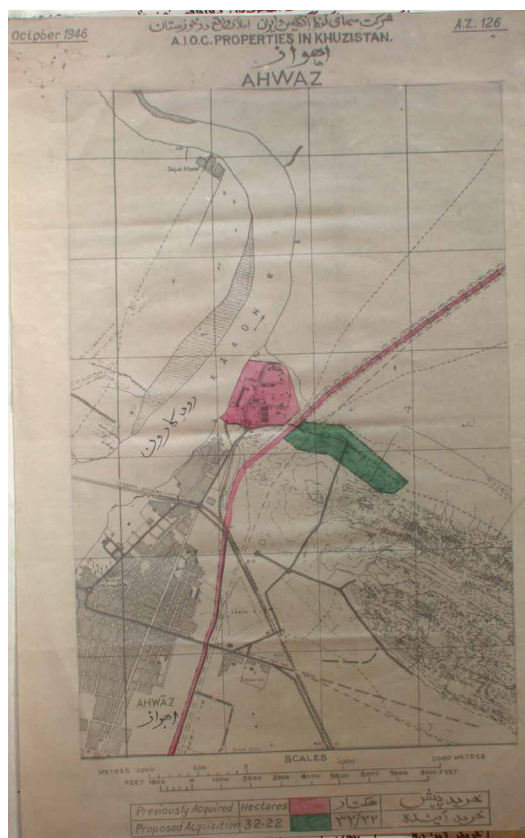


FIG. 4.27 Land Acquisition Map.

Source: Land Acquisition Ahwaz. ArcRef: 68939. Barcode: 63971. BP Archives.

Date: 1946. Accessed: February 2017.

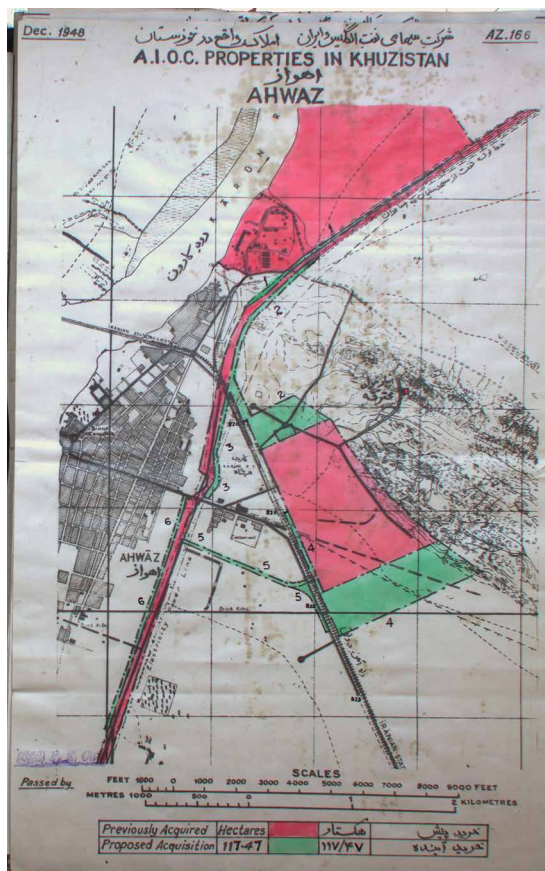
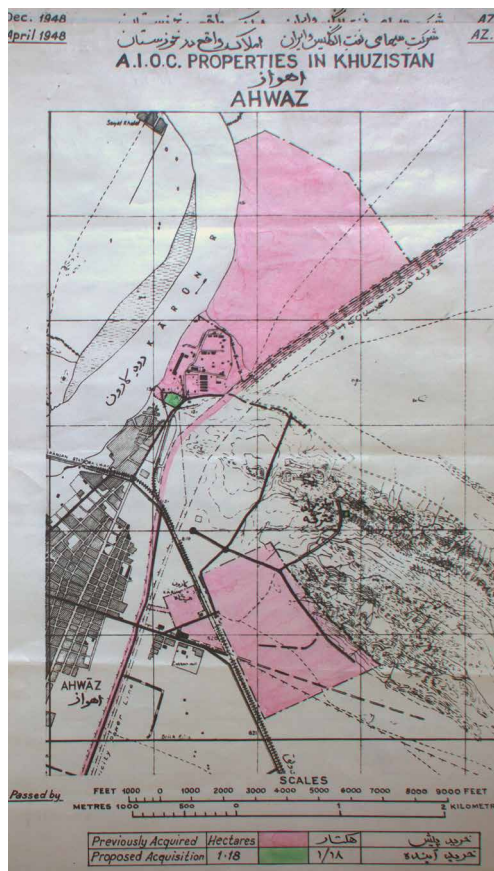


FIG. 4.28 Land Acquisition Map.

Source: Land Acquisition Ahwaz. ArcRef: 68939. Barcode: 63971. BP Archives.

Date: 1948. Accessed: February 2017.



FIG. 4.29 Land Acquisition Map.

Source: Land Acquisition Ahwaz. ArcRef: 68939. Barcode: 63971. BP Archives. Date: 1933-1947.
Date: 1948. Accessed: February 2017.

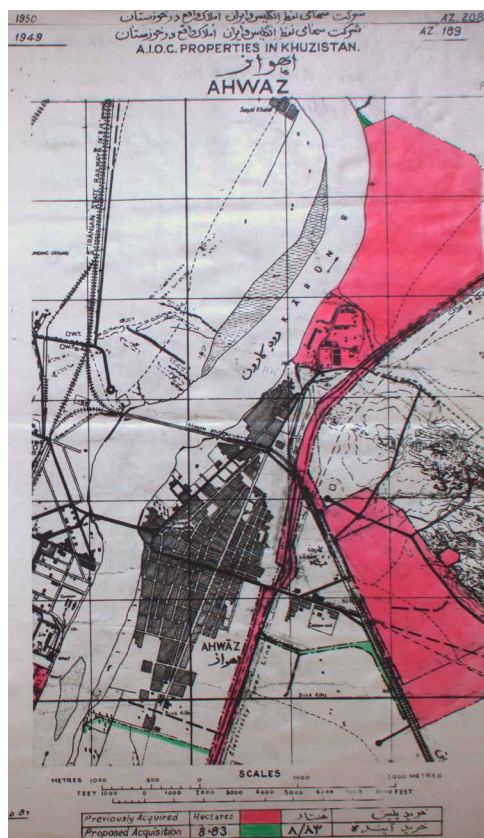
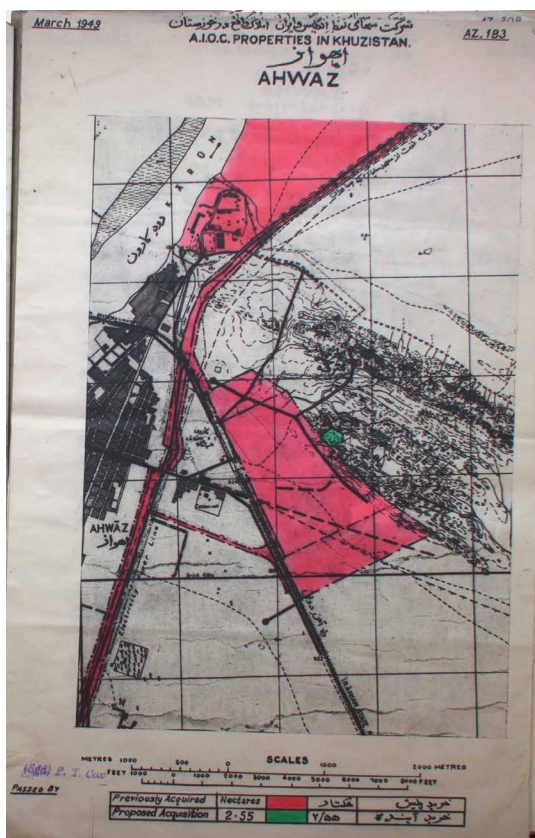


FIG. 4.30 Land Acquisition Map.

Source: Land Acquisition Ahwaz. ArcRef: 68939. Barcode: 63971. BP Archives. Date: 1933-1947.
 Date: 1949. Accessed: February 2017.

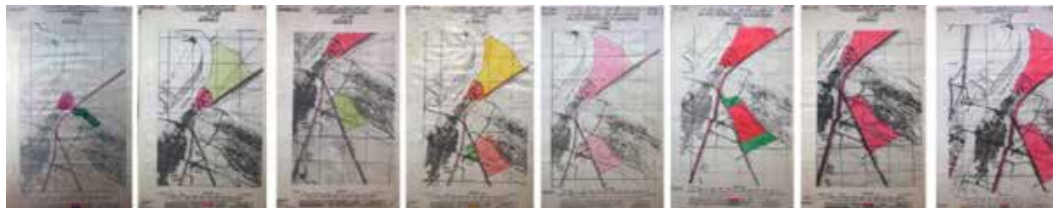


FIG. 4.31 A Selection of Land Acquisition Maps.

Source: Land Acquisition Ahwaz. ArcRef: 68939. Barcode: 63971. BP Archives.
 Date: 1933-1947. Accessed: February 2017.

Urban Transformation: The Evolution of Ahwaz's petroleumscape as a Key Base for Fields' Operations (1941-1951)³⁹⁷

During the early twentieth century, architecture played a crucial role as a tool for industrial production for the Anglo-Persian Oil Company (APOC). This period witnessed a global architectural trend heavily influenced by the philosophical principles of Rationalism. The rise of the modern movement propelled the Company to focus on innovative construction techniques and materials, prioritising functional building designs. The aim was to create a more efficient urban environment that would accommodate the needs of the Company personnel and enhance their productivity. AIOC managers believed that through architectural modernization, they could effectively drive societal progress. In line with the prevailing architectural practices worldwide, the Company embraced the concept of standardized housing.

However, as Kahina Amal Djiar aptly states, the legacy of the Modern Movement was characterized by a tendency to overlook cultural aspects in architectural production.³⁹⁸ In their pursuit of efficiency and functionality, the Company's approach sometimes neglected the cultural context and local traditions, prioritizing a uniform aesthetic that adhered to the principles of modernism. This emphasis on standardized designs was part of a broader movement that aimed to streamline and rationalize the built environment. The focus was on creating efficient and practical spaces that could meet the specific needs of the Company's workforce. While this approach yielded some positive outcomes in terms of functionality and efficiency, it also raised questions about the preservation of cultural identity and the integration of local architectural traditions.³⁹⁹

It is important to note that the Company's architectural endeavours were shaped by its belief in the transformative power of modernization. They viewed architecture as a means to propel societal advancement and facilitate the transition towards a more modern and developed society. However, the exclusive focus on functional aspects and the disregard for cultural considerations reflected the prevailing attitudes of the time. As the Company embraced the principles of the modern movement and pursued standardized housing designs, it inadvertently contributed to a shift away

³⁹⁷ The Development of Ahwaz as a Base for Fields Operations. ArcRef: 49689. Barcode: 46049. 1947. BP Archives.

The Development of Ahwaz as a Base for Fields Operations. ArcRef: 52565. Barcode: 46049. 1947. BP Archives.

³⁹⁸ Djiar, Kahina Amal. "Locating Architecture, Post-Colonialism and Culture: Contextualisation in Algiers." *The Journal of Architecture* 14 (2): 161–83. 2009. <https://doi.org/10.1080/13602360902867392>.

³⁹⁹ Some Budgetary Development on the revenues of the Ahwaz Municipality. ArcRef: 68932. Barcode: 63964. 1943–5. BP Archives.

from the rich cultural heritage and architectural diversity of the region. The impact of this approach on the built environment and the local communities should be viewed within the broader context of the global architectural discourse of that era.

During the initial stages of the Anglo-Persian Oil Company's activities in Ahwaz, significant challenges existed in envisioning the city's long-term development and planning.⁴⁰⁰ Establishing a comprehensive town planning scheme was a formidable task, as the future growth and expansion of the area were difficult to predict accurately. As a result, the formulation of a well-structured city plan proved to be nearly impossible. The locations designated for the Company's operations in Ahwaz were essentially uninhabited, lacking a pre-existing urban framework. This absence of an established community and infrastructure posed a unique set of challenges in terms of urban development. Consequently, the initial developments in Ahwaz followed an ad hoc and spontaneous approach, reflective of a town established in close proximity to the Company's activities. The Company's focus on meeting its own operational needs and the absence of a pre-existing urban fabric contributed to the city's organic and often uncoordinated growth. This approach allowed for greater ease of development and control by the Company, ensuring that the infrastructure and amenities catered to their specific needs. In the absence of a comprehensive town planning scheme, the growth of Ahwaz unfolded in a manner dictated by the Company's immediate requirements and priorities. This haphazard approach was characteristic of a city shaped primarily by the Company's operational necessities rather than a carefully orchestrated urban vision. As a result, the early developments in Ahwaz exhibited a degree of disorder and lack of cohesive planning, with limited consideration for long-term sustainability and overall urban design.

Following the conclusion of World War II, the global demand for oil experienced a significant surge. By 1947, the production rate of the Anglo-Iranian Oil Company (AIOC) had doubled compared to pre-war levels, driven by the discovery of new oil fields. Bolstered by these newfound financial profits, the Company solidified its position on the global stage. During this period, the AIOC took advantage of the weakened position of the young Shah and the Iranian National State. It reneged on its promises made in the 1933 concession with Reza Shah and established itself as the dominant power in the region, focusing primarily on building modern facilities for its British employees. With increased production and financial stability, the architecture of the AIOC began to embody a distinct sense of control and authority. The Company recognized the need for better management of the expanding industry and sought to establish a central location with easier access to the oil fields.

⁴⁰⁰ The Development of Ahwaz as a Base for Fields Operations. ArcRef: 52565. Barcode: 46049. 1947. BP Archives.

Evidently, the previous headquarters in Masjed-I-Soleyman (M.I.S), the initial centre of the Khuzestan oil cluster, was no longer suitable for their evolving needs. As a result, the decision was made to transition the headquarters from M.I.S. to Ahwaz because of its essential role as a transportation hub in the petroleumscape. The choice of Ahwaz as the new centre was influenced by its water connection to Abadan and its railway links to Khorramshahr and Shahpur Port. British planners recognized the opportunities offered by Ahwaz and saw the potential to create a new hub for industry management. In line with this vision, British planners embarked on the development of a new centre for industry management in Ahwaz. This endeavour aimed to consolidate the Company's operations, enhance control over the region, and facilitate more efficient coordination between different departments. The construction of modern facilities and infrastructure in Ahwaz became a priority, reflecting the Company's determination to establish a strong foothold in the region.

The transformation of Ahwaz into a centre for industry management represented a significant shift in the city's urban fabric and economic landscape. It marked a crucial chapter in the city's history and its relationship with the Anglo-Iranian Oil Company. It not only solidified the AIOC's control over the oil industry but also brought about changes in the city's architectural and urban design. As the new headquarters took shape, Ahwaz began to witness the emergence of modern industrial complexes, administrative buildings, and support facilities that reflected the Company's dominant presence. The architectural and urban developments during this period played a pivotal role in shaping Ahwaz's physical and economic landscape, establishing it as a key hub in the global oil industry.⁴⁰¹

Towards the end of the 1930s, the Anglo-Iranian Oil Company (AIOC) attracted a large influx of labour from various regions of Iran and the Gulf to the oil cities, which shows another aspect of the petroleumscape's expansion. The rapid growth of the company's operations necessitated a significant workforce, leading to an urgent need for proper accommodation and provisions. However, AIOC had made little effort to address the issue of shelter and sustenance for the growing number of workers. While it was argued that AIOC was not directly responsible for housing and feeding all the labourers, the company could not dissociate itself from the problem. After all, it was AIOC that had brought in a substantial number of workers, thus contributing to the housing crisis. The situation was dire, with hundreds of workers living in tents provided by the company. The inadequate provision of temporary or permanent

⁴⁰¹ A Report to consider the creation of Ahwaz as a base for field operation. It was recognized that M.I.S was not the most suitable location for field management and as a location for the regional headquarters. The Development of Ahwaz as a Base for Fields Operations. ArcRef: 52565. Barcode: 46049. 1947. BP Archives.

housing barely scratched the surface of the severe problems faced by those without a roof over their heads, particularly during rainy conditions. The visible presence of people sleeping in parks and other open spaces every night raised concerns among local governors and AIOC representatives regarding the potential for future social issues. The company faced the risk of labourers refusing to endure the difficult living conditions and opting to return to their places of origin. Such a scenario would lead to a severe labour shortage, impeding the progress of ongoing projects. Recognizing the pressing need for a solution, AIOC acknowledged that providing permanent accommodation was crucial. As an initial step, the company decided to construct temporary houses using materials such as mud brick, thatch-board, or sandbags. While this was a stopgap measure, more comprehensive and lasting actions had to be undertaken.⁴⁰² By preparing permanent housing for employees with longer service periods, AIOC aimed to create vacant temporary spaces in the towns, thus alleviating the housing shortage for newcomers. This strategic approach sought to address the immediate needs of the workforce while paving the way for future improvements in living conditions.

The decision to prioritize permanent housing development demonstrated AIOC's recognition of its responsibility to provide adequate accommodations for its employees. It also reflected an understanding of the potential consequences of neglecting the issue in terms of labour retention and social stability. The company's commitment to resolving the housing crisis marked a crucial step in ensuring its workforce's well-being and satisfaction and maintaining the smooth progression of its operations.

The pervasive social divisions within the districts of Ahwaz generated significant dissatisfaction among the local population and the national government. The discontentment reached a point where there was a real and imminent risk of oil nationalization in Iran. Recognizing the gravity of the situation, AIOC took proactive measures to address the concerns and appease the nationalist sentiment. One of the key responsibilities of the national State was to ensure the construction of suitable offices and residences for government officials, along with the provision of necessary amenities. AIOC, in line with the growing influence and power of national actors within Iran, embarked on new urban initiatives. The company understood that it had no choice but to address the growing irritation among nationalists and work towards establishing a more harmonious relationship with the local community and the government. By engaging in these urban and architectural endeavours, AIOC aimed to demonstrate its commitment to the development and well-being of Ahwaz.

⁴⁰² Housing and Feeding of Labour. ArcRef: 72350. Barcode: 66015. 1938. BP Archives.

The construction of adequate offices and residences, coupled with the provision of essential amenities, was seen as a tangible effort to improve living conditions and meet the expectations of the local population. Furthermore, these initiatives were crucial in fostering a positive relationship with the national State, which played a vital role in shaping the future of the oil industry in Iran. AIOC's willingness to invest in urban activities reflected its recognition of the need to integrate and align its operations with the Iranian people's and government's aspirations. It was a strategic move to mitigate tensions and ensure a more amicable atmosphere conducive to productive collaboration. By addressing the concerns of nationalists and actively participating in the urban development of Ahwaz, AIOC sought to build trust, strengthen partnerships, and secure its position in the country. In the face of mounting pressure for oil nationalization, AIOC's efforts to contribute to the urban landscape and support the national State's initiatives were aimed at creating a more balanced and mutually beneficial relationship. The company acknowledged the importance of fostering a harmonious environment that would safeguard its interests and contribute to the overall progress and prosperity of Ahwaz and Iran as a whole.

As mentioned above, in a strategic move to avoid oil nationalization and maintain its advantageous position in Iran, AIOC embarked on new investments aimed at improving urban facilities for the oil fields. Recognizing the need to strengthen its relationship with the local community and align with the aspirations of the national State, the Company sought to establish economic councils and enhance supplies in the region. The colonial cities created by AIOC were characterized by a lack of unity among the Company's actors. In order to navigate the evolving socio-political landscape, the Company had to reconsider its initial approach and acknowledge the importance of accommodating diverse social groups based on national and economic hierarchies. This led to a shift in their mindset, prompting them to conduct research on staff and labour relations, seeking ways to improve working conditions and foster better relationships with employees. As the 1940s drew to a close, AIOC made significant efforts to cater to the needs of both Iranian and British employees, a decision that deviated from their initial stance towards city development. This inclusive approach reflected the importance of providing adequate facilities and opportunities for all workers, regardless of nationality. By investing in the well-being and advancement of Iranian employees, AIOC aimed to foster a more inclusive and harmonious environment within the company and the broader community. The decision to build or plan infrastructure for Iranian employees highlighted the Company's evolving understanding of the local context and its commitment to creating a more equitable and balanced society. This shift in attitude demonstrated a willingness to adapt to the changing dynamics and aspirations of the Iranian people, recognizing their rightful place within the urban fabric of Ahwaz. In summary, AIOC's investments in improving urban facilities and addressing social hierarchies reflected

a strategic approach to avoiding oil nationalization and maintaining its favourable position in Iran. By prioritizing employee relations and inclusivity, the Company sought to build a stronger foundation for cooperation and secure its long-term interests in the region.

The town planning efforts in Ahwaz, mirroring the model established in Abadan, were marked by meticulous attention to detail and a comprehensive approach. Various reports and sketch plans were prepared gradually, forming parts of a cohesive and comprehensive town planning scheme for the area. These reports delved into crucial aspects such as road networks, pavements, gardens, open spaces, water supply, electricity, and sewage and surface water drainage systems. The Company, recognizing the significance of these infrastructural elements, outlined specific measures it intended to undertake voluntarily. The accompanying explanatory notes provided in-depth details and specifications, outlining the Company's planned interventions in the town planning process. These measures were designed to create a well-functioning urban environment conducive to the needs of the employees and residents. The comprehensive planning approach aimed to address critical aspects of urban life, ensuring essential services and amenities. The Company demonstrated its commitment to creating a harmonious and liveable city by creating a working draft of a general plan. This approach played a vital role in attracting and retaining suitable employees, as it provided a well-designed and well-equipped environment that met their needs. By incorporating elements such as road infrastructure, landscaping, water supply, and sanitation systems, the Company sought to enhance the quality of life in Ahwaz and create a conducive environment for its workforce.⁴⁰³ The town planning efforts, guided by the comprehensive scheme, demonstrated the Company's recognition of the importance of urban infrastructure and amenities. By proactively addressing these aspects, AIOC aimed to establish Ahwaz as a thriving and well-organized city, contributing to the overall success of its operations and the satisfaction of its employees.⁴⁰⁴

As Ahwaz experienced rapid industrial development, the well-being and welfare of Anglo-Iranian Oil Company (AIOC) employees and their families became a priority. Recognizing the importance of providing adequate housing and amenities, the Company focused on civic developments within the province of Khuzestan. Drafts and notes from 1948 outlined the measures that the Company undertook to cater to the needs of its workforce and their families. Education was a key aspect of the Company's efforts. AIOC established educational facilities and prioritized the

⁴⁰³ General Plan; Working Drafts. Arcef: 9254. Barcode: 8197. 1948. BP Archives.

⁴⁰⁴ Ibid.

training and education of its employees and their children. By providing access to quality education, the Company aimed to foster the growth and development of its workforce, ensuring a skilled and capable workforce for the future. Additionally, the provision of medical facilities was a significant concern. AIOC invested in healthcare infrastructure to ensure that its employees and their families had access to essential medical services. By establishing medical facilities, the Company sought to promote the well-being and health of its workforce, further enhancing their overall quality of life.⁴⁰⁵ Housing was another crucial aspect addressed by AIOC. The Company built houses for its staff, considering various scales, types, and facilities available in each building. This approach allowed the Company to accommodate its employees' diverse needs and preferences, providing them with suitable living spaces and amenities, an example of the ancillary petroleumscape.⁴⁰⁶

Moreover, AIOC extended its efforts beyond its own centres of operations. Recognizing the importance of creating favourable conditions for its employees and their families, the Company contributed to developing and improving neighbouring towns. This included the establishment of stores, workshops, repair services for mechanical transport, and construction and maintenance plants. These developments not only benefited AIOC employees but also had a positive impact on the surrounding communities, fostering economic growth and improving living standards. The comprehensive approach taken by AIOC in providing housing, education, healthcare, and other social amenities demonstrates the Company's commitment to the well-being and welfare of its employees. By creating a conducive and supportive environment, AIOC aimed to ensure the satisfaction and productivity of its workforce, contributing to the overall success of its operations in Ahwaz.⁴⁰⁷

⁴⁰⁵ Sir William Fraser's Visit to Iran: October to December, 1945. ArcRef: 70998. Barcode: 65080. 1946. BP Archives.

⁴⁰⁶ Fields Miscellaneous, DIK Fields Railway, Pipeline, Tembi Power and Pumping Stations, Ahwaz, Darquain Pumping Station, Kut Abdullah Pumping station, Kut Abdullah Bick Klins, Abadan, General Views. ArcRef: 78026. Barcode: 69864. 1946-51. BP Archives.
 Fields Central M.T. and Mobile Plant Workshops – Ahwaz. ArcRef: 10165. Barcode: 8873. 1949. BP Archives.
 Reconnaissance of Ahwaz – Naft Khaneh Pipeline Route. ArcRef: 49686. Barcode: 46046. 1927. BP Archives.
 Pipeline vol 17 Ahwaz Workshops. ArcRef: 53970. Barcode: 50090. 1927. BP Archives.
 Section 3 – Pipeline Vol 17 Ahwaz Workshops. ArcRef: 53970. Barcode: 50090. 1927. BP Archives.
 Reconnaissance of Ahwaz – Naft Khaneh Pipeline Route. ArcRef: 49686. Barcode: 46046. 1927. BP Archives.
 Fields Miscellaneous, Ahwaz, Darquain Pumping Station, Kut Abdullah Pumping Station, Kut Abdullah Brick Klins. ArcRef: 78026. Barcode: 69864. 1946-51. BP Archives.
 No 1. Ahwaz Town, Main Sewer (left Bank) ArcRef: 44000/001. Barcode: Z01586008. 1947. BP Archives.
 Ahwaz and S.E. Fields – Plans 1951. ArcRef: 52899. Barcode: 48848. 1951. BP Archives.

⁴⁰⁷ Abadan and Fields: House Types. ArcRef: 53971. Barcode: 50091. 1949. BP Archives.

As AIOC continued its expansion and development in Ahwaz, the Company embarked on an extensive land acquisition process from the Iranian government. Year after year, AIOC acquired new parcels of land with the intention of developing them for various purposes. The Company gradually emerged as the city's principal landowner by the late 1940s. The strategic acquisition of land allowed AIOC to assert its control and influence over the entire city and its inhabitants. By occupying and purchasing significant portions of land, the Company gained substantial power and authority in shaping the urban landscape and determining the direction of the city's growth. However, AIOC's control over the land was not without its challenges. The Company had to navigate various issues related to its own political expediency, the need for staff accommodation, and social integration. Balancing these factors was crucial to maintaining a harmonious relationship between AIOC and the local community. The acquisition of land by AIOC not only solidified its position as a dominant force in Ahwaz but also presented opportunities and challenges for the Company. While the control over land provided AIOC with significant authority, it also required careful consideration of the social, political, and practical implications associated with developing and using the acquired land. In summary, AIOC's land acquisition efforts in Ahwaz were driven by the Company's expansion plans and the need for strategic development. AIOC gained control over the city's physical space by becoming the principal landowner. Still, this authority was responsible for addressing various considerations such as staff accommodation, social integration, and the broader political context.⁴⁰⁸

The architect entrusted with fulfilling the Company's vision was James M. Wilson, who had previously prepared the initial master plan for the city of Abadan.⁴⁰⁹ Wilson was appointed to undertake the novel and ambitious architectural exercise in collaboration with AIOC, recognising the importance of creating a modern and well-equipped urban environment. James M. Wilson played a pivotal role in conceiving and developing the unique architectural vision for the Company's facilities and infrastructure in Ahwaz. His expertise and innovative ideas were instrumental in shaping the city's expansion and ensuring the provision of all the amenities and necessities required for a modern and comfortable life, as envisioned by the British. The collaboration between AIOC and James M. Wilson was a source of immense satisfaction and pride for both parties. Wilson's deep understanding of the Company's requirements and his ability to translate them into tangible architectural designs earned him the esteemed position of principal architect for

⁴⁰⁸ Mafela, Lily. "Hegemony and Accommodation in the History Curriculum in Colonial Botswana." *Journal of Educational Administration and History* 46 (4): 424–42. 2014.

⁴⁰⁹ Anglo-Iranian Oil Company Limited: Management Report for Board Meeting on 25th July 1939. ArcRef: 102627.Barcode: 84791. 1939. BP Archives.

AIOC for more than a quarter of a century. Throughout his tenure, James Wilson Mason was responsible for designing various buildings and structures for the Oil Company, leaving a significant architectural imprint on the landscape of Ahwaz. His contributions to the development of the city, in line with the Company's goals and aspirations, exemplified his dedication and skill as an architect. The partnership between AIOC and James M. Wilson Mason was a testament to their shared commitment to creating a modern and functional urban environment that reflected the Company's vision. The collaboration between a talented architect and a pioneering oil company resulted in the realization of remarkable architectural achievements that would shape the city of Ahwaz for years to come.⁴¹⁰

⁴¹⁰ Iran: General Manager's Date Order Correspondence to and from London. ArcRef: 71069. Barcode: 65138. 1943-44. BP Archives.

Continuation of General Plan. ArcRef: 16250. Barcode: 14684. 1943-8. BP Archives.

Iran: Ahwaz Development. ArcRef: 44000. Barcode: 41056. 1946-51. BP Archives.

No.56n Newly appointed management directors of the Company 1945 to 1954. Basil Jackson. ArcRef: 115883/056. Barcode: 01532969. BP Archives.

Anglo-Iranian Oil Company Limited: Management Report for Board Meeting on 25th July 1939. ArcRef: 102627. Barcode: 84791. 1939. BP Archives.

Visit to Iran 1936: Abadan Town: Supply Services, Housing. ArcRef: 67507. Barcode: 63050. 1936. BP Archives.

Sir John Cadman's Visit to Persia 1926: Minutes and Agenda of Meetings Held at Ahwaz, Fields Statistics, and Oil Reserves. ArcRef: 71183/008. Barcode: 65196. 1926. BP Archives.

Sir William Fraser's Visit to Iran: October to December, 1945. ArcRef: 70998. Barcode: 65080. 1946. BP Archives.

Visit to Iran – Municipal and Buildings. ArcRef: 67698. Barcode: 63169. 1940. BP Archives.

Ahwaz Diary. ArcRef: 68932. Barcode: 63964. 1943-5. BP Archives.

The Anglo-Persian Oil Company Limited (APOC): Persian Compendium: Central Staff Department. ArcRef: 37034. Barcode: 33567. 1926-7. BP Archives.

Data on Staff and Labour (Supplies and Amenities). ArcRef: 41509. Barcode: 38474. 1949. BP Archives.

The Anglo-Persian Oil Company Limited (APOC), Persian Compendium: Central Staff Department. ArcRef: 37034. Barcode: 33567. 1926-7. BP Archives.

Sir John Cadman's Visit to Persia 1926: Minutes and Agenda of Meetings Held at Ahwaz, Fields Statistics, and Oil Reserves. ArcRef: 71183/008. Barcode: 65196. 1926. BP Archives.

Sir John Cadman's Visit to Persia, 1924. ArcRef: 36139. Barcode: 32675. 1924. BP Archives.

Report by General Manager of the Khuzistan Wheat Development Scheme to the Advisory Committee for Period February 6th to June the 20th 1943. ArcRef: 68932. Barcode: 63964. 1943-5. BP Archives.



FIG. 4.32 Aerial view of Ahwaz. The Fine Modern Road Bridge Spanning the Karun River at Ahwaz.

Source: *Photographs Ahwaz*, ArcRef: 66716. Barcode: 62456. BP Archives.

Date: 1947. Accessed: February 2017.

4.6.3 The Architectural Maestro: The Legacy of James Wilson, APOC's Master Architect

James Mollison Wilson's journey in architecture began in Scotland, and it took him across the world, influencing his practice and ultimately leading him to become the principal company architect for the Anglo-Persian Oil Company (APOC) in Ahwaz, Iran, as an example of how oil helps the transmission of ideas. Born in 1887 in Scotland, he embarked on his architectural journey after completing his education at Dundee High School. He began his career by working in various architectural firms⁴¹¹, gaining valuable experience in the field. However, he had his sights set on London and had the opportunity to join the esteemed office of James Gibson⁴¹², renowned for his architectural contributions in and around the city.⁴¹³ Wilson's time in London proved to be a formative period in his career. Seeking to expand his horizons, he joined the esteemed architect Sir Edwin Lutyens⁴¹⁴ and accompanied him to India, where he served as one of Lutyens' first assistants in the planning of New Delhi. This experience of working closely with one of the most celebrated architects of the time undoubtedly left a lasting impact on Wilson's architectural practice, particularly in the Middle East region.⁴¹⁵ The outbreak of the First World War disrupted Wilson's tenure in India. He left for Mesopotamia (modern-day Iraq) to serve as a significant engineer with the Indian Army's Expeditionary Force until the end of hostilities in 1918. Subsequently, as Iraq began to emerge as a separate state, Wilson transitioned to the Political Service and played a crucial role in organizing and setting up the Public Works Department in the Ministry of the Iraq Government, based in Baghdad.⁴¹⁶ He held a prominent position as its director until his return to the UK in 1926.⁴¹⁷ During his time in Iraq, Wilson was responsible for designing and overseeing the construction of numerous significant governmental

⁴¹¹ Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴¹² known as Gibson and Gordon

Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴¹³ as the outstanding Middlesex Guildhall in parliament square, on which JM worked while serving with this firm.

Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴¹⁴ In that time, pre-eminent among architects, Edwin Landseer Lutyens was a genius in his field. By 1908, Lutyens had designed and restored many country houses and castles and was the architect for London's Hampstead Garden Suburb.

Smith, C. H. Lindsey. *Jm : The Story of an Architect*. 1976.

⁴¹⁵ Smith, C. H. Lindsey. *Jm : The Story of an Architect*. 1976.

⁴¹⁶ A provisional Arab government was set up in November, 1920; and in August, 1921, the Emir Faisal was elected king of Iraq.

Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴¹⁷ Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

buildings. His portfolio included notable structures such as the palace for King Faisal, the University of Baghdad, the Agricultural Institute, the Baghdad Museum, a hospital, and a war memorial in Basra⁴¹⁸. ⁴¹⁹ Wilson also contributed to urban planning by creating the suburb of Alwiyah, which has since become one of the most desirable areas to live in Baghdad. Additionally, he designed numerous houses and ancillary facilities, including the original Alwiyah Club building. Wilson's expertise extended to port infrastructure, as he was commissioned to design new port offices in Basra and the headquarters of the Port Directorate. His architectural prowess and dedication to his craft earned him recognition and established him as a trusted architect within the region. During this time, James Wilson's path crossed with the high commissioner Sir Arnold Wilson, who had ties to the Anglo-Persian Oil Company (APOC) in neighbouring Persia (now Iran).⁴²⁰ This connection would prove to be a significant link between Wilson and APOC, eventually leading to his involvement in the Company's architectural projects in Ahwaz. James M. Wilson's extensive experience, expertise in governmental buildings and urban planning, and his reputation for delivering high-quality designs made him an ideal choice for APOC's architectural endeavours in Ahwaz. His previous architectural achievements in Iraq laid the foundation for his role as the principal architect for the Company, shaping the urban landscape and contributing to the development of a modern and functional city in Ahwaz.⁴²¹

Following his retirement from the Ministry in Iraq in 1926, J.M. Wilson made the decision to return to London and establish his own architectural practice.⁴²²

⁴¹⁸ Basra as a port was entirely underdeveloped while by the late twenties the annual tonnage of vessels entering the port had reached five millions.

Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴¹⁹ When Faisal was elected king, there were no suitable residence existed for accommodation of his majesty. Hurried alterations were made in the old Turkish Government offices, known as "the Serai" in which JM worked and the king was housed on the floor above. P5 During 1927, the design for king Faisal's palace in Baghdad, which has begun to be promulgated earlier in Iraq, was developed and completed when the king was a guest of the government in this country. The designs were exhibited at the royal Academy, and must have been the first of many drawings and perspectives accepted by the Royal Academy as an example of his power of draughtsmanship, particularly in quality of his pencil work and colour washes. His designs for the King Faisal's palace were exhibited and admired at the British Royal Academy in 1928.

Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴²⁰ The coincidence of these two named needs to be remarked in that JM was no relation of Sir Arnold Wilson.

Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴²¹ Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976. .

⁴²² The small commissions that began to come JM's way from 1929 were strengthened by his deciding to enter architectural competitions of those days. The builder of May 20, 1932 realised the high standard of his submitted work for a competition and they considered him as a "genius".

Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

However, he found himself facing the challenges brought about by the economic crisis that plagued the United Kingdom during that period. With numerous architectural projects put on hold, Wilson sought opportunities with affluent clients who could support his practice. During this time, he turned his attention to the Anglo-Persian Oil Company (APOC) as a potential client. In 1927, Wilson's architectural expertise caught the attention of APOC, and he received his first commission from the company. The project involved designing plans for a general hospital to be built in Abadan, one of the key oil cities in Iran. The news of the upcoming hospital garnered attention in the press, with the project being hailed as a significant development. Wilson's design for the hospital was showcased at the Royal Academy in 1928, where it received recognition for its impressive perspective drawing and was commended for its integration of local materials and craftsmanship. This initial commission for the hospital marked the beginning of a fruitful collaboration between J.M. Wilson and APOC. The Company recognized Wilson's talent and ability to create designs harmonising with the local context and showcased the region's unique architectural identity. Wilson's instinct for utilizing local materials and craftsmen in his designs reflected his understanding of the importance of cultural context and his commitment to creating architecture that resonated with the local community. This successful project set the stage for Wilson's continued involvement with APOC and his subsequent contributions to the architectural landscape of Ahwaz. His ability to blend architectural principles with the specific requirements of the oil industry and the cultural context of the region made him an invaluable asset to APOC in their pursuit of creating functional and aesthetically pleasing structures in Ahwaz. Wilson's practice flourished as he continued to design and oversee various projects for APOC, leaving a lasting architectural legacy in the city.

During his tenure in Baghdad and his subsequent architectural career, J.M. Wilson became actively involved in the preservation and restoration of Persia's ancient monuments. This coincided with a period of increased European interest in the country's rich historical past, spurred by the reforms and modernization efforts of Reza Shah. Through these investigations, remarkable examples of traditional craftsmanship and architectural engineering came to light, showcasing the use of brickwork in impressive structures such as pendants, domes, and vaults. In his designs, Wilson faced limitations in terms of material choices and quality. However, he embraced the challenge and sought to utilize brick as the primary material wherever possible, drawing inspiration from the local context. Despite the constraints imposed by the predominantly river silt-based soil of the region, which resulted in bricks of modest quality, Wilson skilfully incorporated hand-made brickwork into his designs. His extensive experience in the Middle East, spanning over fifty years,

deeply influenced his approach to brickwork, both in Persia and beyond.⁴²³ Wilson demonstrated a remarkable ability to blend local craftsmanship and traditional techniques with modern building methods in his designs. The domes, for example, were predominantly constructed using bricks and adorned with glazed tiles, adhering to the traditional style. This fusion of the best of local artistry and modern practices resulted in designs that exuded elegance and dignity, reminiscent of the work of renowned architect Lutyens. Wilson's approach to brickwork showcased his mastery in integrating local materials, craftsmanship, and architectural traditions into his designs. His meticulous attention to detail and appreciation for the historical context of Persia's ancient monuments enabled him to create designs that not only paid homage to the past but also embraced the possibilities of modern construction techniques. Through his architectural endeavours, Wilson left a lasting legacy that celebrated the beauty and ingenuity of Persian architectural heritage.

In the early stages of his architectural career, J.M. Wilson undertook several significant projects for the Anglo-Persian Oil Company (APOC). One of the notable projects was the construction of a large and well-equipped outpatient dispensary, which commenced in 1931. This facility aimed to provide healthcare services to the employees of the company and the local community. The design of the dispensary showcased Wilson's expertise in creating functional spaces that met the specific needs of a medical facility. In the same year, Wilson embarked on the design of a war memorial, the APOC headquarters offices, and the Mount Royal Guest House in Ahwaz. These structures served as important landmarks within the city, representing the Company's commitment to commemorating those who had sacrificed their lives during the war and providing essential administrative and accommodation facilities for APOC personnel. The designs for these buildings were exhibited at the prestigious Royal Academy, garnering recognition and acclaim.⁴²⁴ The technical press at the time acknowledged the architectural achievements of Wilson's designs, highlighting the challenges posed by using local materials. The designs were considered groundbreaking and innovative for the country, as they blended modern architectural principles with a respectful nod to the traditions of Persian architecture.⁴²⁵

Wilson's ability to work within the constraints of local materials while introducing fresh ideas and design concepts demonstrated his skill in adapting to the cultural

⁴²³ Ibid.

⁴²⁴ To deal in detail with all the buildings for which the practice was responsible during the development of Abadan and work in Tehran lies beyond the scope of this chapter. They included in the appended index of commissions: Tehran; Technical school, Abadan; Geological Laboratory, Bawarda Housing, Taj theatre, etc. Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴²⁵ Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

and environmental context of the region. These early projects for APOC showcased Wilson's talent for creating functional, aesthetically pleasing structures that incorporated elements of Persian architectural heritage. His designs not only fulfilled the practical requirements of the Company but also added a new architectural language to the landscape, contributing to the development and modernization of Ahwaz.

James M. Wilson's contributions to Iran's modern architectural history were indeed significant, and his role as a colonial architect cannot be overlooked. In the study conducted by R. K. Home, which explores the roles and characteristics of architects who worked in various British colonial territories, Wilson is classified as a "consultant architect." This designation distinguishes him from being solely a colonial servant or a "peripatetic propagandist".⁴²⁶ As a consultant architect, Wilson's role went beyond the conventional responsibilities of a colonial servant. His expertise and architectural knowledge allowed him to provide valuable insights and guidance to the Anglo-Persian Oil Company (APOC) in developing its infrastructure and facilities in Iran. He brought a level of professionalism and technical expertise to his work, ensuring that the architectural designs and constructions met the highest standards. Wilson's presence as a consultant architect also signified a more collaborative approach between the APOC and local authorities. Rather than being solely aligned with the interests of the colonial power, Wilson's role allowed for a more balanced perspective, taking into account the needs and aspirations of the local population. This approach was reflected in his designs, which often incorporated elements of Persian architectural heritage and respected the cultural context of the region. While Wilson's role as a consultant architect positioned him within the colonial framework, it also highlighted his ability to navigate the complexities of colonial power dynamics and work towards creating meaningful and lasting architectural contributions. His work played a crucial role in shaping Iran's modern architectural landscape and impacted the built environment of cities like Ahwaz.

⁴²⁶ R. K. Home, R. K. Town planning and Garden Cities in the British colonial empire 1910–1940, *Planning Perspectives* 5, 23–24. 1990.



FIG. 4.33 An Aerial View of Ahwaz.

Source: <https://www.karnaval.ir/things-to-do/pol-e-sefid-ahvaz>.

Date: 1950s. Accessed: February 2017.

4.6.4 The Architectural Marvels of Wilson: Unveiling the Ancillary Petroleumscape's Developments by APOC's Master Builder

4.6.4.1 Harmonious Habitat: The Evolution of Housing for Staff and Labour ⁴²⁷

The Anglo-Iranian Oil Company (AIOC) undertook a monumental effort in constructing employee housing, demonstrating its commitment to addressing the housing crisis. The company had verbally expressed its intentions to construct accommodation for its workforce as early as 1936, and these plans were later formalized in written format. It was estimated that the projected cost of the housing construction would amount to approximately £1,000,000, and every effort was made to complete the program within a three-year timeframe. Remarkably, the company successfully fulfilled its goal, completing the housing program just before the outbreak of World War II in 1939. A new large-scale housing project was planned and initiated as the war ensued. However, progress on this project was hindered by the scarcity of materials and labour, as resources had to be prioritized for the production and processing of oil, which was of paramount importance during the war. Despite these challenges, some headway was made, and the scale of progress can be best understood by noting that the expenditure on housing and amenities built between 1939 and 1945 amounted to a substantial £4,400,000. The significant financial investment and dedicated efforts made by AIOC during this period exemplify the company's commitment to improving the living conditions of its employees. Despite the constraints imposed by the war, AIOC recognized the importance of providing adequate housing and amenities for its workforce. The substantial expenditure on housing construction during this time underscores the company's dedication to fulfilling its promise to alleviate the housing crisis and enhance the well-being of its employees. The completion of housing projects and the ongoing investment in employee accommodation demonstrated AIOC's recognition of the crucial role of quality housing in fostering a satisfied and productive workforce. These efforts not only addressed the immediate housing needs but also contributed to the long-term stability and efficiency of the company's operations in the region. ⁴²⁸

⁴²⁷ Housing and Feeding of Labour. ArcRef: 72350. Barcode: 66015. 1938. BP Archives.

⁴²⁸ Abadan and Fields: Housing, Extensions, etc. ArcRef: 67525. Barcode: 63068. 1934-6. BP Archives. Housing. ArcRef: 44410. Barcode: 41442. 1950-1. BP Archives. Abadan and Fields: House Types. ArcRef: 53971. Barcode: 50091. 1949. BP Archives.

AIOC embarked on an ambitious plan for further progress in housing construction, which was to be carried out in three stages. The scale of the construction effort was substantial, with approximately 60,000 man/labour per day dedicated to the project. The estimated expenditure for the program reflected its magnitude, and it was envisaged that a total of around 27,000 married houses and bachelor quarters would be made available upon completion. Following the completion of this program, a comprehensive review would be conducted to assess the need for subsequent developments. Undoubtedly, a project of this size and complexity was subject to various uncertain and unforeseeable factors. The worldwide shortage of materials and qualified personnel posed significant challenges, and in some regions, housing construction had virtually ground to a halt. However, AIOC was determined to overcome these obstacles and had made commendable progress in building houses in its areas of operation since the war's end. The company remained committed to completing the housing program as soon as circumstances allowed and thereafter, evaluating the need for further development.⁴²⁹ For AIOC staff in Ahwaz from 1949 onwards, the housing accommodations encompassed a range of options. The first stage included carry-over and tented camp buildings, providing 2-roomed and 3-roomed residencies for graded staff, as well as necessary services and furniture. In the second stage, 588 houses for labourers were planned, including 257 that were carried over along with essential services. The housing plan encompassed various types of accommodations, including married flats for graded staff, houses for non-graded staff, labourer houses, hostels, nurses' hostels, ship officers' hostels, and student hostels. J.M. Wilson prepared sketch plans for a variety of hostels designed to accommodate 96 students, complete with a dining room and lounge. However, it was found that the Iranian preference was for individual rooms or cubicles rather than dormitory-style sleeping arrangements.⁴³⁰ The estimated costs associated with these measures were subject to the specific site and per capita basis, accounting for higher building costs, as well as the unpredictable trends in salaries, wages, and materials expenses. The program was expected to undergo revisions as it progressed, as its completion depended on a range of factors, including the scope of the company's operations, availability of materials and qualified workforce, inflationary tendencies, and the company's financial resources.⁴³¹

⁴²⁹ Proceedings of the First Meeting of the Anti-Typhus committee held at House of H.E. Mesbah-i-Fatemi, the Ustader of Ustan Vith on 4th. December 1943. ArcRef: 68932. Barcode: 63964. 1943-5. BP Archives. Persia 1929. ArcRef: 36150. Barcode: 32668. 1929. BP Archives.

⁴³⁰ Letter from Mr. J.M. Wilson to Mr. N.A. Gass dated 27th April 1948. P20, Giving the estimated costs of the technical school Students' Hostels
Demi-Official Correspondence 1940 to 1942. ArcRef: 72357. Barcode: 66021. 1940-42. BP Archives.

⁴³¹ ... P69 Explanatory notes in regard to certain measures undertaken voluntarily by the Anglo Iranian Oil Co. Ltd in Iran, 1948.

In his role as the architect responsible for designing various types of housing for both Iranian and expatriate staff, James M. Wilson faced the challenge of accommodating diverse and often conflicting views on architectural design. Recognizing the importance of catering to individual needs and preferences, Wilson believed that the ideal house could only be created by considering each individual's specific requirements and unique tastes. Wilson was confronted with many divergent views in Iran, where strong opinions on architectural design were fiercely held and defended. He acknowledged the need to brave criticism and remain steadfast in his design choices to navigate this complex landscape. While he had to ignore a large volume of opinions in the design process, he expressed gratitude for the wealth of ideas and perspectives he had been exposed to. "faced with such a conflict of architectural opinion, it is essential to brave criticism and ignore the diverse views. Though in preparing the actual designs, I have found it essential to ignore the large volume of opinions, I do not want to give the impression of impatience with it. Too much of it I am consciously indebted."⁴³²

Wilson understood the value of incorporating diverse viewpoints, even if he had to make decisions that did not satisfy everyone. Wilson's approach to architecture in Ahwaz reflected the tension and coexistence of different cultural forms and the hybrid nature of the built environment.⁴³³ His previous experiences in the Middle East allowed him to merge architectural styles into the local fabric and draw inspiration from vernacular building traditions. The resulting architecture in Ahwaz represented a fusion of colonial influences, national aspirations, and global modernism while also respecting and incorporating elements of the region's vernacular architecture. By embracing this hybridity and incorporating diverse cultural influences, Wilson's designs in Ahwaz contributed to forming a unique architectural identity. The buildings he created reflected a dynamic and evolving cultural landscape, embodying the rich tapestry of influences that shaped the city's architectural heritage. Wilson's ability to navigate the complexities of cultural diversity and create architecture that resonated with the local context stands as a testament to his skill and sensitivity as an architect.⁴³⁴

While Wilson's approach in merging architectural styles and incorporating vernacular elements aligned with the cultural context of Ahwaz, it is important to acknowledge

⁴³² Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴³³ Elik, Z. C. *Urban Forms and Colonial Confrontations, Algiers under French Rule*. Berkeley, University of California Press, p. 1. 1997.

⁴³⁴ Housing and Feeding of Labour. ArcRef: 72350. Barcode: 66015. 1938. BP Archives.

the contrasting architectural influences that coexisted in the city.⁴³⁵ National architects and proponents of monumental architecture, as well as German modern industrial architecture, pursued their own vision for urban development, which often diverged from the city's vernacular architecture.⁴³⁶ Their grandiose and monumental designs marked the architectural legacies left by national architects and proponents of modern German industrial architecture. These buildings aimed to create urban landmarks and demonstrate the power and prestige of the national identity. However, their architectural style and form stood in stark contrast to the local vernacular architecture of the region. In contrast, Wilson, drawing on his admiration for the architectural heritage of Iran, sought to integrate classical Iranian forms into his designs for the oil company buildings in Khuzestan.⁴³⁷ This approach resulted in the distinctive features that characterized the architectural formation of the oil fields. By combining European building types with local pre-colonial architectural traditions, Wilson created a unique architectural expression that resonated with the cultural and historical context of the region.⁴³⁸ This architectural fusion persisted for nearly two decades, from Wilson's initial involvement in the 1930s until around 1950, with a temporary interruption during the Second World War. The integration of classical Iranian forms into the designs of the oil company buildings represented a notable attempt to bridge the gap between colonial influences and the local architectural heritage.⁴³⁹ Despite the contrasting architectural influences and the challenges posed by the different approaches, Ahwaz's architectural landscape became a testament to the coexistence and negotiation of various architectural styles.⁴⁴⁰ The blend of European, local pre-colonial, and classical Iranian forms created a unique architectural tapestry that reflected the city's complex history and cultural dynamics.

The bungalow typology largely influenced Wilson's architectural vision for housing development in Ahwaz. His approach to housing development in Ahwaz went beyond mere replication of European architectural styles. Drawing on his experiences and the architectural traditions of Iran, Wilson adapted the bungalow form to suit the unique context of the oil fields in Ahwaz. He recognized the importance of adjusting the built environment to the local climate and cultural context. By incorporating elements from traditional Iranian architecture, Wilson aimed to create a harmonious

⁴³⁵ Criver, Peter, and Vikramaditya Prakash. *Colonial Modernities : Building, Dwelling and Architecture in British India and Ceylon*. The Archtext Series. London: Routledge. 2007.

⁴³⁶ Ibid.

⁴³⁷ Abel, Chris. *Architecture and Identity : Responses to Cultural and Technological Change*. 2nd ed. Oxford: Architectural Press. 2000. P 158.

⁴³⁸ Ibid.

⁴³⁹ Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, 04. London: Routledge . 2010. P80

⁴⁴⁰ ibid

integration of the new oil company towns with the surrounding landscape and local traditions. The transformation of the bungalow type in Ahwaz was a result of the cultural interaction between European architectural styles and local vernacular architecture. Wilson incorporated elements from Iranian houses into the bungalow design, creating a hybrid architectural language. The new identity of Ahwaz architecture emerged as a fusion of European styles influenced by the postcolonial context and adapted through local architectural practices.⁴⁴¹



FIG. 4.34 Ahwaz AIOC Staff Bungalows next to the Karun river, part of the railway bridge can be seen to the left, showcasing the amount of land dedicated to each property.

Source: Aerial Survey. ArcRef: 36524. Barcode: 33080. BP Archives.

Date: 1935. Accessed: February 2017.

⁴⁴¹ *ibid*

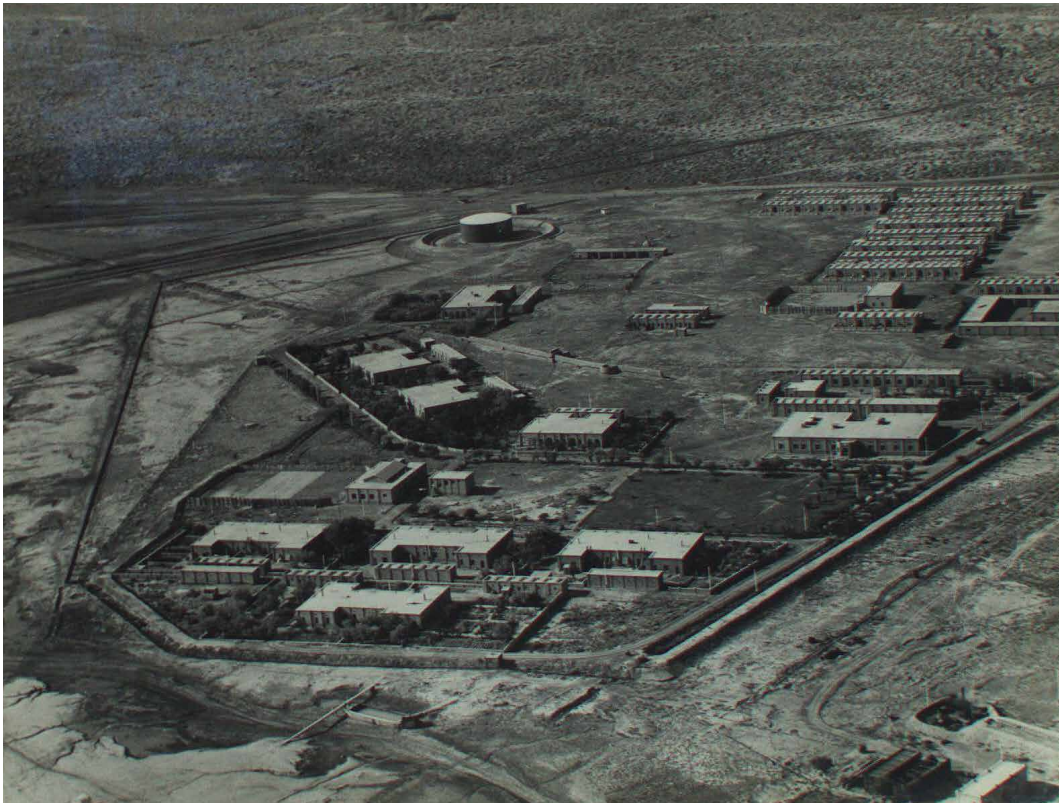


FIG. 4.35 Ahwaz AIOC Staff Bungalows next to the Karun river, part of the railway bridge can be seen to the left, showcasing the amount of land dedicated to each property.

Source: Aerial Survey. ArcRef: 36524. Barcode: 33080. BP Archives.

Date: 1935. Accessed: February 2017.

While the basic form of the bungalows remained unchanged, Wilson made adjustments to accommodate the climate of the oil fields. The spatial organization of the bungalows in Ahwaz was carefully planned to ensure functionality and comfort in the region's hot and arid environment. Wilson strategically positioned the houses to maximize cross-ventilation, allowing the cool breeze to flow through the living spaces and provide natural ventilation. He integrated traditional design strategies in local Khuzestan houses, such as semi-open green inner courts and wind catchers, to enhance cross-ventilation and protect from excessive sunlight. The use of shaded courtyards and wind catchers drew inspiration from the traditional Iranian houses in Khuzestan, where these design elements were used to combat the scorching heat. These adaptations allowed the suburban villas and bungalows in Ahwaz to respond to the specific environmental conditions of the region.

In addition to the climate-responsive design features, Wilson also incorporated local ornamentation and architectural motifs into the facades and interior spaces of the bungalows. Traditional geometric patterns, intricate tilework, and decorative arches were skilfully integrated into the overall design, creating a visual language that celebrated the rich cultural heritage of Iran. These elements served as a bridge between the oil company's modern aspirations and the region's local identity. Furthermore, Wilson's approach to urban planning in Ahwaz considered the residents' specific needs and aspirations. The layout of the oil company towns aimed to create a sense of community and promote social interaction. Public spaces, such as parks and recreational areas, were carefully incorporated into the urban fabric, providing residents with opportunities for leisure and relaxation.

The incorporation of local spatial orders and motifs into the modern buildings created a unique architectural language. Traditional ornamentation and modern design elements were transformed to align with the weather conditions and the urban plans of the Oil Company towns in Ahwaz. However, over time, these traditional features were gradually phased out, and residents began to rely on new products like electronic fans and air conditioners for ventilation.⁴⁴² The increasing availability and affordability of modern cooling systems led to a shift in the way residents approached ventilation and thermal comfort. The practicality and convenience of these new technologies gradually replaced the reliance on traditional architectural strategies.

Nevertheless, the architectural legacy of Wilson's bungalows in Ahwaz remains significant. They stand as a testament to blending different cultural influences and adapting architectural forms to suit local conditions. The bungalows exemplify a unique architectural hybridity that reflects the complex interactions between colonial aspirations, national identity, and global modernism in the development of Ahwaz's built environment. In other words, the architectural development in Ahwaz reflects the evolving needs and influences of the time. Wilson's approach to merging European and vernacular architecture created a distinctive architectural style that responded to the specific cultural and environmental context of the oil fields in Iran. Overall, Wilson's architectural vision and fusion of European and local design elements contributed to forming a distinct architectural style in Ahwaz. The bungalows became iconic symbols of the oil company towns, representing a harmonious blend of modernity and tradition and serving as a tangible reminder of the region's rich cultural heritage.

⁴⁴² Karimi, Z. Pamela. *Domesticity and Consumer Culture in Iran : Interior Revolutions of the Modern Era*. Iranian Studies, 16. London: Routledge. <https://doi.org/10.4324/9780203072905>. 2013.

Wilson confronted a trifecta of challenges in his architectural endeavours: the intricate web of social, cultural, and practical complexities that permeated his designs and planning. Through a meticulous examination of his reports to the esteemed boards of the Anglo-Iranian Oil Company, the true nature and magnitude of the social hurdles he confronted come to light. Within these reports, Wilson endeavoured to elucidate the intricate socio-political landscape of the oil fields, striving to provide clarity amidst the labyrinthine intricacies. In the process of crafting his designs, Wilson acutely grasped the presence of a burgeoning spirit of nationalism that had taken root and thrived throughout the Middle East in the wake of World War I. He understood that the glaring disparity in urban residencies between the Persians and the British employees of the Company fostered an undeniable sense of separation and alienation. Feelings of envy and animosity towards the British permeated the hearts of many nationals, underscoring the pressing need for Wilson, as an architect, to implement measures that would address these social demands.

The consequences of disregarding the essential needs of the populace were not to be taken lightly, as such neglect could potentially unleash a torrent of profound discontent and unrest within the oil cities. The weight of these concerns formed the bedrock of Wilson's meticulous planning arrangement, showcasing an extraordinary degree of perceptiveness and sagacity. In this role, he not only demonstrated his prowess as an architect but also assumed the role of an advisor, deftly navigating the socio-political landscape of Persia and offering invaluable counsel to his clients. Wilson's ability to navigate the intricate interplay between architecture, social dynamics, and geopolitical events exemplified his remarkable sensitivity to the challenges at hand. His designs were not merely aesthetically pleasing structures but also the embodiment of a nuanced understanding of the needs and aspirations of a society in flux. In this way, Wilson's architectural prowess transcended the boundaries of conventional practice, elevating him to the status of a visionary who shaped the fabric of the oil cities and left an indelible mark on Persia's socio-political tapestry.⁴⁴³

Within the sociocultural realm, it became imperative for the Company to provide accommodations that would not only attract esteemed Persians but also retain those who possessed specialized skills. The average Persians, grappling with the complexities of cross-cultural encounters, found themselves confronted with a formidable barrier to their cultural identity. In this context, the astute understanding demonstrated by J.M. Wilson proved invaluable, as he recognized the pressing

⁴⁴³ Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

need to cater to the comfort and aspirations of the inhabitants. The housing conditions had to align with Persian sensibilities, ensuring privacy and other cultural considerations were honoured. However, practical challenges also loomed large. One significant hurdle faced by AIOC in its pursuit of architectural development in Iran was the shortage of skilled labourers. It would be an understatement to describe the initial workforce as unskilled; they were woefully inexperienced. Yet, J.M. Wilson harboured unwavering faith in the potential of the Iranian people to craft extraordinary architectural masterpieces, even surpassing the British in their craftsmanship. He sought to nurture the labour force, transforming mere workers into skilled craftspeople during the construction process. Wilson's exceptional social insight allowed him to forge unique relationships with the labourers, valuing their practical insights and incorporating their suggestions into his designs. Never did he conceive of a building without a comprehensive understanding of the intricacies of the construction process. Every minute detail mattered to him, from the precise orientation of the structure to the meticulous consideration of each element, culminating in his commitment to excellence.

In essence, J.M. Wilson's unwavering dedication to bridging sociocultural gaps and his unparalleled attention to practical details ensured that his architectural creations were visually stunning and harmoniously integrated into the fabric of Persian society. His approach transcended mere construction, embracing the holistic vision of cultural integration and craftsmanship. Through his thoughtful designs and respectful engagement with the labour force, Wilson fostered an environment where architecture catalysed social cohesion, reflecting his deep appreciation for the people and the construction process.



FIG. 4.36 Ahwaz AIOC Staff Bungalows Next to the Karun River.

Source: Aerial Survey. ArcRef: 36524. Barcode: 33080. BP Archives.

Date: 1935. Accessed: February 2017.

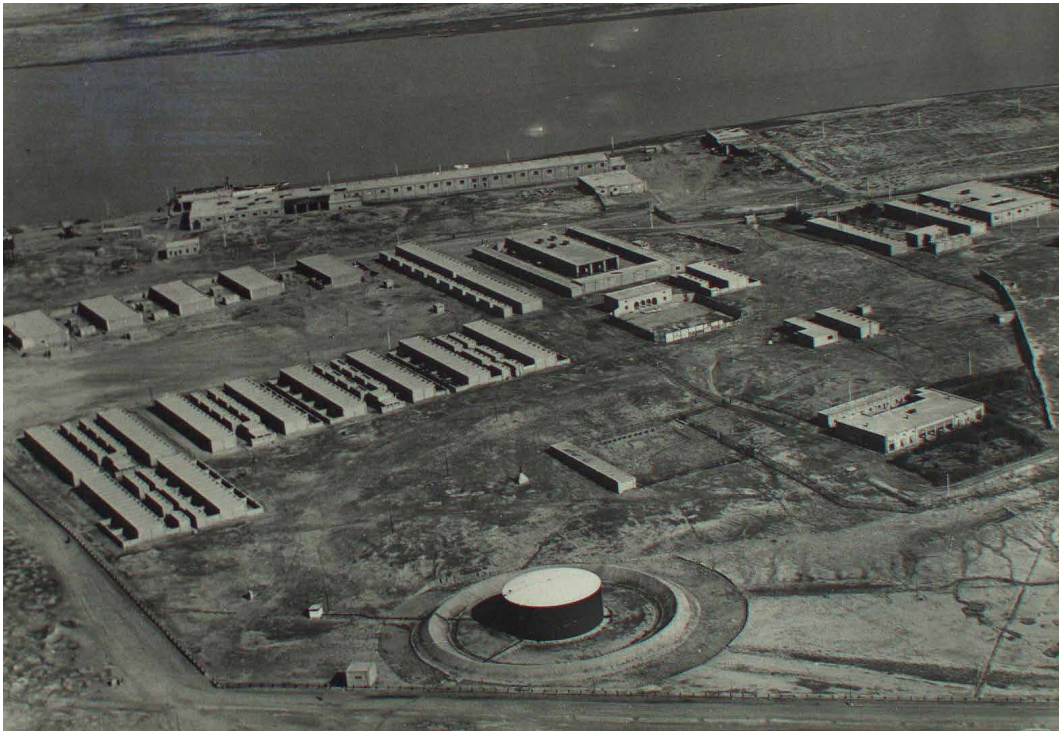


FIG. 4.37 Ahwaz AIOC Staff Bungalows Next to the Karun River.

Source: Aerial Survey. ArcRef: 36524. Barcode: 33080. BP Archives.

Date: 1935. Accessed: February 2017.

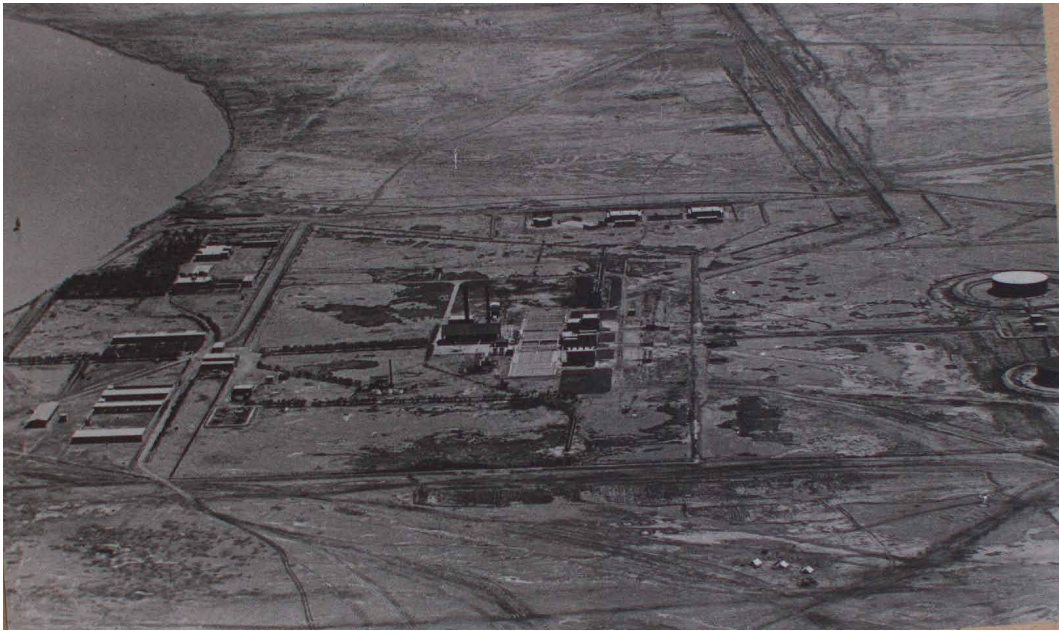


FIG. 4.38 Darquain Oil-pumping Station.

Source: *Operations of AIOC in Iran*, ArcRef: 36119. Barcode: 32637. *The Anglo-Persian Oil Company, Limited*, BP Archives.
Date: 1942. Accessed: February 2017.

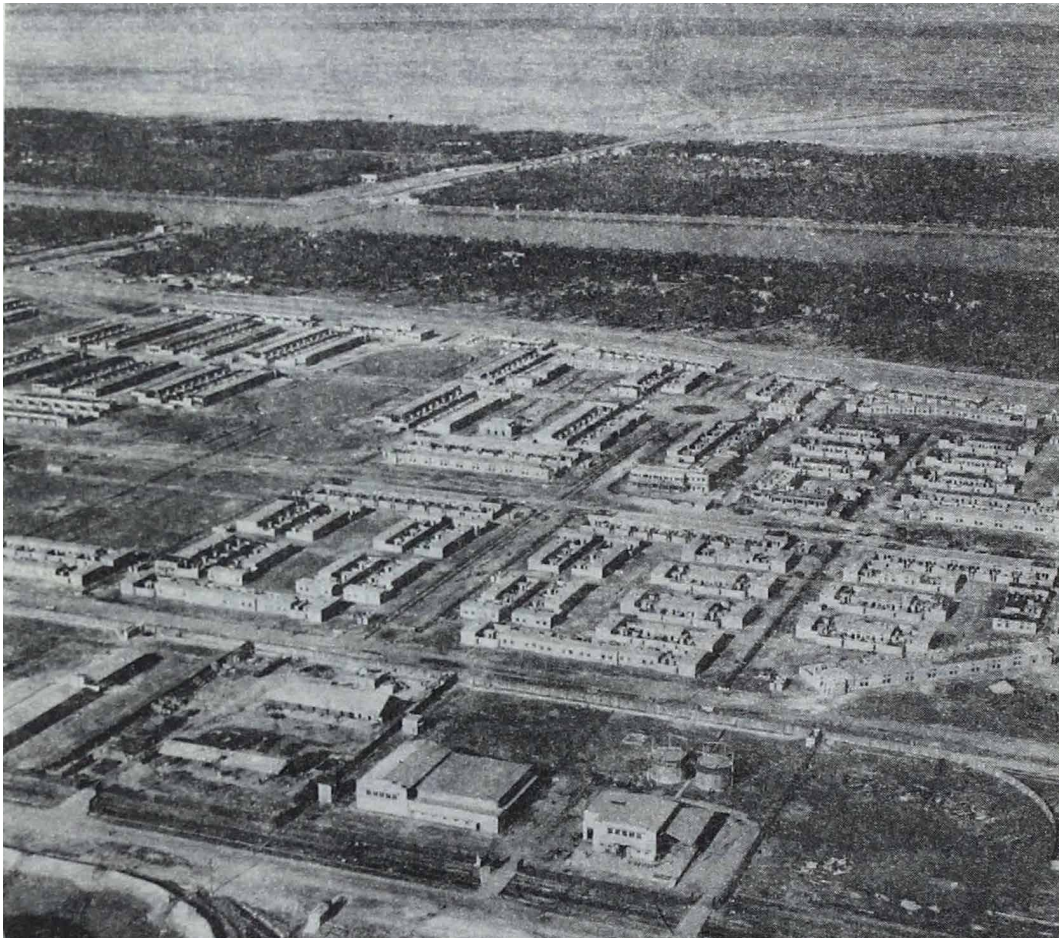


FIG. 4.39 Kut-Abdullah Pump House near Ahwaz. Oil produced from the wells of Suleiman Mosque was returned to Abadan Refinery by the pump houses that were installed on the way. Next to the pump houses, residential houses have been built for the employees.

Source: *Rails e Naft. Iranian National Archive.*

Date: *Unknown. Accessed: January 2017.*

As the Anglo-Iranian Oil Company gained more resources and influence, it opened the door to importing modern construction facilities and materials into Khuzestan, revolutionizing the building structure system in the region. Metal structures became a game-changer, offering speed, ease, and versatility in creating architectural prototypes throughout the province. This transformation allowed for the construction of various functional buildings such as houses, airports, hospitals, and more. Prior to World War II, the local bricks, made from sun-dried clay and chopped

reeds, lacked the necessary strength to bear heavy loads. However, the importation of British red bricks on a significant scale brought about a notable shift. These bricks not only provided the needed strength but also allowed Wilson to incorporate a Western aesthetic into his designs, adding a touch of familiarity amidst the new architectural landscape.

Another noteworthy innovation during this period was the use of artificial stonework made from crushed seashells, manufactured in Abadan and utilized in other oil cities like Ahwaz. Additionally, the production of terrazzo tiles, blocks, and fibrous plaster locally marked a significant milestone, offering new opportunities for decorative elements in buildings. However, challenges arose when the transition from mud roofs to concrete occurred. In the 1930s, the contracting and civil engineering firm, Costain, took on the challenge of constructing concrete roofs.⁴⁴⁴ Unfortunately, some of the initial concrete roofs collapsed due to an unexpected factor – chewed dates and carelessly spat stones that had found their way into the concrete mix. The combination of heat and moisture resulted in rapid germination, compromising the cohesion of the concrete. Fortunately, this issue was swiftly resolved in subsequent experiments and iterations of concrete ceiling construction.⁴⁴⁵

Amidst these advancements, reports emerged that proposed building construction recommendations, including the exploration of experimental work on steel structures. Considering the limited knowledge and understanding of structural expansions for tropical regions at the time, this was a groundbreaking endeavour. The willingness to explore new possibilities demonstrated the Company's commitment to pushing the boundaries of architectural innovation and meeting the region's evolving needs.⁴⁴⁶

⁴⁴⁴ Crinson, Mark. *Modern Architecture and the End of Empire*. British Art and Visual Culture Since 1750, New Readings. Aldershot, Hants, England: Ashgate. 2003.

DeNovo, John A. *American Interests and Policies in the Middle East, 1900-1939*. Minneapolis: University of Minnesota Press. 1963.

⁴⁴⁵ Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴⁴⁶ Housing General: H and AB Projects: Refineries Areas: Situation at date of Evacuation. ArcRef: 68380. Barcode: 63649. 1951. BP Archives.

Labour Staff and Housing, Iran, 1947 to 1951. ArcRef: 68186. Barcode: 63573. 1950-1. BP Archives. AIOC Housing: Abadan, Mashu and Fields (Khuzistan) Areas. ArcRef: 41669. Barcode: 38614. 1954. BP Archives.

Housing and Feeding of Labour. ArcRef: 72350. Barcode: 66015. 1938. BP Archives.

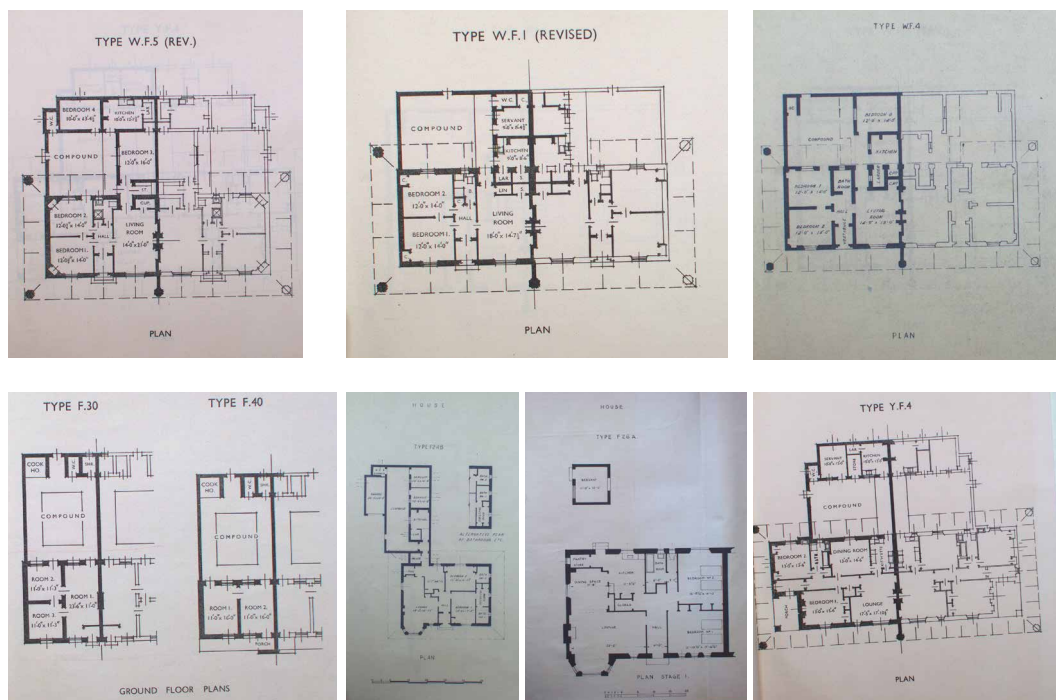


FIG. 4.40 Plans of Various Housing Types.

Source: Abadan & Fields House Types. ArcRef: 53971. Barcode: 50091.

Date: 1949. Accessed: February 2017.

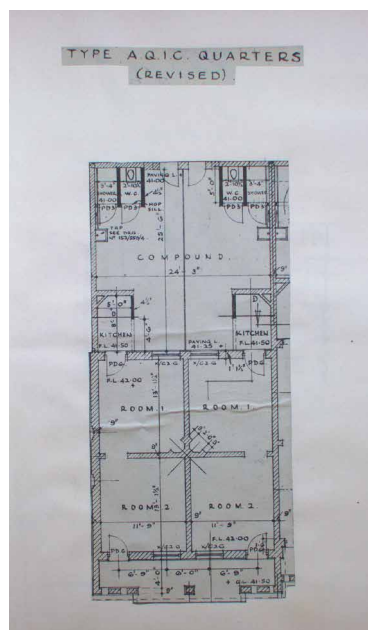
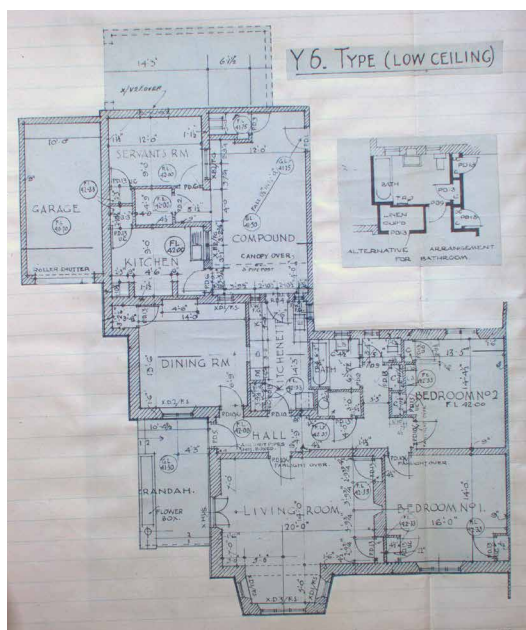
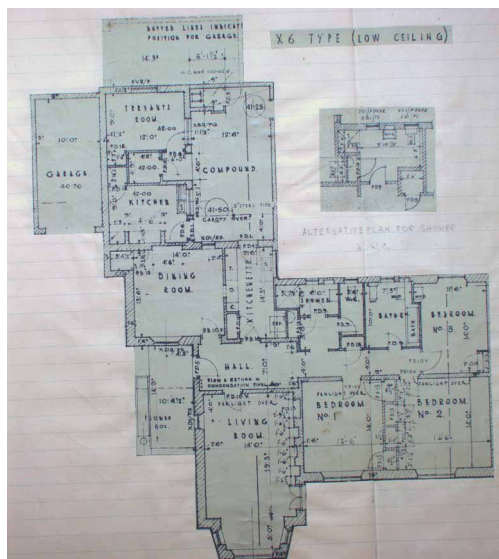
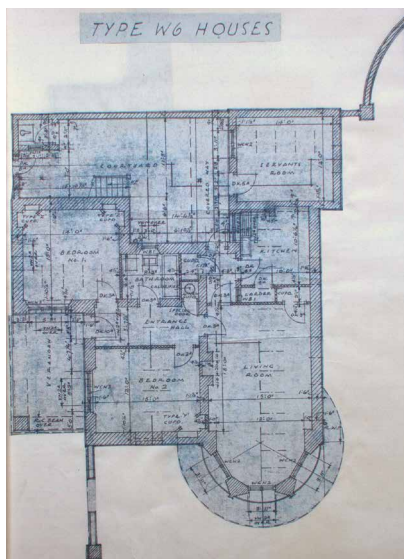


FIG. 4.41 Plans of Various Housing Types.

Source: Abadan & Fields House Types. ArcRef: 53971. Barcode: 50091.
Date: 1949. Accessed: February 2017.

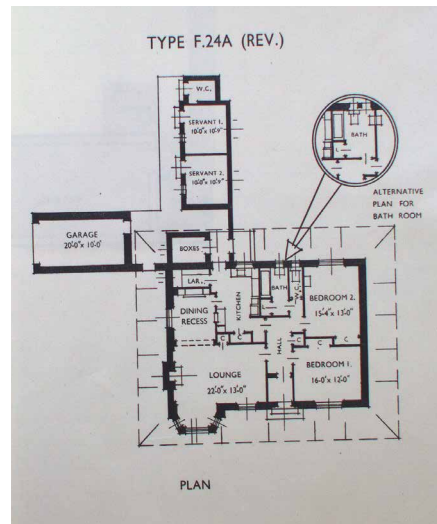
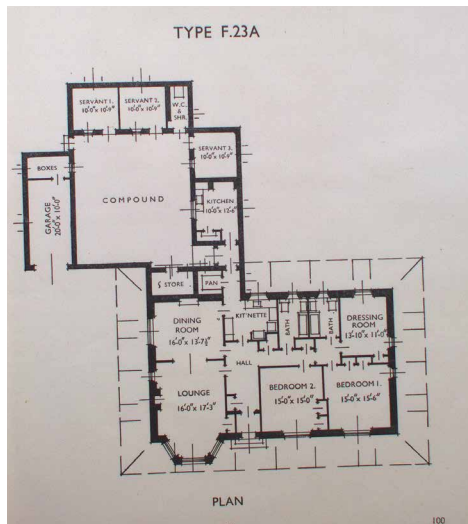
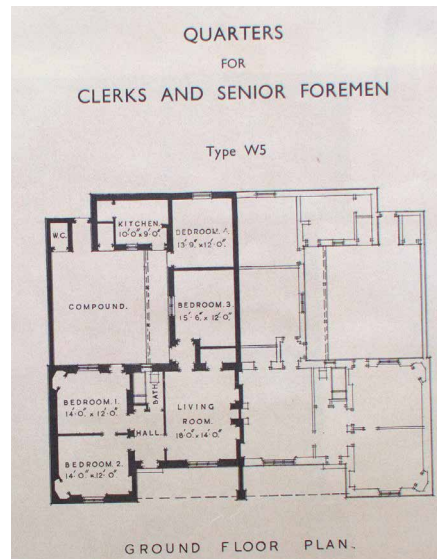
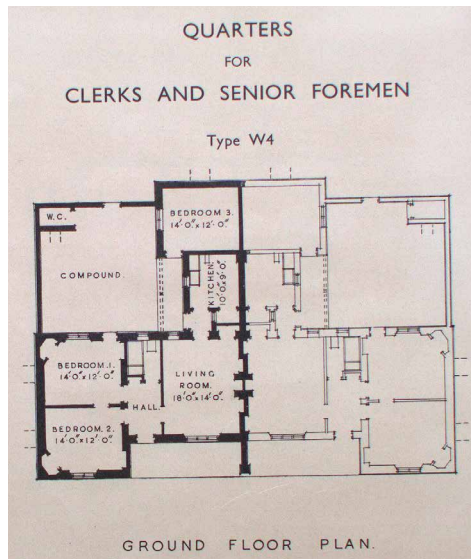


FIG. 4.42 Plans of Various Housing Types.

Source: Abadan & Fields House Types. ArcRef: 53971. Barcode: 50091.

Date: 1949. Accessed: February 2017.

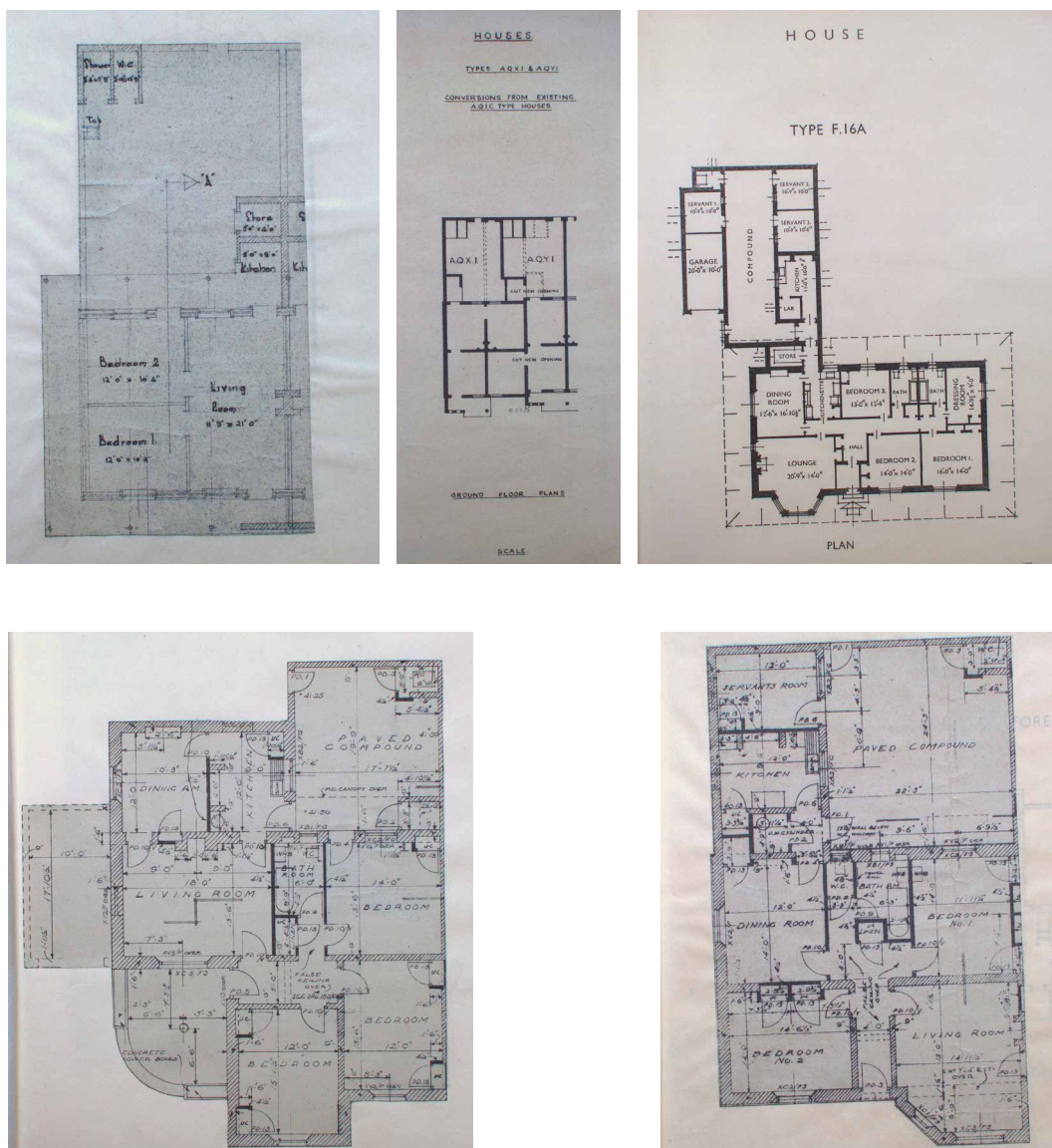


FIG. 4.43 Plans of Various Housing Types.

Source: Abadan & Fields House Types. ArcRef: 53971. Barcode: 50091.

Date: 1949. Accessed: February 2017.

4.6.4.2 Case Example I from British Contributions in the Petroleumscape of Ahwaz: The general fields manager's House

One notable example of J.M. Wilson and H.C. Mason's architectural prowess was the Luxury House they designed for the general fields' manager. This grand residence stood as a testament to the Company's commitment to providing high-quality housing for its top-tier personnel. The BP archives contain photographs that offer a glimpse into the sheer magnitude of the property. Vast stretches of land were dedicated to each individual residence, emphasizing the prestige and exclusivity associated with the position of the general fields' manager. These photographs capture the expansive gardens, manicured lawns, and spacious grounds that surrounded the Luxury House, creating an aura of elegance and refinement.

The architectural design of the Luxury House reflected the expertise and attention to detail that J.M. Wilson and H.C. Mason brought to their projects. Every aspect of the house, from its layout to its materials, was carefully considered to ensure its inhabitants' utmost comfort and luxury. The use of high-quality materials, intricate detailing, and well-proportioned spaces contributed to the overall grandeur of the residence. Beyond its architectural significance, the Luxury House served as a symbol of the Anglo-Iranian Oil Company's commitment to providing exceptional living environments for its key personnel. These properties offered comfort and opulence and reflected the Company's desire to attract and retain top talent in the oil industry.

The photographs from the BP archives capture the grandeur of the Luxury House and provide a glimpse into the larger context of the Company's architectural endeavours. They serve as a testament to the meticulous planning and design that went into creating prestigious residences that were befitting of the esteemed positions held by the Company's executives. In conclusion, the Luxury House designed by J.M. Wilson and H.C. Mason stands as a remarkable example of the Company's commitment to providing luxurious and spacious housing for its high-ranking personnel. The photographs from the BP archives showcase the scale and grandeur of these properties, offering a glimpse into the extraordinary lifestyle afforded to those who held significant positions within the Anglo-Iranian Oil Company.

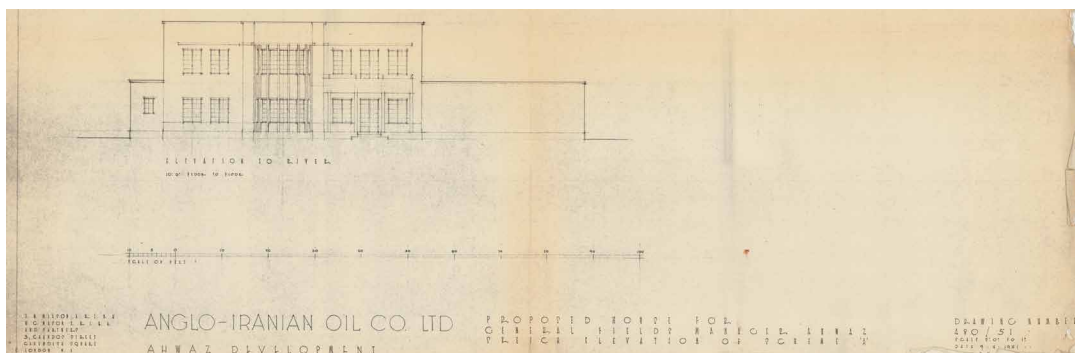
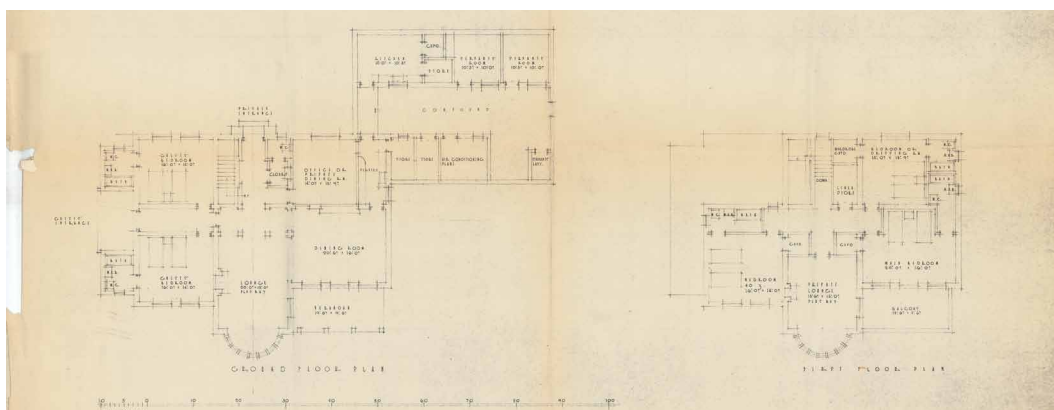
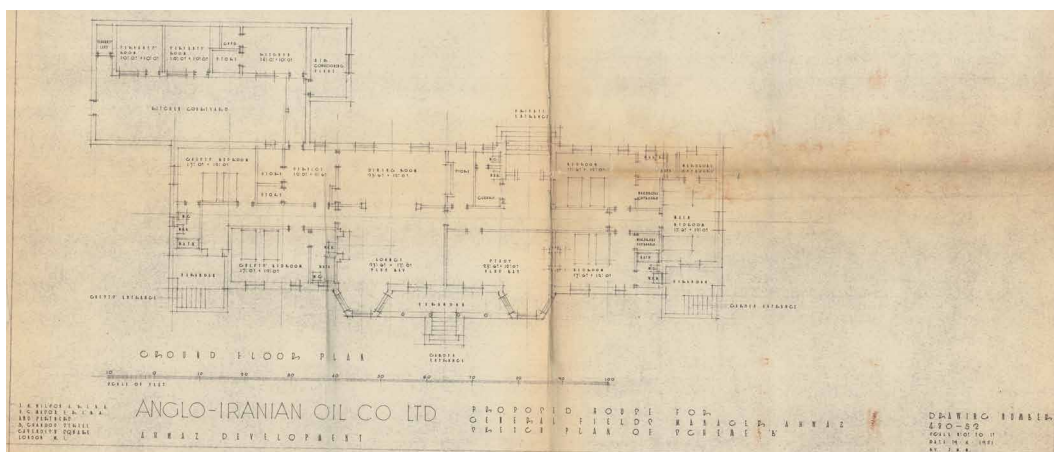


FIG. 4.44 No. 3 Ahwaz Development Proposed House for General Fields Manager, Ahwaz, Plan of Scheme B.

Source: ArcRef: 44000/003, Barcode: Z01586009. BP Archives.

Date: 1951. Accessed: February 2017.

4.6.4.3 Case Example II from British Contributions in the Petroleumscape of Ahwaz: Residential Elegance and Architectural Significance: The National Bank's Houses in the 1930s

Following the construction of the National Bank's iconic triangular building, a modern housing complex was created to accommodate the bank managers. This unique residential complex would later serve as a prototype for similar contemporary developments throughout Iran. The design of the residential complex showcased a harmonious blend of three-story and one-story residential units. The three-floor villas were carefully organized, with distinct divisions in their living spaces. The ground floor featured public areas, while the second floor was dedicated to the private realms of bedrooms and bathrooms. The third floor primarily consisted of spacious terraces, providing residents with elevated views and outdoor spaces for relaxation and leisure.

Architecturally, the volume of the three-floor villas transitioned from a solid mass at the ground level to open balconies on the top floor, with semi-open spaces in between. An octagonal tower, serving as an architectural element, housed the enclosed staircase that facilitated vertical movement among the different floors. The gardens surrounding each villa were thoughtfully designed and defined by walls, fountains, and other landscape elements. These elements created a sense of hierarchy and offered a variety of open spaces within the complex. Each one-floor villa had a simpler layout and smaller dimensions compared to its three-story counterparts. The interiors of these villas were less complex, as was their garden in front of the building. A central open space served as the focal point of the entire residential complex. All the surrounding buildings were accessed through their private gardens, which led to this communal area. This central open space provided a shared gathering place for residents, fostering a sense of community and connection. In summary, the residential complex built for the bank managers exhibited a well-thought-out design that embraced both functionality and aesthetics. The combination of three-story and one-story villas, along with carefully crafted open spaces, created a harmonious and inviting living environment for the residents.

When comparing the residential complex to traditional houses in the region, there are several notable differences and similarities. First is the spatial organization; traditional houses in the region often feature interconnected spaces centred around a central courtyard. Similarly, the residential complex incorporated a central open space that served as a gathering area. However, this central space was shared among the surrounding buildings in the complex, whereas traditional houses typically had private courtyards for each dwelling. The second is about the

architectural elements. Traditional houses in the region often exhibit distinctive architectural features such as windcatchers (Badgirs), which provide natural ventilation, and decorative elements like intricate tile work and geometric patterns. While the residential complex may have incorporated some aspects of Iranian architecture, it leaned more towards modernist aesthetics with its clean lines, simplified forms, and functional design. Third includes the building materials: Traditional houses in the region are typically constructed using local materials such as adobe, mud bricks, and wood. In contrast, the residential complex utilized modern construction materials and techniques, including reinforced concrete and steel. Fourth is about the hierarchy of spaces; traditional houses often have distinct spatial hierarchies, with private areas reserved for family members and more public spaces for receiving guests. The three-story villas in the residential complex mirrored this concept, with public zones on the ground floor and private bedrooms on the second floor. However, the vertical division in the complex was more rigid, whereas traditional houses might have more fluid connections between different levels. And finally, the fifth is about gardens and landscaping; both traditional houses and the residential complex embraced the concept of gardens as integral elements of the living environment. Traditional houses typically featured lush gardens with water features and greenery, serving as peaceful retreats. The residential complex incorporated landscaped gardens and water elements as well, albeit in a more controlled and simplified manner.

The housing project by the National Bank bears a striking resemblance to the housing projects undertaken by Wilson in Abadan. The notable similarities observed in the volume composition, as well as the intricate detailing of blue tiles and brick ornaments, strongly suggest that both projects were designed by the same architect or architectural firm. This parallel exemplifies yet another instance of collaboration among diverse national and global actors in shaping the development of the city. The harmony in design elements, such as the consistent volume composition and the intricate blue tile and brick ornamentation, indicates a shared architectural vision and approach across these projects. It speaks to a deliberate effort to create a cohesive aesthetic and unified architectural language within the urban fabric. Moreover, this collaboration of different actors, both at the national and global levels, underscores the interconnected nature of architectural influences and the exchange of ideas during the city's development. It reflects the dynamic and evolving nature of architectural trends, where designs and concepts transcend geographical boundaries, merging the contributions of various individuals and institutions. While specific data on the architect or architectural firm involved in these projects is not available, the similarities between the National Bank's housing project and Wilson's housing projects in Abadan point to a shared architectural language and a common design philosophy. This convergence highlights the collective efforts of diverse

actors in shaping the city's built environment, contributing to its architectural identity and reflecting the collaborative nature of urban development.

Overall, while the residential complex drew inspiration from some architectural aspects of traditional houses, it ultimately embraced a more modernist approach in its design. The focus on functional spaces, the incorporation of open areas, and the blend of private and communal spaces reflected the evolving architectural trends of the time while maintaining a connection to Iranian aesthetics and cultural elements. Overall, the parallels between the National Bank's housing project and Wilson's projects in Abadan serve as a testament to the interconnectedness of architectural influences and the significant role played by national and global actors in the city's development. It highlights the rich tapestry of collaborations that have shaped the urban landscape, leaving a lasting imprint on the architectural heritage of the city.

In response to the need for urban amenities and services in the newly developed housing areas, the Anglo-Iranian Oil Company embarked on a comprehensive plan to provide a range of facilities within its housing estates. Recognizing that residents would face inconvenience if they had to rely solely on the amenities of the central city of Ahwaz, the Company took proactive measures to ensure that the housing areas were self-sufficient and equipped with essential social and recreational infrastructure. Under the guidance of J.M. Wilson's town planning expertise, a variety of facilities were incorporated into the urban design of the housing estates. The comprehensive plan included municipal buildings, medical centres, educational institutions, social venues, and ancillary structures. These facilities were strategically located within the housing estates, ensuring convenient access for the residents and fostering a sense of community within the neighbourhoods. The development of these amenities was a testament to the Company's commitment to providing a high standard of living for its employees and their families. It recognized that a well-rounded living environment encompassing not only housing but also essential services and recreational opportunities was crucial for the well-being and satisfaction of its workforce.

Furthermore, the construction of townships and store buildings further enhanced the self-sufficiency of the housing estates. These townships served as local hubs, providing residents with convenient access to retail and commercial establishments, creating a vibrant and self-contained community. The implementation of these social and amenity plans and structures within the housing estates reflected the meticulous planning and foresight of the Anglo-Iranian Oil Company. By incorporating a wide

range of facilities, the Company aimed to foster a sense of belonging and improve the quality of life for its employees and their families.⁴⁴⁷

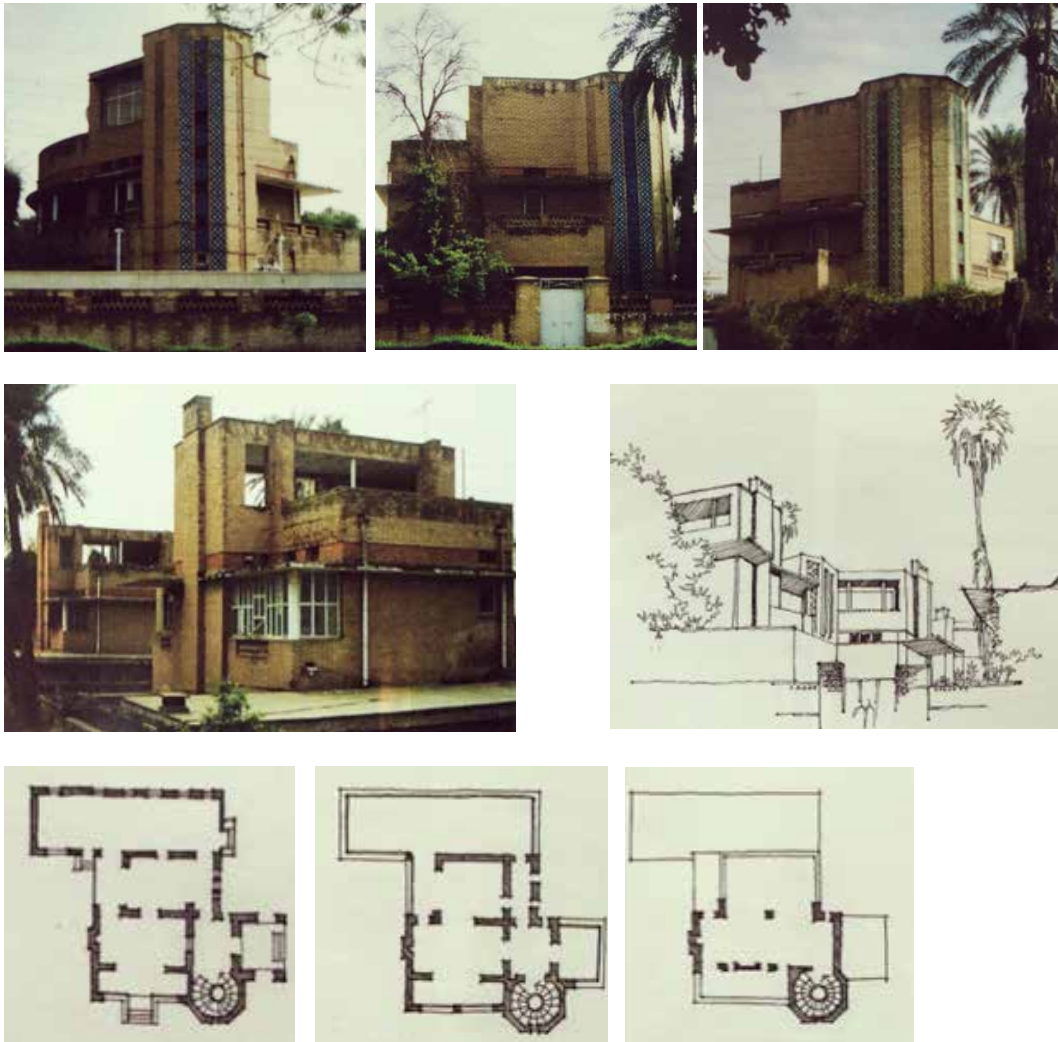


FIG. 4.45 Images of The National Bank's Houses.

Source: Mojtabeh Zade, R. & NamAvar, Z. 1394/2015. *In search of urban identity of Ahwaz: Dar Jost-ejooye hovviate shahri e Ahwaz. Road, Housing and Urban Development Research Center.*

Date: 1930s. Accessed: February 2023.

⁴⁴⁷ The Anglo-Persian Oil Company Limited (APOC): Persian Compendium: Medical Services, Abadan General Hospital and Attached Dispensaries. ArcRef: 37027. Bacode: 33561. 1928. BP Archives.

4.6.4.4 Transforming Urban Comforts: James Wilson's Vision for Modern Urban Facilities and Amenities

By the late 1940s, Ahwaz faced a lack of essential municipal facilities such as water supply and electricity generation. The Anglo-Iranian Oil Company (AIOC) recognized the pressing need for increased water supply and electric power distribution to support the expanding areas of the city. To address this issue, AIOC sold water and power in bulk to the Municipality at nominal rates, which was then responsible for distributing these resources to consumers. The municipality faced challenges in obtaining the necessary materials to distribute water and electricity to the consumers.⁴⁴⁸ They approached AIOC, requesting assistance in purchasing these materials, as they were not readily available in Iran. AIOC, understanding the importance of supporting the Municipality's efforts, agreed to procure the materials and help the government and municipality with their civic initiatives. According to *Mr Elkington's Diary*, Several civic buildings were planned and constructed to improve the city's overall infrastructure. This included the development of private building areas, electrical lines, drinking water storage facilities, sewerage reticulation, road improvements, and other municipal amenities.⁴⁴⁹

Police and fire stations were also built in parallel with powerhouses to ensure the safety and well-being of the city's residents. The cost of these developments, totalling approximately £850,000, was shared equally between AIOC and the Municipality. The revenues of the municipality and the Company contributed to meeting these costs. In cases where the Municipality was unable to cover its share of the capital cost, AIOC offered to provide an advance loan to the Municipality. The loan would be repayable over ten years at a low-interest rate, enabling the construction of these essential buildings. This cooperative approach between AIOC and the Municipality led to the expansion of the city and the provision of much-needed municipal amenities. Similar improvements were also required for the extensions to the existing town and the development of new areas in nearby villages. AIOC was committed to drawing up plans for municipal amenities and continuing its cooperation with the Municipality and the government, sharing the cost of these developments equally. Through this partnership and financial support, AIOC played

⁴⁴⁸ Equipment for this type of plant was in short supply throughout the world while it was essential, in consequences, to undertake the expansion of these services in stages. The first stage was setting up the water supply to the Municipality to a million gallons per day and the electricity supply to 725 kilowatts. Subsequently, the water supply could be increased to 5 million gallons per day and the electricity supply to 5,000 K.W.

Iran: Facilities and Amenities. ArcRef: 36133. Barcode: 32651. 1950. BP Archives.

⁴⁴⁹ Letter from R M Wynne-Edwards to E H O Elkington dated 10 May 1948 concerning the progress of housing projects in Abadan and the fields.

a crucial role in facilitating the growth and improvement of Ahwaz, ensuring that the city had the necessary infrastructure and amenities to meet the needs of its residents.⁴⁵⁰

4.6.4.5 Fostering Community: Enhancing Life through Social Facilities

Ahwaz saw the development of various social facilities that aimed to enhance the quality of life for its residents. These amenities catered to different segments of the population and served as spaces for recreation, entertainment, and community engagement. The Anglo-Iranian Oil Company (AIOC) invested approximately £2,500,000 in the construction of these social facilities.⁴⁵¹ Among the notable facilities were Kanoon-e-Iran, also known as the Iranian staff club, which provided a gathering place for Iranian employees of the Company. Graded and non-graded staff clubs and welfare centres were established to cater to the diverse needs of the employees. Cinemas, some of which were located in assembly halls, offered entertainment and cultural experiences for the community. Traditional cafes, known as Chai Khanehs, provided spaces for socializing and enjoying tea.

Sports played an essential role in the community, and to support athletic activities, a sports stadium, playing fields, swimming pools, and pavilions were built. These recreational spaces promoted physical fitness and served as venues for sports events and competitions. To cater to the dining needs of the employees, works canteens and victualling buildings were constructed. These facilities provided meals and essential supplies to the workforce. An Iranian Hammam, or public bathhouse, offered a place for relaxation and cleansing.

The Company also established amenities such as catering equipment, masonic ball extension, eStates admin centre, seamen's centre, and more. These facilities aim to provide support services and enhance the community's overall well-being.

⁴⁵⁰ The Anglo-Persian Oil Company Limited (APOC) Persian Compendium: Labour Department. ArcRef: 37023. Barcode: 33557. 1927. BP Archives.

Visit to Iran 1936: Abadan Town Supply Services, Housing. ArcRef 67507. Barcode: 63050. 1936. BP Archives.

Manpower (Persia) Correspondence on Housing and Ancillary Buildings Programme. ArcRef: 3542. Barcode: 2575. 1947-51. BP Archives.

IOC Ltd, Personnel Amenities, Social Services, Housing Etc, in South West Iran. ArcRef: 36523. Barcode: 33079. 1950. BP Archives.

Data on Housing, Amenities and Amenity Building and Manpower. ArcRef: 67192. Barcode: 62878. 1951. BP Archives.

⁴⁵¹ Iran: Facilities and Amenities. ArcRef: 36133. Barcode: 32651. 1950. BP Archives.

The investment in these social facilities demonstrated the Company's commitment to creating a conducive and vibrant environment for its employees and the local population. By providing a range of amenities, AIOC sought to foster a sense of community, promote leisure activities, and contribute to the overall social development of Ahwaz.⁴⁵²



FIG. 4.46 Kanoon Iran. (The Social Centre of Ahwaz).

Source: *Photographs of AIOC Operations in Iran and stills from the AIOC Technical film taken in 1938*. ArcRef: 37984. Barcode: 34603. BP Archives.

Date: 1938. Accessed: February 2017.

⁴⁵² Dr Young's Photographs: Persia Miscellaneous. ArcRef: 36144. Barcode: 32662. 1907-37. BP Archives



FIG. 4.47 Kanoon Iran (The Social Centre of Ahwaz): Main Hall and Stage (left), The library.(Right).

Source: Photographs of AIOC Operations in Iran and stills from the AIOC Technical film taken in 1938. ArcRef: 37984. Barcode: 34603. BP Archives.

Date: 1938. Accessed: February 2017.

Supporting Infrastructure: Enhancing Efficiency through Other Ancillary Buildings

In addition to the social facilities, the Anglo-Iranian Oil Company (AIOC) also focused on developing ancillary buildings and infrastructure to support the community's needs in Ahwaz. These facilities were designed to provide essential services and ensure the smooth functioning of various operations. Some of the key ancillary buildings included:

- New Gas Station:** A new gas station was established to provide fuel for vehicles and machinery, ensuring a convenient and reliable fuel supply for transportation needs.
- Company Staff Shops and Stores:** Seven staff shops and stores were set up to cater to the needs of the AIOC employees. These stores offered a variety of goods and supplies, making it convenient for staff members to access essential items.
- Reorganization and Extensions of Old Stores Facilities:** Existing store facilities were reorganized and expanded to accommodate the community's growing demands. This ensured efficient storage and distribution of goods and materials.
- Food Distribution Shops:** Food distribution shops were established to supply provisions to the oil fields. These shops played a vital role in ensuring a steady and reliable food supply for the workforce.
- General Shops:** General shops were set up to serve the local population, offering a range of products and commodities for their daily needs.
- Clothing Supplies:** To cater to clothing requirements, dedicated shops were established to provide a variety of clothing items for the community.
- Bakeries:** Bakeries were constructed to meet the demand for fresh bread and bakery products, ensuring residents' regular supply of baked goods.
- Constructional Materials' Yard:** A dedicated yard was designated for storing and organizing construction materials. This facilitated efficient management and distribution of materials for construction.

projects. Cold-Covered Storage and Ice Distribution Centres: Cold-covered storage facilities were built to preserve perishable items. Ice distribution centres were also established to provide ice for various purposes, ensuring the availability of chilled products and services. Ice Plants: 30-ton ice plants were installed to produce ice in large quantities, supporting the cooling needs of the community. These ancillary buildings and infrastructure played a crucial role in supporting the day-to-day operations and meeting the population's diverse needs in Ahwaz. They contributed to the overall development and convenience of the community, ensuring a well-functioning and efficient environment for both the AIOC employees and the local residents.⁴⁵³

4.6.4.6 Healing Spaces: Enhancing Healthcare through Architectural Design by James Wilson

The Anglo-Iranian Oil Company (AIOC) demonstrated a genuine concern for the health and welfare of its employees in Ahwaz. The provision of medical services was a paramount priority for the company, and it strived to create a medical system that surpassed any other in Iran and even in the industrial sector worldwide. The medical service went beyond merely treating the sick; it encompassed a comprehensive range of public health and disease prevention services. This included efficient and modern laboratory work, diagnostic services, and employee dental treatment. The company also implemented a scheme for training Iranian nurses, contributing to developing regional healthcare professionals.

The medical facilities' construction, equipment, and staffing levels were meticulously planned and documented in correspondence letters and records from E.H.O. (Elkington's Health Office). During his visit to Iran in 1949-1951, Elkington recorded valuable information regarding the medical development in Ahwaz. The visualized plans for the medical buildings in Ahwaz included two staff and labour medical clinics, a central clinic, an extension to the existing clinics, dental clinics, a nurses' hostel, a health office, two health units, and improvements and extensions to the hospital.⁴⁵⁴ The clinics were designed to ensure closer and more personal contact

⁴⁵³ Staff Housing and Labour, Part 1, November 1954 to December 1957. ArcRef: 170608. Barcode: 201512485. 1954-7. BP Archives.

Housing, General: Notes on Housing, Amenity Buildings, and Services, (1) Abadan, (2) Fields Areas. ArcRef: 68720. Barcode: 63795. 1951. BP Archives.

⁴⁵⁴ The Anglo-Persian Oil Company Limited (APOC): Persian Compendium: Medical Services, Abadan General Hospital and Attached Dispensaries. ArcRef: 37027. Barcode: 33561. 1928. BP Archives.

between medical officers and patients, fostering a caring and attentive healthcare environment. Consideration was also given to the extension of the existing isolation hospital and the urgent need for a municipal hospital in Ahwaz.⁴⁵⁵

While the responsibility for most civic buildings rested with the municipality and the government, the AIOC generously offered to bear half of the construction costs, recognising the importance of a hospital. The estimated total cost for the one-hundred-bed municipal hospital was 250,000 £, highlighting the company's commitment to the community's well-being. The comprehensive medical services provided by the AIOC in Ahwaz, encompassing treatment, prevention, and training, significantly contributed to alleviating suffering and improving public health in the region. The company's investment in modern medical facilities and the offer to support the construction of a municipal hospital underscored its dedication to the welfare of its employees and the local population.

The expansion of medical facilities in Ahwaz was deemed necessary to meet the growing healthcare demands of the region. In addition to extending the existing hospital, the construction of ward accommodations in residential and work areas was considered essential. Initially, the fields' central medical store and pharmacy were located at the MIS hospital. However, it became evident that centralizing these functions in Ahwaz, the heart of the oil province, would be more suitable. By relocating the medical store and pharmacy to Ahwaz, pharmacists and medical storekeepers would have the ability to dispatch pharmaceutical supplies to other areas more efficiently. This would significantly save material handling efforts, documentation, and transportation. A sketch of the proposed hospital in Ahwaz was prepared in May 1947, outlining the initial stage of the medical development scheme.⁴⁵⁶ The plan involved converting the existing clinic into health offices, constructing new medical stores, establishing a central pharmacy, and providing hospital facilities with a capacity of 20-30 beds. Temporary clinics were set up in existing houses until the Ahwaz Health Department could be fully established. The company believed that a flexible plan could be replicated at a lower cost than multiple individual plans. In 1950, the Chief Medical Officer expressed disagreement with the suggestion to construct a central medical store and pharmacy in Ahwaz

Medical Development Ahwaz Hospital, and Medical Facilities. ArcRef: 3890. Barcode: 2798. 1948-51. BP Archives.

The Anglo-Persian Oil Company Limited (APOC): Persian Compendium: Medical Services, Abadan General Hospital and Attached Dispensaries. ArcRef: 37027. Barcode: 33561. 1928. BP Archives.

⁴⁵⁵ Explanatory notes in regard to certain measures undertaken voluntarily by the Anglo Iranian Oil Co. Ltd in Iran, 1948.

⁴⁵⁶ Medical Development Scheme – Persia. ArcRef: 3580. Barcode: 2589. 1947-50. BP Archives.

for £25,000. However, by 1951, he recognized the critical importance of such a facility and recommended that consideration be given to its inclusion in the building program. Orders for building materials that were not available in existing stocks were placed with suppliers in the UK. Financial approval was obtained, and it was decided to approach future building programs on an annual basis rather than in stages. This approach provided greater flexibility and adaptability to the changing needs and circumstances. The ongoing development and expansion of medical facilities in Ahwaz demonstrated the company's commitment to ensuring accessible and quality healthcare services for its employees and the local community. By centralizing resources and adopting a flexible building program, the AIOC aimed to meet the region's evolving healthcare needs efficiently and effectively.



FIG. 4.48 The Operating Theatre at the Oil-Fields Hospital. Chief Surgeon and Assistant.

Source: *Album of photographs of Persia*. ArcRef: 24931, Barcode: 22758. BP Archives.

Date: 1925-1927. Accessed: February 2017.

4.6.4.7 Enlightening Spaces: Educational Facilities

In the 1948 General Plan, the Imperial Government of Iran and the Anglo-Iranian Oil Company Limited reached a second agreement regarding the reduction of non-Iranian employees, including artisans and technical and commercial staff, within the company's workforce. The engagement of foreign workers in the expansion program was deemed unnecessary for the benefit of the Iranian government, as suitable Iranian candidates were available. Both parties recognized the advantage of training local employees for the oil industry, as it would contribute to the national economy and ensure satisfactory results for the company's operations. To decrease the number of non-Iranian employees progressively, AIOC decided to follow the practical approach outlined in the 1936 General Plan. This involved an annual reduction of the proportion of foreigners to total employees, allowing more unskilled Iranian labour to be recruited.⁴⁵⁷ In 1948, non-Iranians accounted for 11.8% of the company's total workforce. In line with the Concessional Agreement, the company aimed to reduce this percentage to 7.5% within the next ten years.

However, the company faced challenges in maintaining construction continuity with unskilled Iranian staff alone, as the methods used after 1936 had limitations. Upon assessing the man-days and financial requirements for the 1951 program, it became clear that the current constructional scheme could not be met within the given timeframe. As a result, the company decided to extend their deadlines.⁴⁵⁸ Furthermore, in the event of any downturn in the company's operations, the government strongly opposed any loss of Iranian employment and emphasized the importance of prioritizing Iranian workers over foreign employees.⁴⁵⁹ To address these issues, certain categories of employees were omitted when determining the total number of non-Iranian employees and calculating the percentage of non-Iranians to Iranians. This included non-Iranian employees involved in training Iranians, as well as those temporarily employed for construction work by the company or on its behalf by contractors.

The Iranian government also emphasized the need to broaden the scope of international educational grants to include training in the United Kingdom for all professions required in the company's operations. In addition to petrochemical technology and engineering, training in medicine, accountancy, and other fields became obligatory. The company had to collaborate with the Ministries of Finance

⁴⁵⁷ Letter from R M Wynne-Edwards to E H O Elkington dated 10 May 1948 concerning the progress of housing projects in Abadan and the fields.

⁴⁵⁸ Iran: Facilities and Amenities. ArcRef: 36133. Barcode: 32651. 1950. BP Archives.

⁴⁵⁹ p3

and Labour to ensure the training and employment of Iranian nationals. AIOC, in consultation with the government, was responsible for advertising job vacancies and inviting new employees to fill those positions. The commitment to training extended to various aspects of the company's operations. The government insisted on the expansion of educational grants to cover a wide range of professions. Cooperation between the company and relevant ministries was essential in facilitating the training of Iranian employees. The company also sought to attract new talent by advertising job opportunities and conducting recruitment processes. The Iranian government's insistence on international training aimed to enhance the skills and knowledge of employees in fields necessary for the company's operations. The cooperation between the company, ministries, and educational institutions aimed to provide comprehensive training, including medicine, accountancy, petrochemical technology, and engineering.⁴⁶⁰ Through these initiatives, the company and the Iranian government worked together to address the challenges posed by the reduction of non-Iranian employees and ensure the development of a skilled Iranian workforce capable of contributing to the company's operations and the nation's economy.

The experience gained from working in the oil fields has highlighted the crucial role of a solid general education foundation in practical commercial and industrial training. Without this foundation, training programs tend to be ineffective due to a high dropout rate among youths who struggle to grasp more specialized knowledge. Unfortunately, in Khuzestan, there is a significant shortage of educational facilities. It is estimated that there are 70,000 school-age children in the province, with only about a quarter of them attending primary or secondary schools.

⁴⁶⁰ The Company had not to be bound to consider the application for employment from persons: who had reached the age of 45, or whose state of health was not satisfactory or who had not fulfilled their military obligations in conformity with Iranian law, or who had formerly been in the service of the Company, have been dismissed as being unsuitable for the Company's service or who have been convicted of a criminal offence or whose standard of education is below that of the sixth class of the primary schools. The Company had to be entitled to test the competence and experience of a candidate for employment by means of personal interview or examination at any of its centres or a probationary engagement in Khuzestan for a period not exceeding six months. The government, at its discretion, had to be represented at any such examination or test; if a candidate for employment in whatsoever capacity was rejected in consequence of an interview, examination or probationary engagement, the Company had to, if so required, inform the Government in writing the reason for rejection. The rate of reduction envisaged by this plan may be retarded by an increase in the extent of the Company's operations or by factors beyond the control of the Company. Examples of such factors were: insufficiency of Iranian nationals possessing the requisite competence and experience, which would be accentuated by the establishment or expansion of other industrial and commercial undertakings in Iran requiring artisans and other trained employees, or a state war or any other emergency. The Parties declared that they would comply with the procedure set out in the spirit of mutual goodwill and good faith as required by Article 21 of the Concessional Agreement.

To address this issue, the Company has taken the initiative to construct and equip 20 schools, which have been presented to the Government. However, it is important to note that public education in Iran, like in other parts of the world, falls under the responsibility of the government, specifically the Minister of Education. Consequently, the Company restricts itself to making voluntary monetary contributions, respecting the Ministry's jurisdiction. Looking ahead, the Company has devised a plan for the next decade. It aims to continue voluntarily providing training facilities for Iranian nationals and have the flexibility to host up to one hundred non-Iranian trainees in Iran at any given time. However, the Company emphasizes that no individual should remain in training for more than three years.⁴⁶¹ Furthermore, it intends to finance the establishment of approximately 30 additional kindergarten and primary schools, along with eight secondary schools, in its operational areas. These educational institutions would accommodate around 10,000 more children, but their construction is estimated to cost over £1,500,000. Within the realm of education, the challenges can be divided into three categories: primary, secondary, and university education in Iran; education in the United Kingdom; and vocational training for various professions in Iran, including artisans, supervisors, clerks, drafting technicians, process operators, chemists, engineers, and accountants.⁴⁶²

From a broader perspective, certain topics need to be addressed with the national government to contribute to the success of the overall educational scheme. The government should prioritize the construction of additional schools in Ahwaz to improve educational opportunities for the province's schoolchildren. It should also review salary scales for teachers to ensure the recruitment and retention of suitably qualified educators. Additionally, there is a need to expand the Teachers' Training College in Ahwaz to accommodate a total of 250 students at once and provide training for 50 teachers simultaneously. Moreover, the teaching syllabus of the artisan schools should be examined to introduce any necessary modifications that would better prepare students for employment in the oil industry.

It was firmly believed that the government was responsible for constructing additional schools in Khuzestan. Once these schools were established, there would be a significant improvement in the overall standard of general education throughout the province. This improvement would ensure an ample supply of well-trained teachers who would be appropriately compensated for their work. The importance of having a sufficient number of qualified teachers cannot be overstated. In particular, attention was drawn to the need for expanding the teachers' training college in

⁴⁶¹ Education and training p76

⁴⁶² Education and training p76

both Ahwaz and Abadan. To support the improvement of teachers' conditions, the Company expressed its willingness to make a voluntary contribution by constructing accommodations for the 325 teachers required for the additional schools built by the Company and subsequently handed over to the Ministry of Education. These new educational and training facilities encompassed primary, secondary, and university education. Additionally, there were plans for a student hostel, portable garages, a primary school (as part of the main high school) with six classrooms, a kindergarten, Firdausi school, a marine training centre, two extensions to primary schools with additional classrooms, 20 teachers' quarters (including six relocated), three training workshops, and an artisan training scheme in Ahwaz. The cost of providing this accommodation was approximately £500,000.⁴⁶³

The Company also intended to continue funding a school medical service and clinics for school children in Abadan and Ahwaz at its own expense. The estimated annual recurring cost for this service was around £10,000. Regarding university education, the Company contributed equipment to the Engineering and Science Faculties of Tehran University, amounting to approximately £150,000. To ensure that students in these faculties receive instruction based on the latest advancements in science and engineering, the Company also offered to engage experienced lecturers in these fields at its own expense and make them available to the university. Furthermore, subject to an agreement with the Ministry of Education, the Company planned to recruit youths who successfully completed the fifth year of the secondary school curriculum for a two-year training course at AIOC's Technical Institutes. Upon completion of this course, some students could pursue further university education in the United Kingdom under the terms of Article 16 of the Concession. Others would have the opportunity to undertake a three-year course of study at Tehran University, leading to a degree in Engineering or Petroleum Technology. Students whose homes were located in Tehran were expected to reside with their families while attending the university. However, it was acknowledged that accommodation would pose challenges for those whose homes were elsewhere in Iran. Therefore, the Company was prepared to construct a hostel in Tehran at its own expense for their use. The Company also offered scholarships to a selected number of students, covering tuition fees and, where necessary, reasonable board and lodging expenses. A budget of £10,000 per annum for a period of ten years was allocated by the Company for these scholarships.⁴⁶⁴

⁴⁶³ Section 3 – Pipeline Vol 17. Ahwaz workshops. ArcRef: 53970. Barcode: 50090. BP Archives. Date. 1927

⁴⁶⁴ Education and training p76

Regarding education in the United Kingdom, the Company believed that the students who benefited from the education provided for in Article 16 of the concession demonstrated the success of the system. As a result, the Company proposed selecting a group of Iranian employees and offering them advanced education and training in the United Kingdom. An additional annual sum of £15,000 could be allocated to support this initiative for the next ten years. In terms of vocational training, the Company gathered valuable experiences over the past eleven years. These experiences showed that courses for trainees in various categories were most suitable for the technical operations conducted by the Company. These categories included trade trainees, artisan apprentices, commercial apprentices, technical apprentices, technical trainees, and university students.⁴⁶⁵ The Company's voluntary vocational training schemes in Iran expanded continuously and were maintained at a high level of efficiency.⁴⁶⁶

However, there were certain limiting factors that could influence the future development of these schemes. These factors included the availability of youths with the necessary level of education, the capacity of the Company's works to provide training opportunities and absorb qualified recruits in different occupations, and economic considerations.

The Company's objectives for providing training facilities to Iranian nationals were as follows: Firstly, the "trade trainees" program involved a 5-year course designed for youths who were not suitable for engagement as artisans due to their lower educational achievements. This new system of practical training was developed in recent years. Secondly, the "artisan apprentices" program had achieved significant success, as revealed by an in-depth analysis of its results. It was estimated that the maximum number of apprentices who could be trained at any given time in the Abadan and Fields areas was 900. By 1950, the Company aimed to increase the number of recruits to the course to 315 per year, with an annual output of 90 to 100 apprentices upon completion of the 5th year. This would result in approximately 875 to 900 artisan apprentices undergoing training each year. It should be noted that some artisan apprentices were promoted to become technical apprentices after completing the second year of the artisan apprenticeship, while

⁴⁶⁵ The minimum educational standard required for this course was the completed 4th year of primary school. It is contemplated that this course will be in full operation in 1952 and that there will then be 1,000 trainees taking the course at any one time. 300 new recruits will start the course each year and it is hoped that from 1952 onwards not less than 130 will pass out annually after the 5th year.

⁴⁶⁶ Employing this 5-year course, suitable youths of 6th class standard of primary education had been trained to become artisans of the highest grade; indeed, many of those who had already completed this course were occupying important positions in the works.

others joined the Company's service before completing the entire 5-year course as less highly skilled artisans.

The education of the remaining categories of Company trainees centred around the Technical Institute in Abadan. The progress and developments in their training relied heavily on the ability of Tehran University to accommodate students up to the degree standard in engineering and oil technology. The Technical Institute was officially recognized by the Ministry of Education and played a significant role in providing higher education. It offered opportunities and facilities for part-time teaching, which were particularly crucial for a large industrial community.⁴⁶⁷

The Company's vocational training system aimed to develop technical and commercial staff, as well as skilled tradesmen. The current annual cost for this program amounted to approximately £300,000. AIOC had confidence in the effectiveness and sustainability of this system, as it fostered traits of character

⁴⁶⁷ At that time, three classes of men were undergoing training in the Technical Institute:

- a) Commercial Apprentices: Boys holding 9th class certificates of education were admitted to the Technical Institute as Commercial Apprentices and underwent a 3-year course of training, partly theoretical in Institute and partly practical in the Company's offices, leading up to the ordinary Certificates Examination in Commerce, which was recognised by the Ministry of Education as equivalent to the 12th class diploma in State Schools. Owing to the present paucity of suitable recruits, an introductory course of one year has been instituted in which boys with 7th or 8th class education are admitted and trained up to the required standard. By 1949 the Company plans to increase recruiting for the course to 60 youths each year and hopes that by 1952 not less than 40 will pass out of the 3rd year of the course annually. After 1952 there will be 200 commercial apprentices undergoing training simultaneously, 150 in the main curriculum and 50 undergoing the introductory year's study.
- b) Technical apprentices: In this category boys with similar qualifications to Commercial apprentices were trained up to the standard of the ordinary certificates examination in engineering, which was also recognised by the Ministry of Education as equivalent to the 12th class diploma of the state's schools. The training was partly theoretical in the Institute and partly practical in the Company's works. As with Commercial apprentices, the paucity of suitable entrants to this Training Scheme was being offset to some extent by an introductory training period of one year for boys with 7th or 8th class education. In addition, a certain number of Artisan apprentices were promoted each year to the Technical apprentice class as a result of their annual examinations. 60 new recruits will start the course each year and it was planned that from 1952 onwards not less than 40 will pass out after the 3rd year. After 1952 there were 200 Technical apprentices undergoing training simultaneously.
- c) Technical trainees and University students: at that time students with 11th class certificates of Iranian State Schools were selected as a result of Country-wide examinations to undergo a 5-year course in Science or Engineering, successful completion of which is recognised by the Iranian Ministry of Education as equivalent to a degree of Tehran University. Technical knowledge acquired in the institute is consolidated by practical experience in the Company's Works for 7.5 months in each year. As mentioned previously, it was planned that the opening of Faculties of engineering and Science at Tehran University would enable this course to be reduced to a 2 years course of preliminary study and so make available facilities in the Institute to handle an increased number of Technical apprentices. In that event 30 new recruits could start the Technical training course each year and it was hoped that having completed the course, not less than 25 will pass out annually. The Company was prepared to continue the maintenance at its own expense of the Technical Institute for the next 5 years at an estimated cost of some 50,000 Pounds per annum.

and self-reliance among trainees, providing a solid foundation for leadership in the industry it sought to promote. The hostel facility had successfully instilled these qualities, contributing to the residents' improved physical well-being and overall health. This achievement stood as a testament to the positive impact of their way of life. Recognizing the significance of the hostel, the Company had included plans for its expansion in the future building program, with an estimated cost of £15,000.

Furthermore, Wilson, the architect responsible for educational buildings in Ahwaz, designed an impressive technical college. The construction featured an extensive campus layout, incorporating classrooms, lecture theatres, engineering workshops, and laboratories. With a commanding central tower at the main entrance and administrative quarters, the Technical College exemplified Wilson's skill in handling architectural design and adding a sense of dignity to brickwork aesthetics.⁴⁶⁸



FIG. 4.49 Artizian school at Ahwaz.

Source: Mashal Magazine. NO 901. <http://www.mashal.ir/>.

Date: 1959. Accessed: February 2022.

⁴⁶⁸ Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.



FIG. 4.50 Fields Workshops.

Source: Middle East Oil Development. ArcRef: 134844C. Barcode: Z01622274. 1956. BP Archives.

Date: 1956. Accessed: February 2017.

4.6.4.8 Mastering the Urban Canvas: James Wilson's Vision for Urban Planning

James Wilson's role as a company architect went beyond conventional architectural design. He was instrumental in shaping the urban landscape of Ahwaz to align with the evolving needs and values of the Anglo-Persian Oil Company,

contributing to the city's overall development and modernization. In addition to addressing the accommodation needs within existing zones in Ahwaz, AIOC recognized the importance of creating new towns that would cater to the diverse housing requirements of local workers, international employees, and managers. The Company's financial prosperity in the post-war period allowed for the implementation of comfortable and well-designed urban forms. This transformation in the Company's financial status had a direct impact on the character of Ahwaz, turning it into a site for the British to experiment with the machinery and modernity of a garden city. Taking inspiration from Ebenezer Howard's concept and principles of a garden city, Wilson played a crucial role in extending Ahwaz into a more environmentally-friendly and green-designed neighbourhood. These designs aimed to provide suitable housing for both British and non-British engineers and employees. Remarkably, many of Wilson's architectural designs for employees' quarters have withstood the test of time and can still be seen today. The company towns created in Ahwaz featured wide streets that were intentionally designed as dead-ends, making entry easy but exit difficult from any direction except the entrance. This layout, with limited pedestrian or vehicle access, contributed to the safety and security of the Company towns. Through these intentional urban planning decisions, AIOC aimed to create cohesive and well-functioning communities that provided comfortable housing and fostered a sense of security and belonging. The focus on green spaces and well-designed neighbourhoods reflected a commitment to enhancing the quality of life for its employees and their families, contributing to Ahwaz's overall development and modernization as a city.⁴⁶⁹

⁴⁶⁹ Ward, Stephen V. *The Garden City: Past, Present, and Future*. [in English] Studies in History, Planning, and the Environment. 1st ed. ed. London :: E & FN Spon, 1992.

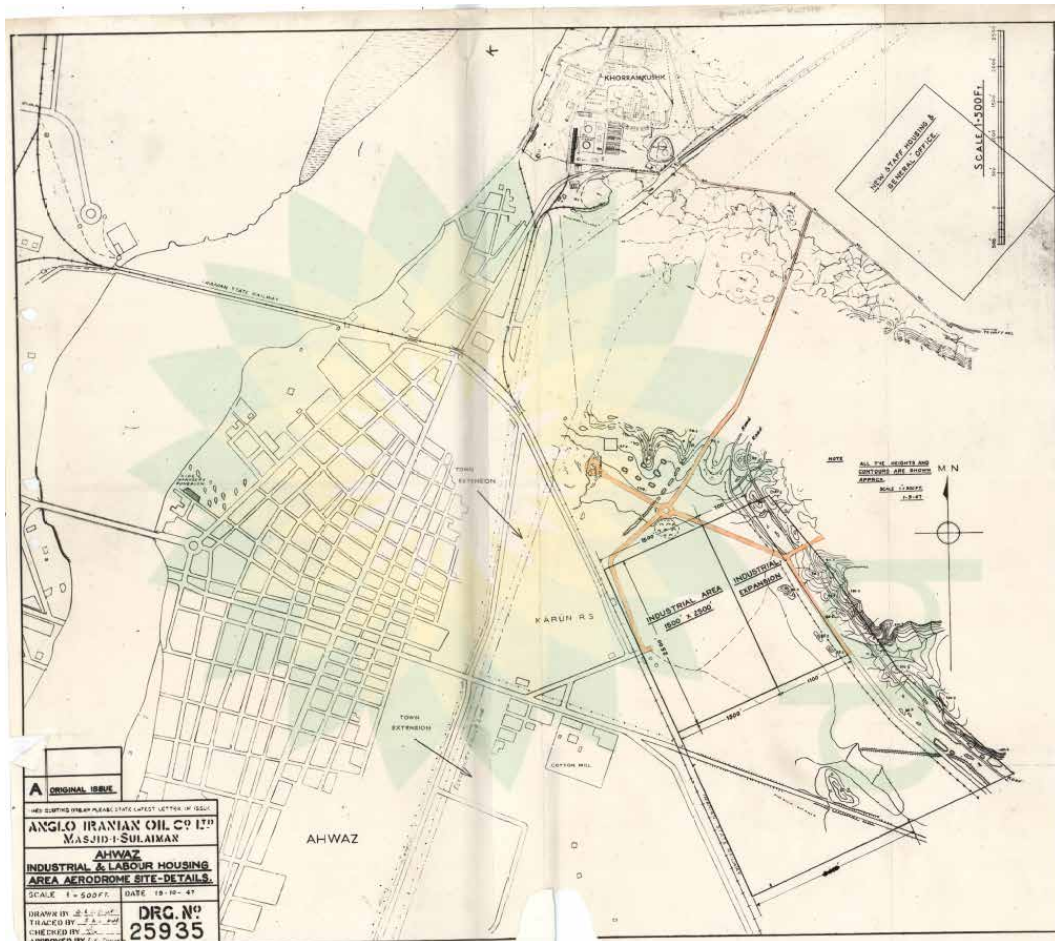


FIG. 4.51 Connections among Living and Working Spaces in Ahwaz.

Source: Ahwaz Development. ArcRef: 44000. Barcode: 41056. BP Archives.

Date: 1947. Accessed: February 2017.

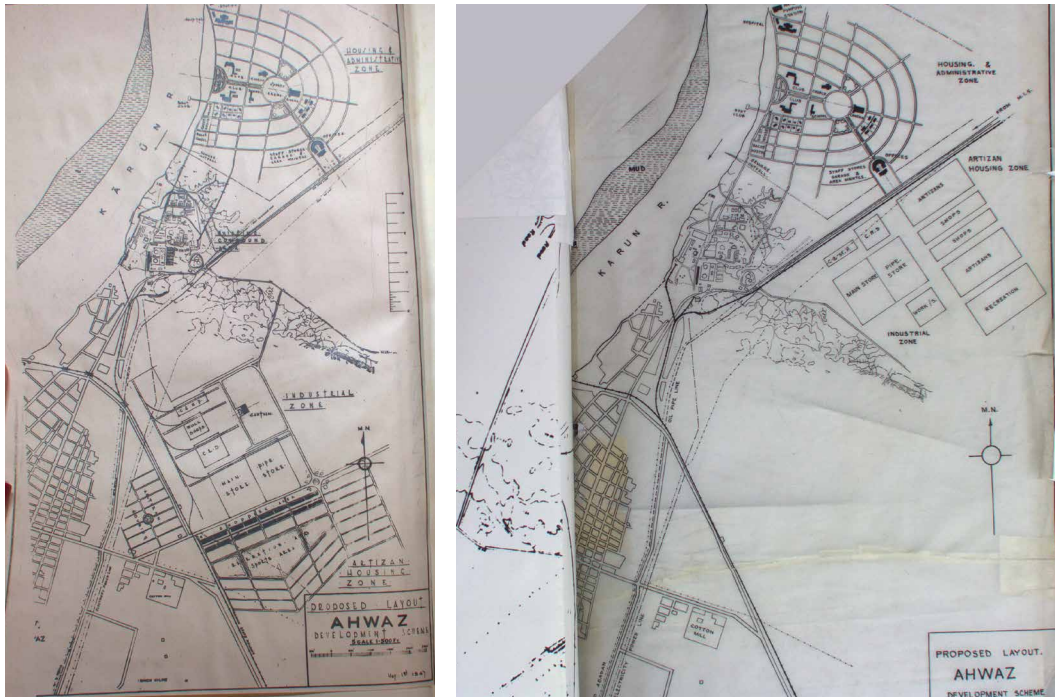


FIG. 4.52 Proposed Layout Ahwaz Development Scheme.

Source: Iran: Ahwaz Development. ArcRef: 44000. Barcode: 41056. BP Archives.

Date: 1946-1951. Accessed: February 2017.

4.6.4.9 Case Example III from British Contributions in the Petroleumscape of Ahwaz: Case study: Khorram-Kushk

Khorram Kushk, situated on the eastern edge of the Karun River and adjacent to the old town of Amery in northern Ahwaz, was conceived as a vibrant green enclave. Located at the heart of the city, it initially emerged as a vital hub for loading oil products destined for national distribution. Soon, its historical significance went beyond its role as an oil products loading point. Known as the “verdurous castle,” it exemplified the implementation of the garden city model in Ahwaz. It served as a prominent residential area for the British employees of the Anglo-Persian Oil Company (APOC) during the early 20th century. It featured distinct residential zones that were segregated based on the hierarchical classes of society, with a single guarded entrance providing controlled access. The neighbourhood layout

was characterized by the repetition of similar houses of the same order and size on each street, arranged in a grid pattern intersected by wide streets and boulevards. This design facilitated the Company guards' ability to maintain social control and surveillance.

Khorram-kushk was a predominantly administrative region rather than the entire company town. Initially, the oil company focused its efforts on creating a substantial office-residential complex that would serve as a haven for employees. The centrepiece of Khorram-Kushk was its remarkable architectural structures, characterized by their grandeur and integration with the surrounding gardens. The area featured a multitude of office buildings, numbering in the dozens, which served as the hub for administrative functions. Thirty to forty residential bungalows stood alongside these structures, providing comfortable housing for the company's employees.

Wilson purposefully extended its design and constructed the town to accommodate the needs of the British expatriate workforce. He characterized it by its well-planned layout and modern infrastructure, reflecting the British influence on urban development. The town featured spacious and comfortable housing units, complete with amenities catering to the residents' needs. These amenities included schools, hospitals, recreational facilities, and social clubs, fostering a sense of community among British employees and their families. Within its bounds, one could find the local headquarters of the National Iranian Oil Company, symbolizing its pivotal role in the oil industry, along with a labour polyclinic catering to the healthcare needs of the workforce.

A captivating spiral street, mirroring the sinuous flow of the Karun River, wound its way through the district. Lined with palm trees on both sides, this street served as a prominent thoroughfare, dividing Khorram-Kushk into two distinct halves.⁴⁷⁰ Along this enchanting route, residents could embark on leisurely strolls or simply admire the natural beauty that surrounded them. At the easternmost point of Khorram-Kushk, a grand mansion stood as a testament to opulence and refinement. This single-story building, enveloped by lush green spaces along the banks of the Karun River, served as a hub for administrative functions. Its strategic location allowed for easy access to the surrounding area's natural beauty. Its luxurious rectangular building, adorned with balconies and supported by stately white columns, exuded an air of elegance. It served as a focal point within the district, captivating the attention of all who passed by. To support the essential infrastructure, a telecommunication

⁴⁷⁰ Mashal magazine . No 899

centre and an electrical office workshop were situated on the eastern side of the spiral street. These facilities ensured efficient communication and maintained the power supply within the district, enhancing its residents' overall functionality and convenience.

As Khorram-Kushk expanded, a multitude of oil office buildings and residential houses were established in the second-class zone of the town. These houses varied in size and layout, ranging from two-room structures to multi-room corporate houses. Resembling the workers' houses of the MIS district, they featured small courtyards and narrow passages. The architectural style of these houses and the surrounding urban planning were heavily influenced by British and European modern design principles. They were constructed in parallel rows, nestled within well-maintained gardens and yards. Unlike traditional Iranian architecture, these houses lacked tall surrounding walls, which minimized privacy but offered unobstructed views of the picturesque river.

On the banks of the Karun River, a large warehouse was constructed, serving as a crucial storage facility. A dock for shipping operations once stood at a distance from the river, but it eventually disappeared with the construction of the coastal road. Adjacent to the river, a sailing club was established, initially used for unloading and loading pipes destined for the MIS district. Khorram-Kushk also housed the first piped-water production plant in Ahwaz, known as the Khorram-Kushk water supply workshop. This facility played a vital role in supplying the area with clean and accessible water. In the southernmost part of Khorram-Kushk, the oil depots of the distribution company were enclosed by corrugated galvanized sheets, creating a secure area for storing fuel. Trains carrying fuel regularly traversed the region until the early 1960s, contributing to the efficient distribution of resources.

The development also included amenities to enhance the residents' quality of life. The oil conservatory and vocational schools were established to provide educational and training opportunities. A compact sports club offered recreational activities, complete with a movie saloon for entertainment and a dining lounge where residents could socialize. A squash saloon was adorned with a distinctive tubular ceiling for those seeking leisure and physical activity. Additionally, a laundry facility, a clerk's shop, and a grocery store were available to meet the day-to-day needs of the residents. Among the enduring structures in Khorram-Kushk were the educational centres, which catered to the educational needs of the oil-rich region. These included the administrative sciences training centre, the oil conservatory, and the Ahwaz vocational school. These buildings featured high walls and gabled roofs, creating a distinctive architectural presence along the main street in the heart of Khorram-Kushk. A health centre was situated at the beginning of this row of

educational buildings, serving the community's healthcare needs. Additionally, the Nursing Education Center, also known as the Nurse Hostel, provided training and accommodation for aspiring nurses.

Khorram-Kushk was carefully designed to embody the vision of a well-appointed and self-contained community. Its architectural marvels, expansive gardens, and an array of amenities created an environment that catered to the needs and leisure of its residents. The district stood as a testament to the oil company's commitment to providing a comfortable and self-sustaining living space within the larger city of Ahwaz.

Amidst the absence of comprehensive urban planning, its development followed a grid arrangement guided by notions of 'rational' urban growth, still harmonized with the organic shape of Karun, the river flowing through the city. This combination of urban extension patterns allowed for potential future expansions by seamlessly integrating additional blocks into the existing urban grid. Each block held the potential to be further subdivided into parcels, meticulously allocated to individual employees of the respective companies. Adjacent to these self-contained towns, a store of vacant land was strategically positioned, earmarked as a reserve for future expansion, ensuring the fluidity of urban growth. The town's layout was meticulously organized, characterized by orderly avenues and intersecting streets.⁴⁷¹ This thoughtful urban planning created a sense of cohesion and facilitated ease of movement throughout Khorram-Kushk. The well-designed avenues, complemented by greenery and landscaping, added to the aesthetic appeal of the neighbourhood. With their fusion of modern architectural styles and carefully curated streetscapes, the houses in Khorram-Kushk exemplified the influence of British and European design sensibilities. The town's overall layout and architectural features contributed to its distinctive character, blending elements of both international influences and the unique setting of Ahwaz.

The architecture of Khorram-Kushk showcased a blend of British colonial design elements and contemporary architectural trends of the time. The buildings boasted a combination of modernist features and traditional British architectural styles, creating a unique visual identity for the town. Over time, as the oil industry in Ahwaz expanded, Khorram-Kushk witnessed changes in its demographics and function.

A distinct feature of this urban landscape's proximity to Amery old town was the juxtaposition of modern streets alongside crowded neighbourhoods and the

⁴⁷¹ shahrneshini dar shahrhaie naftkhiz jonob az ebtedaie kashfe naft: Page 29

transformation of empty grounds encircling the city's historic core. These modern thoroughfares, paved with contemporary materials, coexisted with traditional and densely populated areas and sought to bridge the gap between the past and the present. They served as conduits of progress, carrying the promise of modernity and serving as tangible reminders of the transformative power of urban development. The deliberate integration of these modern streets within the fabric of the existing city signified a conscious effort to reconcile the old with the new, showcasing the harmonious coexistence of different architectural styles and urban forms. This fusion of contrasting elements reflected the complexities of Ahwaz's history and became an emblem of the city's ability to adapt and embrace change while preserving its rich heritage.⁴⁷²

Furthermore, Khorram-Kushk embodied the sharp contrast between the lifestyles of the British expatriates and the local population. The town symbolized the stark social and economic disparities that characterized the colonial era, with the British employees enjoying a privileged and often luxurious lifestyle within the confines of their exclusive community. The houses in Khorram-Kushk were allocated different architectural designs and sizes, corresponding to the various employee classes and their grades within the Company. This resulted in categorising the neighbourhood, where residents were separated based on their social standing. While this zoning approach may have been intended to provide housing options suitable for different employee groups, it also created a noticeable division among the districts, hindering social interactions and activities within the larger city. The design of Khorram-Kushk reflects a conscious effort by AIOC to establish distinct residential areas that met the needs and expectations of its employees. However, the rigid separation of classes and the lack of integration with the broader urban fabric of Ahwaz presented challenges in fostering a cohesive and inclusive community. The neighbourhood's adherence to the garden city model emphasized the importance of green spaces and orderly planning but also perpetuated social divisions within the city.⁴⁷³

Khorram-Kushk, with its blend of architectural splendour, recreational amenities, and well-planned streetscapes, created a harmonious environment where residents could live, work, and indulge in leisure activities. These diverse facilities and buildings in Khorram-Kushk served the community's functional needs and contributed to the

⁴⁷² With the gradual nationalization of the oil industry, the town became more accessible to Iranian employees and their families. Today, Khorram-Kushk stands as a testament to Ahwaz's history and the impact of foreign presence on the urban fabric of the city. It serves as a reminder of the era when British influence shaped the landscape and left an indelible mark on the architectural heritage of Ahwaz.

⁴⁷³ Ehsani, Kaveh. "The Social History of Labor in the Iranian Oil Industry: The Built Environment and the Making of the Industrial Working Class (1908-1941)" (2014).

oil city's overall infrastructure and development. They represented the Company's commitment to providing essential services and amenities for its employees and their families, creating a well-rounded and thriving urban environment within the Ahwaz region. It was a testament to the careful planning and attention to detail that went into the creation of this distinctive neighbourhood within Ahwaz.

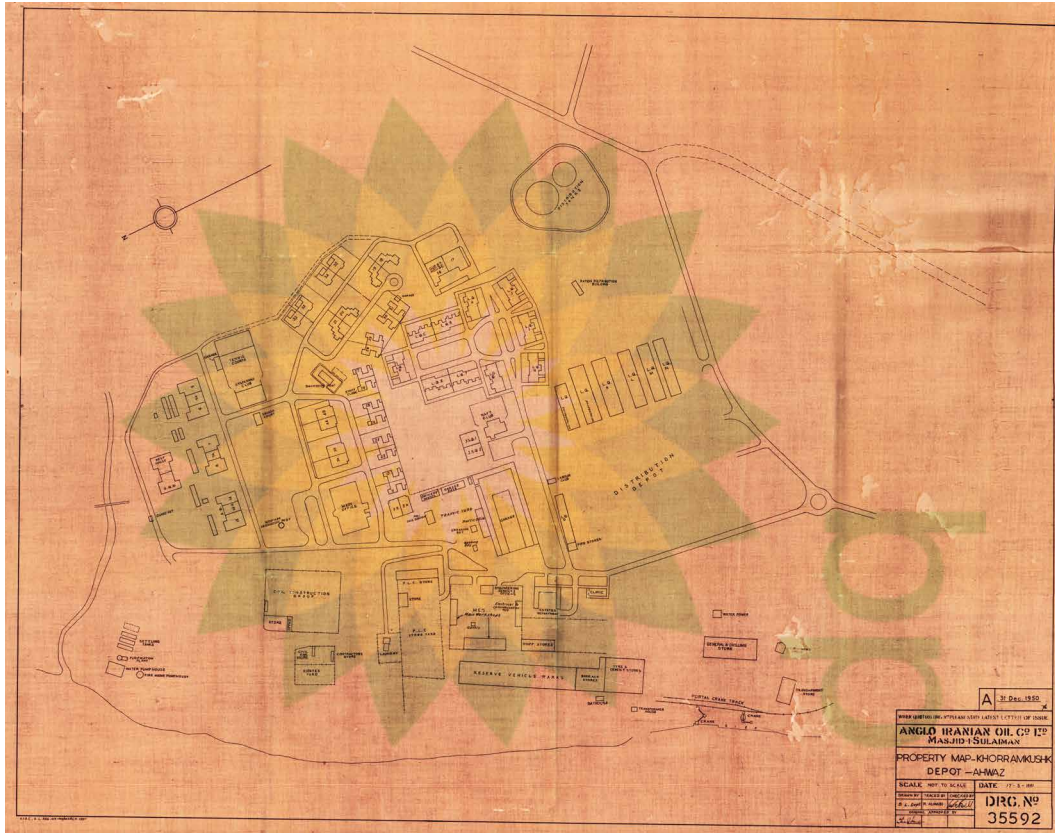


FIG. 4.53 Property Map - Khorramkushk Depot - Ahwaz.

Source: Ahwaz and S.E. Fields - Plans 1951. ArcRef: 52899. Barcode: 48848. BP Archives.

Date: 1951. Accessed: February 2017.

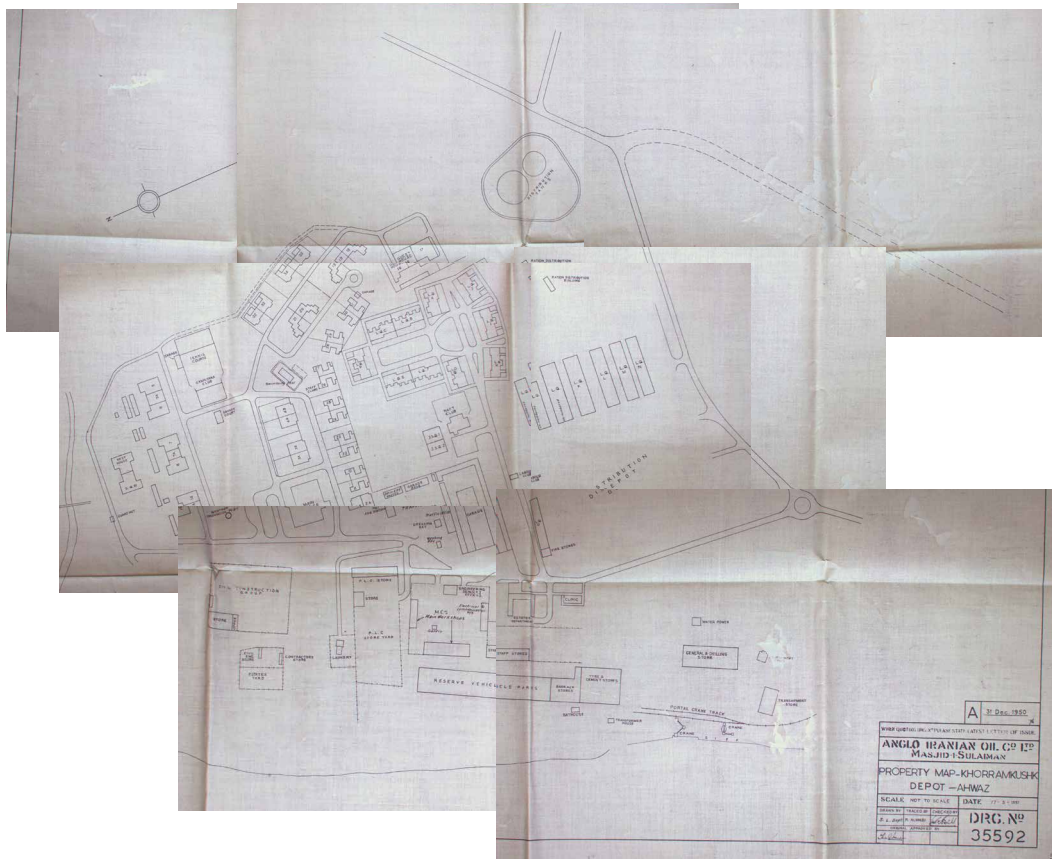


FIG. 4.54 Property Map - Khorramkushk Depot - Ahwaz.

Source: Ahwaz and S.E. Fields - Plans 1951. ArcRef: 52899. Barcode: 48848. BP Archives.

Date: 1951. Accessed: February 2017.

4.6.4.10 Case Example I from British Contributions in the Petroleumscape of Ahwaz: New-Site Company Town

The subsequent wave of oil headquarters, distinguished by their contemporary architectural styles, emerged as iconic embodiments of modernity within the realm of global exchanges. Establishing these modern and industrially designed headquarters exemplified the city's commitment to modernization and held significant implications in the broader international and global contexts. Constructing a modern urban

centre centred around these headquarters stood as a compelling testament to the formidable economic prowess wielded by Iran's oil companies on the international stage. The architectural design of these oil headquarters served as an articulation of modernity that resonated globally. These structures, with their sleek lines, innovative materials, and advanced construction techniques, mirrored the prevailing architectural trends of the time. This design language positioned the city at the forefront of contemporary aesthetics, aligning it with the visual lexicon of modernity that transcended geographical boundaries.

By forging a cityscape punctuated by such architecturally advanced oil headquarters, Ahwaz embarked on a strategic representation of its economic might on the international spectrum. This urban transformation, marked by the establishment of modern industrial headquarters, operated as a powerful visual symbol within the global discourse. The collective impact of these architectural endeavours communicated a narrative of affluence, progress, and technological advancement, positioning Ahwaz as a significant player in the international economic milieu. The act of creating a dedicated headquarters city characterized by contemporary architectural expressions was a profound reflection of the commanding influence exerted by Iran's oil industry on the world stage. The international recognition garnered by these emblematic structures underscored the strategic fusion of architectural aesthetics and economic dominance. This integration of architecture, economics, and global influence fostered a distinct identity for the city, encapsulating the symbiotic relationship between its industrial and international roles. In other words, the establishment of modern and industrially designed oil headquarters not only propelled Ahwaz into the realm of architectural modernity but also projected a resonant image of economic power on the global canvas. These headquarters embodied the city's commitment to progress, innovation, and international prominence. In this dynamic, architecture transcended its functional purpose to become a formidable tool for communicating the city's economic prowess within the broader context of international and global interactions.

An illustrative instance of this multifunctional urban expansion was the development of the New-Site. This area, situated between the airport and the Karun River and nestled in Ahwaz's northern and eastern suburbs, was strategically chosen to host the new headquarters of the Iranian Oil Exploration and Producing Company. This location was carefully chosen to ensure convenient access to transportation and natural surroundings, reflecting a thoughtful approach to urban planning. At its core, the New-Site featured a state-of-the-art administrative building that served as the nucleus of the Iranian Oil Exploration and Producing Company's operations.

The centrepiece of this development was the modern administrative building designed to house the administrative functions of the Iranian Oil Exploration and Producing Company. This building served as a symbol of the Company's presence and authority in the region, showcasing modern architectural design and reflecting the Company's forward-looking vision. The architectural design of this headquarters exemplified the contemporary ideals of the time, underscoring the marriage of modernity with functionality. By adopting the most advanced architectural principles of the era, the headquarters building stood as a tangible symbol of the oil industry's influential role in driving the city's modernization trajectory.

The New-Site not only accommodated the administrative hub of this vital industry but also featured a comprehensive array of amenities, effectively weaving together diverse functions within a cohesive urban framework. In addition to the administrative building, the area also encompassed spacious residential and recreational zones, providing comfortable living spaces for the Company's staff and their families. The residential areas were thoughtfully planned to create a harmonious and pleasant living environment, offering amenities and green spaces for the resident's well-being. Within this new headquarters area, essential facilities were carefully placed to cater to the community's needs. Notably, a well-established Emergency Hospital was established to ensure the health and safety of the residents. Additionally, a staff clinic provided medical services, while the Naft Club offered recreational and social activities, fostering a sense of community among the Company's employees. Sports facilities, schools, and cinemas were also thoughtfully integrated into this urban development, providing ample opportunities for leisure, education, and entertainment. The inclusion of these amenities not only enhanced the quality of life for the residents but also contributed to creating a vibrant and thriving community within the Ahwaz Headquarters.

Notably, the architectural aesthetics of the New-Site were symbolic of the interplay between the oil industry's power and the modernization of urban structures. The European-inspired construction technology, materials, and architectural styles employed in the main oil buildings stood as a testament to the industry's significant influence in shaping the city's physical landscape. This incorporation of European design elements underscored the oil industry's aspiration for a globally resonant image, while simultaneously highlighting the broader influence of Western ideals within the city's architectural fabric. The development of the New-Site in Northern Ahwaz marked a significant expansion of the city, transforming previously barren and desolate land into a lavish urban neighbourhood. This new area was nearly twice the size of Khorram-Kushk, allowing for expansive green gardens and spacious residential villas to be constructed. The design and layout of the New-Site reflected a commitment to creating a desirable and upscale living environment. The presence

of abundant green spaces and gardens added a touch of natural beauty to the surroundings, providing a refreshing and serene atmosphere for the residents. The residential villas, characterized by their large-scale and luxurious features, were meticulously designed to offer comfort, elegance, and ample living space for the inhabitants.

The New-Site represented a shift towards modern urban planning and architectural principles, incorporating elements of aesthetics, functionality, and environmental sustainability. The spaciousness of the area allowed for the creation of wide boulevards and well-organized streets, promoting ease of movement and accessibility. The deliberate inclusion of greenery and open spaces enhanced the quality of life for the residents, offering opportunities for recreational activities, relaxation, and social interactions. This expansion of Ahwaz exemplified the continuous efforts of the Anglo-Iranian Oil Company to provide its employees and their families with not only comfortable housing but also a vibrant and thriving community. The New-Site became another symbol of prosperity and progress, showcasing the Company's commitment to creating an exceptional living environment that catered to the needs and aspirations of its residents.

In summary, the development of the New-Site exemplified the era's approach to multifunctional urban expansion. This locale encapsulated the fusion of administrative, residential, and recreational functions, all seamlessly integrated within a coherent urban tapestry. The New-Site also served as a potent symbol of the oil industry's sway in the city's modernization efforts, both through its prominent headquarters and the incorporation of European architectural influences. This convergence of elements underscored the intricate interplay between industrial power and urban development in shaping the city's trajectory. The new Ahwaz Headquarters exemplified a comprehensive and well-planned urban development designed to meet the various needs of the Iranian Oil Exploration and Producing Company's staff and their families. This urban oasis brought together modern architecture, essential facilities, and recreational spaces, creating a cohesive and inviting environment that fostered a strong sense of community and belonging.⁴⁷⁴

⁴⁷⁴ Homeownership scheme by Iranian Oil Participants Limited, 1961, Source: BP. Archive. ArcRef: 170607. Homeownership, part 1 May 1955 to November 1960

4.6.5 Forging Partnerships: AIOC and Iranian State Collaboration in Equipment and Material Supply

At the beginning of the 1940s, the city had limited facilities for repairing industrial vehicles and maintaining and constructing new buildings. The old Mobile Plant was located at MIS Workshops, which was not geographically well situated for the whole oil province. Thus, Motor Transport Repair Facilities were brought mainly to Ahwaz; however, the facilities were still inadequate to meet the fleet requirements. In 1949, AIOC initiated a project covering the establishment of Central Workshops and Stores at Ahwaz. During this period, British experts (including the Board of Cement Marketing, L.M.S. Railway and London Transport -Chiswick Works and Operating Garages-) visited the oil fields to plan for the Repair Works of Large Transport Organisations. They proposed improved facilities which were based on London's Transport Practice.

The details of the layout were discussed and agreed upon with the "London Transport Development Engineers" having a specialized fleet of several thousand vehicles as being the most suitable for the Company's particular needs.⁴⁷⁵ First, it was a Central Repair and Maintenance Organization, and second, it was an Operating & Service Garage at Fields' Centre. The proposed Central Repair Workshop included the central reception and storage and supplies for all M.T. & C.M.P. spares in reserve vehicle park spaces, new and reconditioned spares and components, overhaul shops as a unit reconditioning shop for the body and chassis repairs of all types of engines (such as engines, gearboxes, axles, starters, dynamos etc.), ancillary units (such as water pumps, fuel injection, ignition equipment, electrical components, radiators, gearboxes, axles etc.), heavy vehicle maintenance and preparation for the issue of all classes of vehicles, trailers and unit parts (servicing facilities, refuelling, washing and greasing, assembly and storage of new vehicles), commissioning and construction of mobile plant repair.⁴⁷⁶

The building construction in Ahwaz was initially possible only by using materials from imported stocks. While later on, it became unmanageable to continue this procedure due to the shortage of many items in supplies and the necessity of unique materials for larger structures. In 1949, the abovementioned projects were mainly prepared in London with the highest possible haste. Still, there were delays in the construction dates because of the long period necessary to deliver them. Some items (such as air-conditioning) could be prepared by the end of construction, but generally, there

⁴⁷⁵ Fields central M.T. and Mobile Plant Workshops- Ahwaz. ArcRef: 10165, Barcode: 8873. Date 1949.

⁴⁷⁶ The extent of the facilities was based on an M.T. fleet strength of 1,600 vehicles and 800 units of C. & M. Plant comprising.

had to be no significant hold-ups in the construction process. Gradually, when the financial approval had not yet been obtained, the flexibility of construction was reduced, and the situation was expected to worsen considerably. Constructing certain urgent buildings required borrowing from housing stocks. Still, the general programme for ancillary buildings was much less promising and was not anticipated to be completed before 1950.⁴⁷⁷

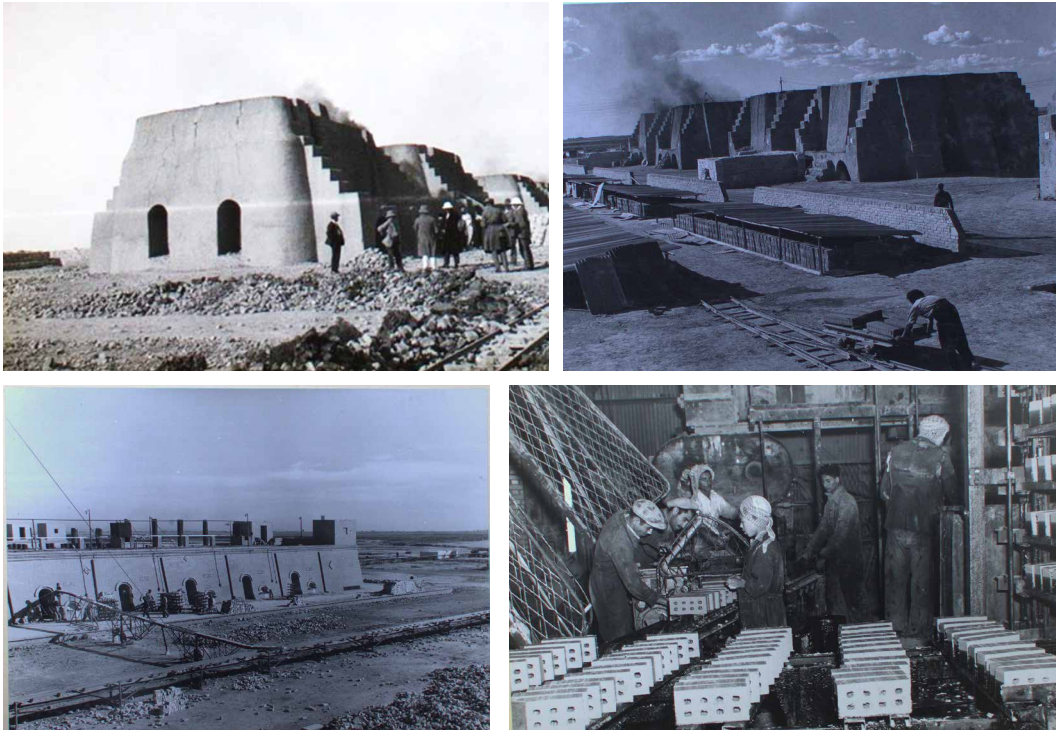


FIG. 4.55 Kut Abdullah Brick Kilns.

Source: ArcRef: 78026, Barcode: 69864, Company: The Anglo-Iranian Oil Co Limited. BP Archives.
Date: Unknown (1946-1951). Accessed: February 2017.

⁴⁷⁷ Homeownership scheme by Iranian Oil Participants Limited, 1961, Source: BP. Archive. ArcRef: 170607. Homeownership, part 1 May 1955 to November 1960



FIG. 4.57 Godown - Ahwaz.

Source: *Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views*. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Accessed: February 2017.



FIG. 4.58 Repair Shed - Ahwaz.

Source: Album Persian State Railway From BandarShahpour, Ahwaz, Salehabad, to Tunnel 64 views. ArcRef: 28233, Barcode: 32701. BP Archives.

Date: 1933. Accessed: February 2017.

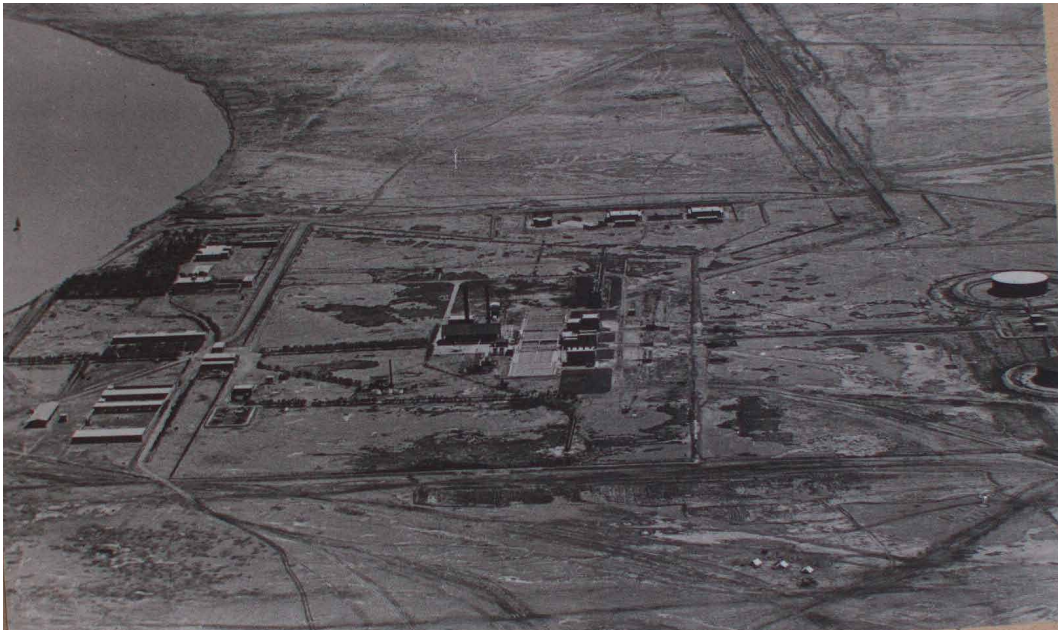


FIG. 4.59 Darquain Oil-pumping station.

Source: Operations of AIOC in Iran, ArcRef: 36119. Barcode: 32637. The Anglo-Persian Oil Company, Limited, BP Archives.
Date: 1942. Accessed: February 2017.

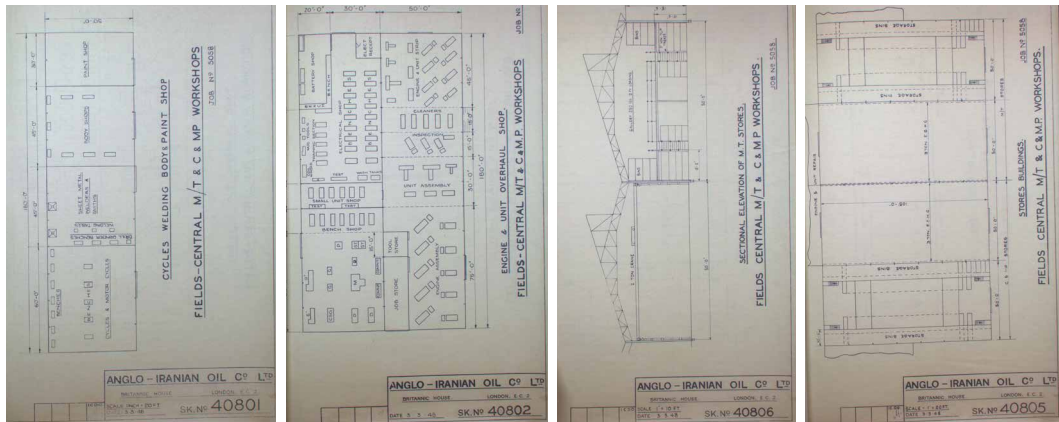


FIG. 4.60 Workshops Plans & Sections made for AIOC in Britannic House, London.

Source: Fields Central M.T. and Mobile Plant Workshops - Ahwaz. ArcRef: 10165. Barcode: 8873.
Date: 1949. Accessed: February 2017.

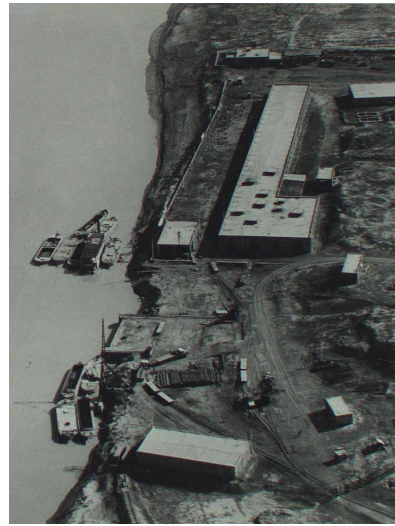


FIG. 4.61 Fields Central MT and Mobile Plant Workshops, Ahwaz.

Source: Operations of AIOC in Iran. ArcRef: 36119, Barcode: 32637. BP Archives.

Date: 1942. Accessed: February 2017.

4.7 Harmonizing Hybridity: Local Constructors and the Fusion of Vernacular and Colonial Architecture

The architectural developments in post-colonial Ahwaz served as a platform for bridging the divide between the Eastern and Western influences in the city. Ahwaz, like many other places in the Middle East, faced the challenge of asserting and preserving its national identity in the wake of decolonization. The clash between traditional norms and the aspirations of modern architecture necessitated a nuanced approach that went beyond the certainties of established architectural practices. As the construction of modern buildings progressed, there was a deliberate shift towards utilizing local contractors who could gradually adapt to the use of modern building materials and construction techniques. This approach aimed to foster a sense of ownership and empowerment among the local workforce while also incorporating the benefits of contemporary building practices. By involving local contractors and gradually introducing modern construction methods, the architectural landscape of Ahwaz began to reflect a fusion of cultural influences. It became a site where traditional craftsmanship and local knowledge merged with Western architectural principles and materials advancements.

The process of transitioning from traditional building practices to modern construction techniques was challenging. It required developing skills and expertise among the local workforce and the establishment of robust supply chains for modern building materials. However, these efforts were essential in creating a harmonious blend of local identity and global architectural trends. The introduction of sophisticated building groups further contributed to the evolution of Ahwaz's architectural landscape. These specialized teams brought expertise in utilizing modern building materials and constructing structures that met international standards. Their involvement helped push the boundaries of architectural possibilities in the city, enabling the creation of innovative and visually striking buildings.

Despite the transformative impact of the oil industry and the modern architectural developments in Ahwaz, the traditional neighbourhoods, the city's market, and the mosques remained vibrant centres that preserved the continuity of life and upheld the local community's values. These historic areas acted as the heart of Ahwaz, where the rich tapestry of traditional culture and Islamic heritage thrived. The traditional neighbourhoods, with their distinct architectural styles and close-knit

communities, provided the city's long-term residents with a sense of belonging and rootedness. These areas served as a testament to the enduring cultural values and practices that had shaped Ahwaz over generations. The streets were filled with the daily activities of residents, and the architecture reflected the unique character of the local culture.

The bustling market, or Bazaar, was a commerce and social interaction hub. It served as a gathering place for locals and newcomers alike, fostering connections and facilitating the exchange of goods and ideas. The vibrant atmosphere of the market reflected the resilience of traditional trading practices and the preservation of local customs. As spiritual and community centres, the mosques played a vital role in sustaining the Islamic values that underpinned the daily lives of Ahwaz's residents. These sacred spaces provided a sense of tranquillity and served as places of worship, education, and social gatherings. The mosques were not only religious symbols but also important institutions that helped uphold the community's traditional values and moral fabric. Amid the rapid modernization brought about by the oil industry, the traditional neighbourhoods, markets, and mosques stood as reminders of Ahwaz's rich heritage and cultural identity. They offered a sense of continuity and stability, allowing the city's residents to navigate the complexities of modernity while remaining rooted in their historical traditions. The interaction between long-time residents and new immigrants within these traditional spaces facilitated the preservation of historical Islamic values and provided a counterbalance to the forces of modernization. It created a dynamic cultural landscape where old and new coexisted, allowing for a diverse tapestry of traditions, beliefs, and practices to thrive. In this way, Ahwaz maintained its cultural resilience and identity, with the traditional neighbourhoods, markets, and mosques serving as pillars of community life that celebrated the heritage of the city amidst the rapid changes brought by the modern oil industry.⁴⁷⁸

The indigenous Ahwaz house, shaped by its surroundings and reflecting its inhabitants' cultural and social dynamics, experienced transformations as the forces of modernity introduced by the oil industry influenced the city. In the heart of the city, the old town of Amery stood as a testament to the pre-oil era, characterized by its compact layout and high population density. This historical core was home to people from various social classes living together without the divisions that later emerged. The majority of the population in this area were Arabs, adding to the diverse cultural fabric of Ahwaz. The old houses, nestled amidst tall palm trees, imparted a unique charm to the neighbourhood. Their architectural styles and design

⁴⁷⁸ Edens, David G. *Oil and Development in the Middle East*. Praeger Special Studies. New York: Praeger. 1979. p.22

elements reflected the indigenous traditions and aesthetics of the region. These structures had withstood the test of time, preserving the visual heritage of Ahwaz and serving as a reminder of the city's pre-modern era. The oldest mosque in Ahwaz, a symbol of religious and cultural significance, stood proudly in this neighbourhood, further enhancing its historical value.

Despite the encroachment of modern developments and the impact of the oil industry, the old town retained its distinct character, offering a glimpse into the past and providing a connection to the indigenous roots of the city. Its preservation served as a testament to the importance of visual culture in shaping the post-colonial identity of Ahwaz. The landscape of Amery, with its traditional houses and verdant surroundings, held a special place in the hearts of the residents, acting as a bridge between the old and the new. While the modernization brought about by the oil industry may have introduced changes to the indigenous Ahwaz house and its surroundings, the resilience and enduring value of the old town stood as a reminder of the city's rich history and cultural heritage. The visual landscape of Amery, with its indigenous architecture and natural beauty, played a significant role in shaping the post-colonial identity of Ahwaz's residents, fostering a sense of pride in their roots and providing a tangible connection to their cultural heritage.⁴⁷⁹

The post-colonial period in Ahwaz witnessed significant transformations in the realm of housing as the fabric and structure of vernacular houses gradually evolved. This process resulted in the emergence of a unique architectural prototype that combined elements of both local culture and European colonial practices. Traditional houses underwent a modernization process that integrated international architectural styles into their design, creating a fusion of diverse influences. As Ahwaz underwent modernization, the traditional houses adapted to the changing times while still maintaining a connection to their cultural heritage. This transformation involved incorporating various aspects of European architectural practices into the existing architectural framework. Elements of international styles were seamlessly merged with the traditional forms and elements of the local houses. The result was a mixed architectural pattern that represented the harmonious coexistence of different cultural influences. The integration of international styles brought a new dimension to traditional houses, enhancing their aesthetic appeal and functional efficiency. These hybrid structures became prototypes that reflected the evolving identity of Ahwaz and its embrace of both its cultural heritage and the modern world. Modernizing traditional houses not only transformed their physical appearance

⁴⁷⁹ Sir John Cadman's Visit to Persia, 1924. BP Archives. ArcRef : 36139

but also had a profound impact on Ahwaz's cultural and social fabric.⁴⁸⁰ Blending architectural styles symbolized the merging of different cultural practices, fostering a sense of cultural exchange and openness. It represented a shift towards a more cosmopolitan outlook and an acknowledgement of the city's position as a hub of cultural diversity. In this way, the post-colonial period in Ahwaz witnessed the convergence of local traditions and international influences, resulting in a unique architectural expression that harmonized various elements from different cultures. The transformation of traditional houses into prototypes of mixed architectural patterns served as a testament to Ahwaz's ability to adapt and embrace the changing world while preserving its cultural identity.

The impact of modern structures in the Company towns had a profound influence on the local architects of Ahwaz, shaping their approach to their craft. These architects faced the challenge of balancing the multicultural influences brought about by the modernization process while preserving the distinctive values of local housing. Despite the transformative effects of modernization, the local architects in Ahwaz sought to find compromises that would allow them to maintain the visual cultures that were deeply rooted in the community. They recognized the importance of preserving the lived landscapes of the oil-rich region and sought to incorporate them into the domestic scenes of the city.⁴⁸¹ Among the prominent local constructors was Haj-Mohammad Taghizade, a renowned figure in the field of traditional construction. His expertise and craftsmanship contributed to the preservation of traditional settlements and their architectural heritage, even as new materials, building techniques, and decorative elements were introduced. The introduction of modern elements into the local architecture resulted in Ahwaz showcasing a diverse range of architectural styles. This amalgamation of influences created a unique architectural landscape that blended traditional and modern elements. The local contractors gradually acquired sophistication through collaboration with building groups, enabling them to produce building materials and construct structures that aligned with the evolving architectural trends. In this process, the local architects played a crucial role in mediating the transition between traditional and modern architectural practices. They integrated new materials and techniques while staying true to the distinctive values and aesthetics of local housing. By doing so, they ensured that Ahwaz's architectural landscape reflected both its cultural heritage and the changing dynamics of the modern world.

⁴⁸⁰ Bavar, Syrus. *Naft Va Tamaddon E Sanati [Oil and Industrial Civilization]*. Honar-e Mermari-e Gharn, 2019.

⁴⁸¹ Neves, V. "International Encyclopedia of Housing and Home." Essay. In *Shanty Towns*, 316–20. Elsevier Ltd. 2012. <https://doi.org/10.1016/B978-0-08-047163-1.00533-6>.

The efforts of these local architects and constructors in navigating the multicultural influences and preserving the visual cultures of Ahwaz demonstrate their commitment to maintaining a sense of identity and continuity amidst the rapid changes brought about by modernization. Their work not only transformed the physical aspects of the city but also upheld the traditions and values integral to the local community.

The accelerated industrialization in Ahwaz led to a significant influx of migrants, resulting in overpopulation and a shortage of housing. In response to these challenges, local constructors took matters into their own hands and began building new towns in the suburban areas. This initiative was aimed at addressing the housing needs of the growing population. As discussed earlier, the colonizers brought with them their own housing styles, which they adapted to suit the local materials and tropical climate. At the same time, the colonized people sought to leverage the knowledge and techniques introduced by the colonizers to enhance their own architectural practices. They viewed the vernacular house as a hybrid form that incorporated elements of both local and colonial cultures. Certain aspects of the new vernacular houses followed traditional patterns, such as the inclusion of inner courtyards, which had long been a feature of local architecture. However, other elements, such as iron structures, reflected the influence of modern architectural styles brought by the colonizers. These new vernacular houses should not be seen as imported Western architecture but rather as an indigenous form that emerged through cross-cultural integrations between the local population and the informal colonizers. The construction of these new vernacular houses represents a fusion of local traditions and colonial influences, resulting in a distinct architectural style that reflects the unique cultural dynamics of Ahwaz. It is a testament to the ability of the local population to adapt and incorporate external influences while maintaining their own identity and architectural heritage. The emergence of these hybrid architectural forms highlights the ongoing process of cultural exchange and negotiation between the colonizers and the colonized. It showcases the capacity of the local community to creatively engage with and transform external influences, ultimately shaping the architectural landscape of Ahwaz in a way that reflects the blending of local and colonial cultures.

One of the distinguishing features of vernacular colonial houses in Ahwaz was their focus on private gardens, setting them apart from the more outward-facing patterns of Western bungalows. These houses were designed and constructed with careful consideration for the surrounding natural environment, creating a sense of privacy and tranquillity. During the construction of these houses, colonial designs and architectural elements were adapted and integrated with local building techniques and materials. While the overall façade of these houses may have

retained some similarities to traditional local architecture, it was the incorporation of specific elements that gave them their distinctive colonial character. Elements such as porches and balconies were added to provide shaded areas and outdoor spaces for relaxation and socialization. The choice of materials for windows, doors, and structural elements reflected the influence of colonial architecture, often incorporating modern materials and construction techniques. These vernacular colonial houses maintained a balance between the adaptation of colonial styles and the preservation of local architectural traditions. The result was a unique blend of design elements that combined the practicalities of colonial construction with the aesthetic sensibilities of the local culture. By incorporating these colonial elements into their houses, the residents of Ahwaz demonstrated their ability to adapt to new influences while still maintaining a sense of cultural identity. The houses served as a visual representation of the cultural exchange and fusion during the colonial period, reflecting the region's dynamic nature of architectural development.

Ahwaz, a vibrant tapestry of diverse groups, witnessed the expression of its residents' unique differences and a constant interplay and negotiation of the boundaries that separated them. The advent of oil brought forth a transformative experience, leading people to embrace new ways of life and reshaping their perceptions. For example, as the residents of Ahwaz embarked on a path of change, increasingly embracing individualist patterns of lifestyle, the traditional courtyard houses no longer sufficed to meet their evolving needs. The influence of oil permeated every aspect of socio-cultural and political structures, leaving no group untouched. The impact was profound, altering the course of history for all involved. The local groups found themselves unable to return to their pre-oil situation, forever transformed by the forces unleashed. They also harboured aspirations of emulating European lifestyles, an unattainable desire that perpetually eluded them. Similarly, the Oil Company managers found themselves unable to fully replicate European ways of life within the city's confines. As eloquently described by Hernández Felipe, the collision of cultures and desires led to a process of hybridization that intensified exponentially as interactions multiplied.⁴⁸²

The development of global practices and industrialization in Ahwaz had a profound impact on the local population and their perception of housing. As the Company expanded its operations and infrastructure, it brought with it new housing typologies

⁴⁸² Djar, Kahina Amal. 2009. "Locating Architecture, Post-Colonialism and Culture: Contextualisation in Algiers." *The Journal of Architecture* 14 (2): 161–83. <https://doi.org/10.1080/13602360902867392>.
Hernández Felipe. 2010. *Bhabha for Architects*. Thinkers for Architects, 04. London: Routledge . P 119
Yeoh, B. S. A. *Contesting Space: Power Relations in the Urban Built Environment in Colonial Singapore*. Oxford: Oxford University Press, (1996) P 118.
Edens, David G. *Oil and Development in the Middle East*. Praeger Special Studies. New York: Praeger. 1979.

and modern amenities that were previously unfamiliar to the residents of Ahwaz. The Company towns, with their well-planned layouts, modern facilities, and distinct architectural styles, served as aspirational models for the local population. Native constructors and clients began to observe and appreciate the benefits of these new housing forms, which offered improved living conditions and a more modern way of life. The merging of traditional and modern architectural elements became a way to incorporate the desirable aspects of both styles into their own homes. This process of adaptation and integration allowed for the creation of unique architectural hybrids that reflected the changing aspirations and lifestyles of the local population. While the exact details of the housing evolution during this period are not readily available, it is plausible to assume that the merging of traditional and colonial architectural styles resulted in the emergence of new housing typologies that combined elements of both worlds. This blending of architectural influences allowed for the preservation of traditional values and aesthetics while embracing the benefits of modern living.

Additionally, the sociocultural dynamics of the time played a significant role in shaping housing preferences. The dualistic nature of society, with the presence of both indigenous residents and colonial actors, contributed to the adoption and adaptation of architectural forms that catered to diverse social groups. The desire to maintain cultural identity and historical values, alongside the allure of modern amenities and lifestyles, led to the development of housing typologies that reflected this merging of influences. Overall, the first Pahlavi period in Ahwaz marked a transformative phase in the architectural evolution of the city's housing. The integration of a variety of styles and elements, driven by sociocultural factors and the desire for modernization, resulted in the creation of distinct architectural hybrids that reflected the changing aspirations and values of the local population.⁴⁸³

The first realm of local housing materialized in permanent forms, crafted meticulously from enduring materials such as concrete, brick, metal, and wood. These structures, meticulously planned and designed in accordance with architectural discourse and urban regulations, symbolize power, control, and stability. They stand as resilient embodiments of an ordered and productive society, etching their mark upon the landscape. However, a second realm still existed, constructed from mortal materials that tell a different tale. Palm leaves, wasted metals, and paper come together to form humble dwellings, serving as a reminder of the transient nature of existence. These structures, born from necessity and resourcefulness, embodied the resilience and adaptability of the human spirit.

⁴⁸³ Seo, Ryeong Ju et al.. *Southeast Asian Houses: Embracing Urban Context*, Seoul Selection, 2017. *ProQuest Ebook Central*, <http://ebookcentral.proquest.com/lib/delft/detail.action?docID=5396328>.

4.7.5.1 Case Example I from Local Contributions in the Petroleumscape of Ahwaz: Mousavi House: A Fusion of Tradition and Modernity in Ahwaz

The incorporation and transformation of modern architectural features in the vernacular colonial houses of Ahwaz served as a testament to the collective acceptance and endorsement of modernization. These features included the use of iron structures, simplified forms of porches, and terraces that faced the street. They represented a departure from purely traditional design elements and demonstrated a willingness to embrace new architectural trends. At the same time, the architectural composition of these houses maintained a connection to traditional experiences and local construction practices. The inclusion of multiple floor levels, with three levels above ground and one below, reflected the traditional understanding of spatial composition and hierarchy. This complexity in spatial arrangement showcased the expertise and craftsmanship of the local constructors. The significance of privacy was also evident in the design of these houses. The presence of two separate courtyards, divided by a wall, underscored the importance placed on maintaining private spaces. This emphasis on privacy was in line with traditional cultural values and provided a sense of seclusion within the larger context of the house.

Among the various facades of the vernacular colonial houses, the southern front was particularly notable. It presented a complex combination of spaces situated on four different levels, serving as a connector between the inner and outer courtyards. This intricate design not only provided aesthetic appeal but also offered functional solutions to spatial organization within the house. Overall, the incorporation of modern architectural features alongside traditional spatial concepts and privacy considerations in the vernacular colonial houses of Ahwaz represented a harmonious integration of different architectural influences. It showcased the adaptability and ingenuity of the local constructors in embracing modernization while maintaining a connection to their cultural heritage.



FIG. 4.62 Mousavi House

Source: Mojtabeh Zade, R. & NamAvar, Z. (1394/2015). *In Search of Urban Identity of Ahvaz: Dar Jost-ejooye Hovviate Shahri e Ahwaz. Road, Housing and Urban Development Research Center.*

Date: Unknown. Accessed: February 2022.

4.7.5.2 Case Example II from Local Contributions in the Petroleumscape of Ahwaz: Mapaar House

The adaptation and inspiration of historical patterns from Ahwaz's introverted houses by the colonial bungalows of APOC resulted in an entirely extroverted façade for this particular house. The traditional architectural elements that were typically found in Ahwaz's houses, which prioritized privacy and introverted design, were reimagined to create a more open and outward-facing appearance. The house's interior structure also deviated from the traditional norms of Ahwaz's houses. It departed from the typical layout and arrangement, incorporating both traditional and modern elements. Traditional rooms with three doors (Se-dari) coexisted with more modern rooms, reflecting a blend of different architectural styles and influences.

While the formal role of the porch in this building was less pronounced, other elements, such as the cellar and the presence of a pool on the ground floor, harkened back to historical patterns. These features served as nods to the architectural heritage of Ahwaz, adding a sense of continuity and connection to the past within the modernized design.



FIG. 4.63 Mapaar House.

Source: Mojtabeh Zade, R. & NamAvar, Z. (1394/2015). *In Search of Urban Identity of Ahvaz: Dar Jost-ejooye Hovviate Shahri e Ahwaz. Road, Housing and Urban Development Research Center.*

Date: Unknown. Accessed: February 2022.

4.7.5.3 Case Example II from Local Contributions in the Petroleumscape of Ahwaz: Red-haired (Sorkh-mu) house

This house exhibits an entirely introverted spatial pattern, emphasizing the dominant influence of tradition. Situated at the boundary of the Qajar development of Ahwaz, it is likely to belong to the late Qajar period, making it one of the early examples of mixed traditional and colonial architecture. Due to the limited dimensions of the land, the building takes on a more modern and simplified form. The central space of the front facing the yard is occupied by a porch, a characteristic feature of structures from this period. The small rectangular-shaped yard is adorned with a shade tree at one end, creating a pleasant outdoor space. The porch of the house is particularly noteworthy, with circular columns that feature a brickwork array known as Petkin or Tonje in the headstone part. This ornamental detail is reminiscent of the colonial bungalows constructed by APOC, further highlighting the fusion of traditional and colonial architectural influences.

The house's overall design reflects a balance between traditional elements and the emerging colonial architectural styles of the time. It showcases adapting and incorporating colonial influences into the local architectural traditions, creating a unique and harmonious blend of styles.

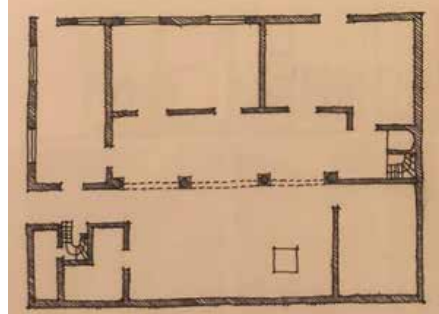


FIG. 4.64 The Red-haired (Sorkh-mu) House.

Source: Mojtabeh Zade, R. & NamAvar, Z. (1394/2015). *In Search of Urban Identity of Ahvaz: Dar Jost-ejooye Hovviate Shahri e Ahwaz*. Road, Housing and Urban Development Research Center.

Date: Unknown. Accessed: February 2022.

4.8 Conclusion to the Chapter

In the realm of petroleumscape, the city of Ahwaz developed as a vivid embodiment of the profound concepts of differences and diversity. Within its colonial and post-colonial architecture, various nationalities intertwined to shape a landscape that was both captivating and complex. It became a testament to the extraordinary pluralism residing within its boundaries, showcasing a rich assortment of constructions and reflecting its diverse tapestry. This juxtaposition gave birth to a unique urban development, where three distinct yet interconnected settlements materialize under the skilled hands of national and international architects, local builders, and even the people themselves. The development of Ahwaz, both in concept and execution, can be seen as a reinforcement of power dynamics. It symbolized the complex interplay between the global, national and local flows, where each group grappled with the transformative effects of their interactions. Ahwaz became a living testament to the enduring legacy of modernism, a landscape where power dynamics continued to evolve and shape the destiny of its inhabitants.

It is important to note that Ahwaz society, with its internal heterogeneity, stood distinct from the surroundings of the oil fields in Iran. Unlike other oil-centric towns such as MIS and Abadan -primarily developed due to their association with the oil industry, Ahwaz embraced a broader spectrum of industries, leading to a more diverse and dynamic growth trajectory. While the significance of other cities cannot be undermined, their development was primarily driven by the extraction and processing of oil resources. Meanwhile, Ahwaz's development encompassed a wider range of sectors, fostering a more comprehensive and diverse urban growth. The city's unique blend of cultures and identities shaped its destiny, carving a path that was distinct from the broader context in which it was situated. Ahwaz emerged as a testament to the power of cultural exchange and the resilience of a society that thrived amidst the convergence of diverse influences. Global influences, such as architectural trends, urban planning practices, and design philosophies, would have undoubtedly left their mark on the cityscape. These influences could range from architectural and urban planning styles imported from different parts of the world to the introduction of modern technologies and construction techniques.

Ahwaz's development was not solely attributed to the oil industry but held a multifaceted significance beyond oil's importance. The city was meticulously shaped to serve as a showcase of national pride, representing the aspirations and achievements of the nation. This emphasis on national pride manifested in the deliberate planning and architectural endeavours undertaken in the city. Ahwaz,

with its strategic location, multifaceted development, and the presence of various industries, emerged as a symbol of national progress and served as a testament to the nation's achievements beyond the realm of oil. Against the backdrop of this historical juncture, the intricate interplay of geopolitical interests and shifting allegiances unfolded, precipitating the British intervention that reshaped Iran's trajectory. The enthronement of Mohammad Reza Shah Pahlavi set the stage for a new era, one characterized by the evolving dynamics of power and the emergence of a leader whose disposition and upbringing deviated from his predecessor.

Furthermore, Ahwaz's development was fuelled by the growth of various industries beyond the oil sector. This diversification created opportunities for the city to attract individuals from different nationalities and backgrounds, enriching its development narrative. The city's unique position in the industrial context made it fertile ground to explore how these diverse flows intersect and shape the built environment. The annals of Iran's history bear witness to the turbulent interplay between global powers, where the German presence, both insidious and formidable, cast a long and treacherous shadow. Within this intricate tapestry of international dynamics, the ebb and flow of influence shaped Iran's trajectory, leaving an indelible mark on its journey toward industrial and environmental development.

Simultaneously, traditional factors, including cultural norms, would have influenced the architectural and urban planning decisions made in Ahwaz. The city's development would have been shaped by the priorities and visions of the local authorities and the local population's cultural identity and aspirations. Additionally, regional flows, encompassing the specific needs, traditions, and social dynamics of Ahwaz's inhabitants, would have significantly shaped the city's architecture and urban planning. The unique cultural heritage, social structures, and spatial practices of the local community would have influenced the design and layout of the built environment.

In the hands of the Oil Company, Ahwaz's urban fabric continued the distinct character reflecting the colonial desire to create a classified society. The architectural trends that prevailed spoke of British identity, serving as a mirror to their social self-perception. It was a manifestation of the colonial nation's sense of self, juxtaposed against the otherness of the colonized city. Not only did the Company's endeavours racialize the urban structures and spaces, but they also ignited a sense of individuality among its employees through the built environment. The geometric layouts that unfolded in Ahwaz became tools of control, safeguarding properties and enforcing the desired social order envisioned by the dominant groups. These rectangular urban forms stood as tangible embodiments of the AIOC's official practices in the realm of colonial urban planning. The very infrastructures

that were initially erected to support colonial practices later became a symbol of the Company's authority over the city's growth. They stood as testaments to the influence wielded by the Oil Company, leaving an indelible mark on Ahwaz's evolving identity. Within the intricate tapestry of Ahwaz's history, the influence of the AIOC as the dominant colonial force transcended mere physical transformation. It wielded its power to navigate the complexities of conflict and negotiation with national authorities and various colonized groups residing within the city.

The interdependence between the income of the Oil Company and the urban growth of Ahwaz was of profound significance. Oil served as a compensatory force, filling the void left by the absence of indigenous factors that typically drive growth and development. Prior to the nationalization of oil, the Iranian government received a stream of income that had little direct correlation with the city's progress. Economic growth, in this context, was often disconnected from substantial improvements in the overall quality of life for the majority of the population. The unique nature of change driven by oil meant that mere income growth did not necessarily translate into comprehensive development. Instead, it was often directed towards the construction of individual buildings, lacking a holistic approach to urban planning and societal well-being. The wealth generated by the oil industry appeared to be channelled into isolated architectural endeavours rather than fostering sustainable and inclusive growth. The repercussions of this phenomenon were twofold. On the one hand, it highlighted the imbalance between economic progress and the broader development of Ahwaz as a city. The benefits of increased income were not evenly distributed or harnessed to address the multifaceted needs of the population. On the other hand, the focus on erecting singular buildings failed to foster the comprehensive urban development necessary to create thriving communities and enhance the overall quality of life. The subsequent chapter will delve into the nationalization of oil, shedding light on the evolving dynamics that shaped the city's trajectory beyond this period of income-driven growth.⁴⁸⁴

By growing the national power of Iran, the dynamics shifted, and the coexistence and interplay of diverse cultures became central to the city's development across

⁴⁸⁴ Hernández Felipe. *Bhabha for Architects*. Thinkers for Architects, 04. London: Routledge. 2010.
Djar, Kahina Amal. "Locating Architecture, Post-Colonialism and Culture: Contextualisation in Algiers." *The Journal of Architecture* 14 (2): 161–83. 2009. <https://doi.org/10.1080/13602360902867392>.
Fraser, M. and Kerr, J. 'Beyond the Empire of the Signs' in : Borden, Iain, and Jane Rendell. 2000. *Intersections : Architectural Histories and Critical Theories*. London: Routledge. 2000. p. 126.
Djar, Kahina Amal. "Locating Architecture, Post-Colonialism and Culture: Contextualisation in Algiers." *The Journal of Architecture* 14 (2): 161–83. 2009. <https://doi.org/10.1080/13602360902867392>.
Majd, Mohammad Gholi. 2001. *Great Britain & Reza Shah : The Plunder of Iran, 1921–1941*. Gainesville, FL: University Press of Florida,

different zones. The presence of these cultures within the local nation's space gave rise to the classification of cultural sites, forming a system of multicultural coexistence. Ahwaz, in its essence, became a melting pot of hybrid cultures, where overlapping boundaries revealed the profound interplay between architecture and culture, each influencing and shaping the other. The cultural differences that thrived in Ahwaz unveiled a city that was far from being singular or uniform. Instead, it embraced multiplicity and pluralism, celebrating the rich diversity of its society. Within Ahwaz, one could witness a tapestry of cultures, each with its own unique expression and contribution, creating a vibrant mosaic that defied homogeneity. Thus, a delicate dance unfolded—a dance of power and influence, where multiple forces jostled for primacy upon the intricate geopolitical stage. Amidst the grand ambitions of Iran, the strategic partnerships with Germany and the United States, and the ever-watchful gaze of the British Empire, the fate of Iran hung precariously in the balance. The journey towards an empowered Iran, emancipated from the clutches of colonial control, would be paved with both collaboration and contention, its final destination shrouded in the haze of uncertainty.

Architecture, acting as a catalyst, established spaces that resonated with intricate networks of political, economic, cultural, and social issues. These spaces became the embodiment of the city's ethos, capturing its complex identity and reflecting the multifaceted nature of its inhabitants. Acknowledging the mutual relationship between buildings and people led to a deeper comprehension of the cultural and architectural implications of hybridization within the realm of postcolonial thinking. By considering political, sociological, and historical factors, the inseparable connection between culture and architecture became apparent. This study of Ahwaz served as a case in point, exposing the forces through which the built environment can either contribute to the preservation of cultural values or act as an instrument of cultural change, shaping and representing the cultural fabric within physical spaces.

This chapter gained insights into the complex dynamics that shape cities by studying the interaction of these variant flows – global, national, and local – in Ahwaz's architecture and urban planning. It allowed us to understand how different forces and influences come together, intertwining and sometimes conflicting, to shape the physical and social fabric of a place. Ahwaz provided a rich context for exploring the intricate relationships between the global, the national, and the local in the realm of architecture and urban development.

The chapter delved into the intricate postcolonial situation that unfolded in Ahwaz, shedding light on the nuanced dynamics among various actors within a context of authoritarianism. It aimed to illuminate the inherent ambivalence in Ahwaz's environmental developments, highlighting the complex interplay of economic,

cultural, and political dominations. Moreover, it explored the construction of globalized identities in the modern era, revealing the multi-layered nature of colonial legacies. The analysis presented in this chapter challenged the notion of a simple fusion between colonizer and colonized, instead revealing a convoluted process of cultural interactions fraught with inequalities. As aptly described by Bhabha, this process is labelled as “hybridization,” characterized by continuous negotiation and contestation of cultural differences. By examining postcolonialism through the lens of architecture, this study sought to transcend disciplinary boundaries and explore new avenues for understanding cross-cultural interactions.

Britain’s aspiration to establish permanent control over Persia ultimately faltered, and the removal of Reza Shah at the end of WWII marked the beginning of the end of British domination in Iran. Seizing the opportunity presented by British weakness, the United States started exerting its influence over Iranian affairs in early 1942. A presidential finding signed by Franklin D. Roosevelt on March 10, 1942, emphasized the vital importance of defending the Iranian government for the defence of the United States. This declaration paved the way for American assistance to Iran in military, financial, and urban development realms, effectively heralding the era of American dominance. These political shifts and the termination of direct informal colonial control with the nationalization of oil in Iran in 1951 did not bring an end to the various forms of cultural rearticulation. Ahwaz, as the primary city in the oil-rich province of Khuzestan, assumed a crucial role as a political and military centre. Its significance and infrastructure had already been demonstrated during World War II and expanded further after nationalization. Cultural interactions continued and even intensified after the demise of the AIOC. As the main hub of oil pipelines and the trans-Iranian railway, Ahwaz became a focal point of national and international attention, shaping the city’s future developments, which will be explored in subsequent chapters. The presence of Americans, collaborating with the new Shah of Iran, introduced a new dimension of oil-based development and influenced the emergence of its architecture. The following chapter will delve into the diverse architectural landscape, highlighting how it obscured the existence of political differences and exploring the subsequent trajectory of Ahwaz’s development.⁴⁸⁵

⁴⁸⁵ Operations of AIOC in Iran. ArcRef: 36119. Barcode: Z01586409. 1942. BP Archives.
Notes on General Plan. ArcRef: 67205. Barcode: 62891. 1951. BP Archives.
Present Postion in Persia. ArcRef: 67280. Barcode: 62952. 1951. BP Archives.
Demi-official Correspondence 1940 to 1942. ArcRef: 72357. Barcode: 66021. BP Archives. Date: 1940-42
NO 1 Ahwaz to Tehran by Rail. ArcRef: 72357/001. Barcode: 66021. BP Archives. Date: 1940.
Proposed Layout Ahwaz Development Scheme. Source: The Development of Ahwaz as a Base for Fields
Operations. ArcRef: 49689. Barcode: 46049. BP Archives. Date: 1947

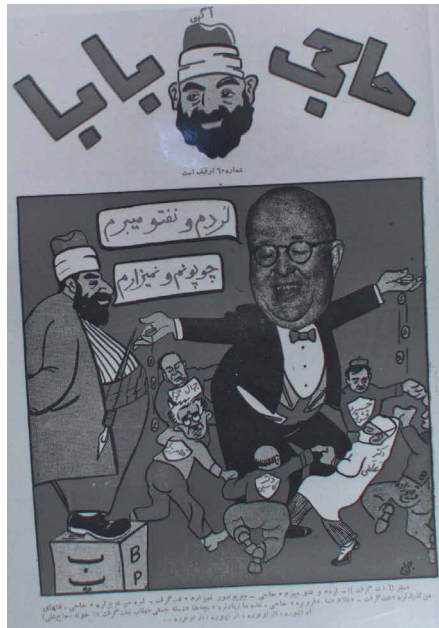


FIG. 4.65 An Iranian Cartoon (November 1950) Showing Northcroft Playing the Iranian Children's Game: "I am the Lord and Carry away the Oil. - I am the Shepherd; I will not Allow it."

Source: ArcRef: 115883/051-/055. Barcode: Z01532962. BP Archives.

Date: 1950. Accessed: February 2017.



FIG. 4.66 British Staff Family Leaving Iran by Plane.

Source: ArcRef: 115883/051-/055. Barcode: Z01532962. BP Archives.
Date: 1954. Access: February 2017.



FIG. 4.67 Changing the Plaque at the Entrance to Britannic House.

Source: ArcRef: 115883/051-/055. Barcode: Z01532962. BP Archives.
Date: 1954. Accessed: February 2017.

5 A Mesmerising Journey into the Genesis of Planning as a Profound Discipline

Time frame

1953 (The oil nationalization on papers)-1973 (The oil nationalization in practice)

Main questions

- How did the dynamics of Anglo-American relations influence the exchange of architectural ideas within the backdrop of the Iranian oil fields?
- To what extent did political decisions made by Anglo-American entities shape the environmental consequences in the post-war period?
- How did Iranian architects and urban planners engage with British and American perspectives while shaping spaces of inspiration?

5.1 Introduction to the Chapter

Amidst the intricate web of post-WWII complexities, Iran's stage was set for an extraordinary spectacle of close collaboration between the Anglo-American powers, driven by their shared needs and aspirations. The bountiful petroleum reserves within its borders held the key to fuelling the economies of Britain and America for a remarkable quarter-century ahead. As the global power dynamics shifted following the ravages of World War II, the Soviet Union and the United States rose to claim their positions as the new superpowers on the world stage, with Europe acting as a buffer between their ambitions. This tectonic shift in political influence, coupled with the emergence of fervent nationalists within Iran, transformed the constellation of actors, propelling the British to pass the baton to their American counterparts.

Stepping into the spotlight as the frontrunner in the Cold War, the United States was tasked with countering communist subversion in Iran, which had taken root through Russian Communist activities. In the early years of this epochal struggle, the United States embarked on a multifaceted evolution within Iran, orchestrating a paradigm shift in US-Iranian relations. The alluring Iranian oil fields swiftly became the focal point of American economic interests, laying bare notions of post-war American hegemony and its deepening involvement in the enigmatic lands of the Middle East. With an aura of ambition and intrigue, this captivating tale of political manoeuvring and oil-driven destinies unveils the enthralling entanglement of powers, forever altering the course of history in the radiant backdrop of Iran's post-war evolution.

Amidst the dawn of a new era ushered in by the 1953 oil Consortium, the Iranian oil region emerged as a captivating theatre for post-war international interactions, where architectural and urban planning rivalries played out with fervour. For the United States, a relentless apprehension gripped their hearts, fearing the spectre of a communist society taking hold in Iran, while Britain's sole concern lay in safeguarding its overseas assets within the oil fields. Intriguingly, the oil environment's architecture and urban planning mirrored the essence of their international policies. Beneath the surface of tactical disagreements lay profound disparities between the British and American strategic priorities, profoundly influencing the design and construction of the oil cities. These diverging trajectories found their epicentre in a series of urban and architectural responses, emblematic of the contrasting paths undertaken by these global powers.⁴⁸⁶

⁴⁸⁶ Elm, Mostafa. *Oil, Power, and Principle: Iran's Oil Nationalization and Its Aftermath*. [in English] Contemporary Issues in the Middle East. Syracuse, NY: Syracuse University Press, 1992.

Ever since the dawn of the twentieth century, Britain cherished the Iranian oil region as a wellspring of wealth, a means to bolster its dominance as an imperial powerhouse. Even after the Consortium, Britain held a significant stake in the oil fields, courtesy of its substantial share in British Petroleum. Wounded by the setbacks of WWII, Britain set its sights on revitalising the oil cities of Iran, intending to reestablish them as bastions of imperial prowess. Yet, these endeavours remained superficial, failing to extend beyond mere urban activities. Despite their ambitions, British agents astutely recognised the importance of investing a portion of the oil income to safeguard their interests in Iran's oil industry. Embracing newfound wisdom, they sought collaboration with other nations, including Americans, French, Dutch, and even Iranians, recognising the potential for mutually beneficial partnerships rather than perceiving them as mere rivals. The reconstruction of their economy and fulfilment of overseas obligations demanded collaboration with the United States and Iran. Nonetheless, lurking beneath this semblance of cooperation was Britain's long-standing hypersensitivity to any hint of a rival potentially replacing them in the Iranian oil fields. The spectre of America's ascendancy instilled fear rather than eliciting support, leading to a complex interplay of interests and apprehensions in this mesmerising tale of power and ambition. Thus, within the captivating canvas of the Iranian oil region, a symphony of ambitions, fears, and alliances played out, shaping the fabric of architectural marvels and urban landscapes, forever etched in the annals of history.

Within the captivating tapestry of Iranian oil fields' architecture, one can trace the intricate interplay of global Anglo-American co-relation from the post-war era to a pivotal moment when the British realised their sense of partnership had been shattered. Iranian oil evolved into a centrepiece, dictating the ebb and flow of Anglo-American activities. The United States, driven by the imperative to safeguard its economic interests, had to protect the Consortium from the formidable presence of Great Britain, which held a significant stake in the oil fields. Subsequently, both sides embarked on a journey to shield their respective assets, giving rise to divergent priorities and decisions in the oil-rich lands. The United States, fuelled by an increasing thirst for oil supremacy, posed a fundamental challenge to the harmony of Anglo-American interactions. Bitter rivalries over control of the oil fields ensued between the British and Americans, with the latter becoming progressively assertive, initiating a chapter that marked the relative decline of British activities in Iran. Yet, this assertiveness sometimes led to sub-optimal policies, constraining British and American policymakers and leaving them vulnerable to Iran's deft manoeuvres in frequent disputes. Iran deftly played the two powers against each other, further fuelling the complexities of their relationship.

Amidst these dynamics, the US-Iranian policy grew progressively secure as the Shah acknowledged the United States as the preeminent Western power in the Middle East. Under the pretext of anti-communism, the US dismantled British control over Iranian oil, securing its own interests in the region. The oil consortium became a defining moment, signifying the decline of British influence and heralding the ascendance of the United States in Iran. It was a settlement forged with a resolute Anglo-American stance, compelling Iranian capitulation in alignment with US preferences. In this symphony of geopolitical manoeuvrings and power plays, the Iranian oil fields' architecture bore witness to the grand narrative of Anglo-American relations, forever altering the course of history and leaving an indelible mark on the landscape of the Middle East.⁴⁸⁷

In the city of Ahwaz, the echoes of the oil dispute's international relations reverberated, giving birth to a new approach that left an enduring impact on its architecture and urban landscape. Within its streets, one could discern the indelible imprints of both Britain and the United States, whose architectural and urban rules intermingled to shape the city's identity. Delving into the profound influence of American ideas, this chapter unravelled a remarkable series of unspoken tales, a tapestry of oil-related cross-cultural urban activities that bore heavy implications on the city's broader picture and enduring issues long after the resolution of the Consortium. The conclusion of the Oil Consortium heralded a momentous turning point, catapulting Iran's national income from oil to an astounding fourfold increase. This newfound wealth became a resilient impulse for the nation to manifest this achievement through comprehensive environmental development in the oil cities. Against this backdrop, the idea of a development program for Ahwaz, positioned as the headquarters city, gained fresh vigour. This marked the genesis of an era of vast urban growth and transformative changes in Ahwaz, supported by the Iranian oil managers with a national approach, working hand in hand with the heads of consortium participants, chiefly the Americans.⁴⁸⁸

The city's urban planning embraced the ideals of welfare, and land law reforms took shape, all guided by the enduring vision of the Comprehensive Plan of Ahwaz. Through this ambitious undertaking, the city became a canvas for the convergence of diverse cultures and ideologies, blending the essence of America's urban planning prowess with Britain's indelible architectural touch. The metamorphosis of Ahwaz was not merely a physical transformation; it represented the intertwining of nations'

⁴⁸⁷ Pearson, Ivan L. G. *In the Name of Oil: Anglo-American Relations in the Middle East, 1950-1958*. [in English] Eastbourne [England]; Portland, Or.: Sussex Academic Press, 2010.

⁴⁸⁸ Taylor, S. "Data on Housing, Amenities and Amenity Buildings and Manpower." *the Anglo Iranian Oil Company, Limited* (1951).

aspirations, transcending boundaries and narrating a tale of ambition, collaboration, and innovation. In tracing the footsteps of this captivating journey, one unveils a story that transcends time as the echoes of the past reverberate through the city's soul. Ahwaz stood as a living testament to the power of cross-cultural exchanges, carrying the legacy of Anglo-American cooperation in its very infrastructure and essence. And as the city thrived and evolved, it paid homage to a chapter of history that left an indelible mark on its present and shaped the course of its future.⁴⁸⁹

In reflecting on the overarching concept and theme of the thesis, the narrative consistently intertwines with the pivotal role of oil in shaping Ahwaz's geopolitical, economic, and urban landscape. The post-WWII period, marked by the collaboration between Anglo-American powers, unfolds against the backdrop of Iran's rich petroleum reserves. The quest for oil supremacy, economic interests, and geopolitical manoeuvres became central motifs in the evolving relations between Britain and the United States, with Iran as a crucial stage. Ahwaz's architecture and urban planning turned into a tangible manifestation of these intricate geopolitical dynamics, reflecting the ambitions, fears, and collaborations between global powers within the petroleumscape. As the oil dispute unfolded, it not only shaped the urban fabric but also became a catalyst for cross-cultural exchanges, innovation, and the transformation of Ahwaz into a living testament to the enduring legacy of Anglo-American cooperation and the power dynamics associated with oil exploration and development. The chapter, through its exploration of the oil-centric narrative, provides a nuanced understanding of how oil acts as a cross-cutting theme that threads through the historical, geopolitical, and urban development aspects of Ahwaz.⁴⁹⁰

⁴⁸⁹ Tibi, Bassam. *Conflict and War in the Middle East, 1967-91: Regional Dynamic and the Superpowers*. [in English] New York: St. Martin's Press, 1993.

⁴⁹⁰ United States. Technical Cooperation Administration. Mission to Iran. *The Point IV Program in Iran: The Joint Effort of the Peoples of Iran and the United States of America to Raise the Level of Living and Other Conditions of the People of Iran. July 1, 1952-*. Place of publication not identified, 1952.

5.2 Background

In the prelude to World War II, Britain's commercial will to assert dominance over the oil fields was inadequate, prompting Reza Shah to invite European rivals to challenge British influence. However, the tides turned during the war and the Anglo-Soviet invasion, allowing Britain to eliminate its opponents and gain near-absolute control over the oil fields. Urban construction in oil cities, especially Ahwaz, became a canvas for the Anglo-Iranian Oil Company (AIOC) to display its political strategies, albeit with little concern for addressing the city's socio-urban issues. This lack of organised planning and neglect of socio-urban challenges gave rise to significant social, economic, and urban difficulties in Ahwaz. In the aftermath of World War II, Iranian nationalists, empowered within the government, found an opportune moment to criticise the British for their mishandling of the oil city crisis. Mohammad Reza Shah Pahlavi, the new monarch, held limited control over the Iranian government due to his young age, allowing foreign powers and nationalist forces to vie for influence over Iran's wealth. For the nationalists, the battle for Iranian oil became a focal point in their struggle against the Pahlavi monarchy. Mohammed Mosaddegh, the leader of the Nationalists, harboured a deep desire to challenge Pahlavi's international dealings, particularly concerning selling the country's lands and resources to foreign interests.

As Prime Minister, Mosaddegh engaged in political and economic disputes with the British-owned Oil Company, escalating tensions between Iran and Britain. The ambiguity of this situation attracted the attention of the United States, which saw an opportunity to intervene and become a mediator in this battle. Eventually, with American support, Iran's oil was nationalised in 1951, establishing the National Iranian Oil Company (NIOC) as a symbol of Iranian oil independence. Despite this apparent success, Mosaddegh faced mounting national and international pressure, seeking to undermine him and reverse the nationalisation. Global political tensions and the stoppage of Iranian oil production plunged the country into an economic crisis, impacting not only Mosaddegh's government but also the cities' economic and urban development. Within Iran, Mosaddegh's socio-democratic policies, along with the rise of the communist Tudeh Party, created a political showdown with the Shah and his Anglo-American supporters. To remove Mosaddegh entirely from power, British leader Winston Churchill and the Americans collaborated in a joint coup on August 19th, 1953. The Shah allowed the CIA to orchestrate the coup, resulting in the ousting of Mosaddegh from the government. This dramatic chapter in Iran's history illustrated the intricate web of global political rivalries and power struggles over the nation's valuable oil resources, leaving an enduring impact on its political landscape and shaping its path into the future.

In the midst of momentous events, while Mossadegh found himself incarcerated in a military prison, negotiations were underway for an oil consortium led by Royal Dutch Shell, marking a decisive blow to the nationalisation of Iran's oil industry. The Consortium Agreement breathed new life into the Abadan refinery, which had been shuttered following the British departure in 1951. This multinational oil consortium brought together the Iranian government and the National Iranian Oil Company (NIOC) on one side and eight major foreign companies on the other side, with the lion's share held by Anglo-American interests. Five American companies, along with the British Petroleum Company, held a significant 80% interest, while Dutch and French companies had a smaller stake.⁴⁹¹ The conspicuous dominance of Anglo-American shares underscored Britain and the US's overwhelming involvement in Iranian oil development, revealing their aspiration to wield influence in global oil crisis management.

Renowned historian Steve Marsh aptly characterised the Consortium as emblematic of an Anglo-American special relationship, a testament to their amity, collaboration, and solidarity in navigating the intricacies of global power dynamics.⁴⁹² Through their agents, Britain and the United States compelled NIOC to undertake an ambitious expansion of its oil-production capacities and hasten the compulsory environmental development of the oil fields.⁴⁹³ The year 1954 marked the beginning of a remarkable period as oil revenues surged, leading to a rapid increase in government income from the oil industry. The Consortium's intervention spurred the growth and transformation of Iran's oil sector, leaving an indelible mark on the nation's economic landscape. In this tapestry of international affairs, the Anglo-American influence resonated profoundly, shaping the trajectory of Iran's oil industry and illuminating the depth of their collaboration in managing the world's resources. As the Consortium forged ahead, the echoes of their distinctive relationship reverberated, forever impacting the course of history and heralding a new era in the realm of global oil politics.

⁴⁹¹ five American Companies with a 40% interest, the British Petroleum Company with 40%; one Dutch Company with 14% and one French Company with 6%)

Source: Iranian Oil Participants Limited & Iranian Oil Exploration and Producing Company & Iranian Oil Refining Company, *Working with the operating companies in IRAN*, 1965.

⁴⁹² Marsh, Steve. *Anglo-American Relations and Cold War Oil : Crisis in Iran*. Cold War History Series. New York: Palgrave Macmillan. 2003.

⁴⁹³ Similarly to the consortium, Iran found itself compelled to establish petrochemical subsidiaries primarily founded on the principle of equitable shares. Additionally, Iran entered into agreements with various international companies to engage in oil exploitation beyond the geographical scope of the consortium's operations.

5.3 Pioneering International Collaborations in the Oil Fields: British Engagement with Iranian and American Partners

5.3.1 Genesis of Partnership: The Inaugural British Collaboration with Iranians

5.3.1.1 A Confluence of Minds: The Collaborative Endeavours between Abdul-Aziz Farmanfarmayan and Wilson

Amidst the tumultuous backdrop of WWII, Wilson's focus on Iran briefly wavered. However, upon his return to London, a new chapter awaited as he founded the distinguished Wilson Mason and Partners. In 1943, destiny called once more, beckoning Wilson back to Iran at the behest of the Anglo-Iranian Oil Company (AIOC), tasked with overseeing the development and expansion of the famed Abadan and all areas under his purview.⁴⁹⁴ From 1945 until the historic oil nationalisation of 1951, Wilson immersed himself in AIOC's monumental urban and architectural endeavours. A visionary mastermind, he left an indelible mark on the landscape, shaping cities with his unparalleled creativity and expertise.

With the dawn of 1954, a seismic shift took place. AIOC underwent a metamorphosis, transforming into the esteemed British Petroleum Company (BP), while the National Iranian Oil Company (NIOC) emerged onto the global stage. Undeterred by these changes, Wilson Mason and Partners seized new opportunities, embarking on an architectural odyssey in Iran, this time collaborating hand in hand with Iranian actors. Together, they crafted awe-inspiring buildings that melded the best of British and Iranian sensibilities, a harmonious fusion of cultures that enchanted all who beheld it. 1958, as the horizon of possibilities expanded, Wilson Mason and Partners forged a momentous alliance, establishing an office in Tehran alongside the brilliant Iranian architect Abdul-Aziz Farmanfarmaian.⁴⁹⁵ The birth of the Farmanfarmaian

⁴⁹⁴ Smith, C. H. Lindsey. *Jm : The Story of an Architect*. Great Britain: Privately published. 1976.

⁴⁹⁵ Iranian Oil Participants Limited & Iranian Oil Exploration and Producing Company & Iranian Oil Refining Company, 1965. *Working with the operating companies in IRAN*.

(AFFA) office was a pinnacle of prestige, housing a select team of ten individuals, including the aristocratic and talented young architect from Shiraz. Endowed with solid connections to the royal court, Farmanfarmaian would soon ascend to become a key figure in Iran's modern architecture, a visionary whose work would come to define the realms of design in the 1960s and 70s. Their partnership would ignite an extraordinary era of architectural marvels, a symphony of innovation and creativity that resounded throughout Iran and beyond. As they ventured forth, hand in hand, the confluence of British finesse and Iranian artistry would forever shape the urban landscape, casting a spell on the hearts of all who witnessed the splendour of their collaborative work.⁴⁹⁶

Embarking on a journey of architectural brilliance, the birth of Wilmafar heralded a transformative era, where architectural ingenuity melded seamlessly with the world of the National Iranian Oil Company (NIOC). Established as an esteemed architectural consultant, Wilmafar (AFFA in Tehran and Wilson & Masons and Partners in London) took on the monumental responsibility of overseeing all design operations for NIOC, leaving an indelible mark on the landscape of Iran's oil industry. From 1955 to 1970, Wilmafar's creative prowess knew no bounds, as they undertook a multitude of projects for the Oil Operating Companies (Consortium). Schools, houses, clubhouses, hospitals, clinics, and more bore the signature of Wilmafar's visionary touch, redefining the very fabric of urban architecture. The impressive portfolio they crafted encompassed a plethora of landmark projects that stood as a testament to their unwavering dedication to excellence. In 1961, the modern NIOC headquarters emerged as a beacon of architectural innovation, symbolising the oil industry's dynamic spirit. The Oil Consortium Head Offices, a soaring eight-story marvel, became an iconic symbol of collaborative prowess in 1960, transcending national boundaries in its grandeur. Further enriching the urban landscape, Wilmafar brought forth the majestic office building of the Social Welfare Organization, soaring skyward with five stories of elegant design in 1964. Wilmafar's touch extended to the heart of Tehran, where they undertook the ambitious Tehran pharmaceutical factory commissioned by the esteemed Royal Welfare Organization from 1958 to 1963.

Ahwaz, a city that bore the imprint of their vision, witnessed the birth of the University of Ahwaz and a cutting-edge hospital in 1959, equipped with a 300-bed facility and a state-of-the-art doctors' training centre.⁴⁹⁷ Their influence reached beyond borders, with groundbreaking projects like the sprawling 20,000 square meters of plant, laboratories, and 300 offices for the Darou Pakhsh Group

⁴⁹⁶ Taylor, S. "Data on Housing, Amenities and Amenity Buildings and Manpower." *the Anglo Iranian Oil Company, Limited* (1951).

⁴⁹⁷ Source: <http://www.caoi.ir/en/architects/item/441-abdol-aziz-farmanfarmaian.html>

Pharmaceutical Plan in 1965 and the iconic Pfizer pharmaceutical centre, boasting 8,000 square meters of offices in the same year. Not to be confined by land, they also made their mark in the realm of industry, designing seven thousand square meters of offices for the Squibb industrial offices in 1965, a testament to their versatility and innovation. Through their visionary creations, Wilmafar etched their name into the annals of architectural history, leaving an enduring legacy that continued to captivate the imagination. Their collaboration with NIOC and dedication to shaping the nation's architectural identity served as a beacon of inspiration, a symphony of brilliance resonating through the ages. As Ahwaz bore witness to the splendour of their projects, Wilmafar's impact reverberated far and wide, forever etching their name among the luminaries of architectural excellence.

Amidst the landscapes of Ahwaz, a stunning tapestry of architectural marvels unfolded, a testament to the harmonious collaboration between British architects and visionary Iranians. This flourishing partnership saw the implementation of a multitude of awe-inspiring development projects, reshaping the city's urban fabric with unrivalled grandeur. Ahwaz became a canvas for realising visionary plans, with an array of individual buildings taking centre stage. From elegant housing and communication centres to imposing industrial structures, the city breathed new life with every edifice. Educational institutions stood tall, nurturing the minds of generations to come, while social and health facilities offered solace and healing to the community. Public utilities, an essential cornerstone, weaved through the city, serving as lifelines to its bustling populace.⁴⁹⁸

In the heart of Ahwaz, the architectural ensemble displayed a mesmerising interplay of modern elements. Wilmafar, an embodiment of contemporary design brilliance, left an indelible mark with their glass curtain-walled facades, steel structures, and masterful utilisation of open spaces. The spirit of Bauhaus theory found its resplendent home in Iran, with Wilmafar's creations embodying the essence of innovation and progress. The symphony of collaboration with the venerable J. M. Wilson resounded through the years, sculpting the city's landscape until June 25th, 1965, when the visionary architect passed away at the age of 78. Nevertheless, the legacy of Wilmafar endured as they continued to weave their artistic vision until 1973. A seamless transition followed, with accomplished Iranian engineers, including the esteemed "Nader Ardalan," assuming the mantle and carrying forth the torch of architectural excellence. As the story of Ahwaz unfolded, the fusion of British expertise and Iranian creativity became a source of inspiration, a remarkable testimony to the boundless possibilities of cross-cultural

⁴⁹⁸ garages, power stations and sub-stations, pump houses, water towers.

collaboration. The cityscape bore witness to their visionary dreams, etching a chapter of architectural brilliance that remains forever etched in the sands of time. From Ahwaz's picturesque horizon to the hearts of its inhabitants, the legacy of this harmonious alliance lives on, a tribute to the power of shared vision and the enduring spirit of innovation.⁴⁹⁹

5.3.1.2 Eminent Architect Dame Jane Drew and Her Collaborative Work with Iranian Constructors

Following the 1953 Coup and the change in British policy, opportunities arose for other architects to take the reins of Wilson Mason and Partners. With the resumption of oil production, a fresh wave of urban projects emerged in Iran, particularly under the auspices of BP (British Petroleum). During this time, Dame Jane Drew, an accomplished British modernist architect and town planner, had already made a name for herself with her visionary work not only in the United Kingdom but also in Africa, India, and the Kuwait Oil Company.⁵⁰⁰ Dame Jane Drew's indelible mark on the Modern Movement in Britain was underscored by her pioneering work with MARS (Modern Architectural Research) and her active involvement in the Congrès International d'Architecture Moderne (CIAM).⁵⁰¹ Her expertise extended beyond the borders of her homeland as she ventured into British colonies, honing her skills in adapting modern architectural design to varying climates. A defining moment in her career came through her collaboration with the eminent Le Corbusier for the New Capital City in Chandigarh, India. This profound experience not only enriched her professionally but also shaped her personal outlook on architectural design. Drew's expertise and experience with the Kuwait Oil Company garnered her recognition, leading to an invitation to lend her talents to the planning of townships for the oil

⁴⁹⁹ Hakiminejad, A. 2021. The oil and the brick; tales of a Scotsman in Persia. acces: <https://round-city.com/the-oil-and-the-brick-theses-of-a-scotsman-in-persia/>

⁵⁰⁰ While in London, she contributed to the construction of buildings for the Festival of Britain and played a pivotal role in the establishment of the Institute of Contemporary Arts. Her active involvement in architectural practice concluded in 1977, yet she maintained her global explorations and engagements as a lecturer. Her contributions were so esteemed that she was awarded multiple honorary degrees.

⁵⁰¹ MARS constituted an alliance comprising architects, painters, and industrialists, united by a shared principle advocating the prioritization of space for human activities over the mere manipulation of stylized conventions.

At its core, MARS operated on a philosophical foundation centered around the notion of harnessing space to facilitate human activities, as opposed to manipulating stylized conventions. In subsequent years, Drew described their mindset by stating, "We believed we had the capacity to strategize the global landscape." Their aspiration rested upon the liberation of humanity, with the aim of aligning individuals more closely with their inherent connection to the natural surroundings.

Consortium in the southern regions of Iran.⁵⁰² With invaluable knowledge, Drew embarked on her journey in the Iranian oil fields, where her talents would blossom to new heights.⁵⁰³ In 1955, she embarked on a transformative journey, taking on the responsibility of designing major housing projects for Iranian oil workers. Moreover, her keen eye and invaluable insights made her an indispensable consultant, offering her expertise to numerous new oil cities and advising on their housing developments.⁵⁰⁴

Despite her London base, Drew's commitment to her projects in Iran was unwavering. She collaborated closely with a trusted partner on-site, ensuring that her innovative designs came to life in every detail.⁵⁰⁵ As the years unfolded, Drew's legacy in Iran expanded, encompassing a diverse array of structures that left a lasting impact on the nation's architectural landscape. Clinics, indispensable for providing healthcare access, and swimming pool complexes, offering recreational opportunities, bore her distinctive mark. Moreover, she played a vital role in shaping the educational landscape with her involvement in creating two new universities, contributing to Iran's intellectual development.⁵⁰⁶

Drew's significant contributions to various architectural projects in Iran were indeed a result of the long-standing oil relations and the lasting presence of British architects and designers in the country. In this context, Jane Drew's unwavering commitment and her diverse portfolio of projects in Iran were a reflection of the multifaceted impact of oil on various aspects of the nation's development, extending beyond the oil fields to include architecture, education, and healthcare infrastructure.

Drew's approach was rooted in meticulous scientific research, gathering local data encompassing climate, ecology, regional culture, medical statistics, lifestyles, and constructional materials. Armed with these insights, she set out to revolutionize the architectural landscape, responding to the unique challenges posed by the arid climate of the oil cities. Drawing inspiration from her previous experiments in

⁵⁰² Fry, Maxwell E. *Problems of Chandigarh Architecture*. Bombay: J.J. Bhabha. pp.20—25, 1961. p. 20.

⁵⁰³ Jackson, Iain, Jessica Holland, Maxwell Fry, and Jane Drew. 2016. *The Architecture of Edwin Maxwell Fry and Jane Drew : Twentieth Century Architecture, Pioneer Modernism and the Tropics*. Ashgate Studies in Architecture. London: Routledge. <https://doi.org/10.4324/9781315612492>. pp.38—42.

⁵⁰⁴ See British Petroleum Archives, 1851 55/10.

⁵⁰⁵ Possessing remarkable talents and a strong sense of autonomy, Jane Drew pursued her career as an architect during a time when the field was largely dominated by men. When the executives in the Oil industry became aware of Drew's gender, there was a desire to terminate the contract. Thankfully, the progressive perspectives of the Shah of Iran prevailed, upholding the contract in a display of steadfast commitment.

⁵⁰⁶ Drew, Jane (1911–1996) | Encyclopedia.com. access: <https://www.encyclopedia.com/women/encyclopedias-almanacs-transcripts-and-maps/drew-jane-1911-1996>

labourers' housing in West Africa and India, Drew boldly defied the standardization model of the existing Company houses. She sought to craft a new modern style deeply rooted in local architecture and town design, meticulously tailored to meet the needs of the residents. The extreme dry heat posed a formidable challenge, necessitating a keen understanding of the dynamic interplay between sun, shade, and vegetation to ensure maximum human comfort.⁵⁰⁷ Drew's visionary approach embraced the notion of creating accommodations that would provide shade and shelter from the relentless sun.⁵⁰⁸ Aware that air-conditioning remained a luxury reserved for the privileged few, she delved into innovative solutions inspired by her experiences in Chandigarh. Embracing dense construction and defined narrow streets in each community, Drew's architectural canvas was transformed into a symphony of shaded enclaves, offering respite from the scorching rays. Her steadfast dedication to providing optimal living conditions for the oil city residents left an enduring legacy. As the heat of the desert sun ebbed and flowed, the cool shade of Drew's architectural masterpieces offered solace, comfort, and a testament to the transformative power of design in shaping human experiences. Through her visionary vision and thoughtful adaptations, Dame Jane Drew enriched the architectural fabric of Iran's oil fields, leaving behind a legacy that continues to inspire architects to this day.⁵⁰⁹

In her quest to create homes that harmonized with the local environment, Dame Jane Drew's final designs struck a balance between innovation and practicality.⁵¹⁰ While she initially aimed to break away from standardization, her general design approach encompassed a primary method for the entire residential town, with a thoughtful differentiation of accommodations based on the social class of employees. The result was a diverse array of housing types tailored to meet the needs of each grade of staff. Drew ingeniously arranged the houses in a mirrored and grid pattern, surrounding a charming central park, fostering a sense of community and serenity. At the core of her design lay the primary dwelling type - terraced houses with barrel-vault roofs. Inspired by vernacular mud architecture, these roofs proved functional in the face of heavy rainfall and the immense daily temperature fluctuations, ensuring the comfort and safety of the residents. Adding to the tapestry of her vision, Drew introduced the concept of a 'compound' house with an enclosed courtyard,

⁵⁰⁷ Fry, Maxwell E. 1961. *Problems of Chandigarh Architecture*. Bombay: J.J. Bhabha. pp. 87—94, p.91.

⁵⁰⁸ Drew, *Reflections on My Life and Work*. RIBA Archive, F&D12513, 1993. p.4.

⁵⁰⁹ *Jane Drew Biography*, unpublished manuscript, John Morrison Archive. p. 41.

⁵¹⁰ A comparable approach was employed for an additional project in Gachsaran, where I was tasked with conceiving a township from scratch. The scene resembled a passage out of Dante's "Inferno," with towering flames ascending miles into the sky, jagged rocks positioned at extraordinary angles, and the entire area appearing desolate and barren.

providing a haven of private surrounded open space. Embracing the practicality of locally available materials, the labourers' housing echoed the ingenuity of Drew's designs at Chandigarh, a testament to her consistent commitment to responsive architecture.⁵¹¹

Beyond residences, Drew's holistic approach extended to essential social functions within the towns. Hospitals and schools found their rightful place in her town plans, ensuring that the residents' well-being and educational needs were catered to. Drew ingeniously incorporated small 'bazaar' centres into her designs to foster a vibrant sense of community life. These lively hubs served as gathering places, where the pulse of daily life thrived, allowing residents to interact, connect, and enhance the fabric of their shared experiences. Dame Jane Drew's final designs embodied a seamless integration of contemporary innovation and respect for local traditions. Her architectural symphony not only provided shelter but also nurtured a profound sense of belonging, community, and well-being. As the towns flourished under the graceful touch of her vision, the legacy of Drew's architectural heritage continued to thrive, an enduring reminder of the profound impact that thoughtful design can have in shaping the fabric of society.⁵¹²

Dame Jane Drew's creations stood as a testament to the marriage of beauty and practicality, seamlessly fusing aesthetics with functionality. Drawing inspiration from the sun's fiery embrace, Drew's designs blossomed into sun-protecting canopies that shielded residents from the intense rays and adorned the landscape with an exquisite allure. With an artist's eye, she crafted structures that exuded elegance while serving a vital purpose - providing refuge from the unyielding sun. Every angle and line was thoughtfully orchestrated to create deep, shadowed recesses, offering respite from the relentless heat. Like the pages of a well-composed symphony, her walls emerged as guardians, standing tall, both proper in form and protective of the sun's piercing glare. In Drew's vision, beauty and functionality were inseparable. The geometries she conjured held the power to embrace the harsh sun with poise, showcasing a delicate dance of light and shadow. Her architectural canvas became an ode to the balance between artistry and practicality, where the harsh realities of the environment found solace in the embrace of her thoughtful designs.⁵¹³

⁵¹¹ Jackson, Iain, Jessica Holland, Maxwell Fry, and Jane Drew. 2016. *The Architecture of Edwin Maxwell Fry and Jane Drew : Twentieth Century Architecture, Pioneer Modernism and the Tropics*. Ashgate Studies in Architecture. London: Routledge. <https://doi.org/10.4324/9781315612492>. pp.38—42.

⁵¹² *Maxwell Fry's Memoirs*, RIBA Archive, F&D/14/4. p. 38.

⁵¹³ Drew, Jane (1911–1996) | Encyclopedia.com. <https://www.encyclopedia.com/women/encyclopedias-almanacs-transcripts-and-maps/drew-jane-1911-1996>

Dame Jane Drew's profound concern for the people she designed for was evident in her minimal yet impactful interventions, each thoughtfully tailored to enhance the well-being of the residents. Drawing from her extensive research, Drew devised a remarkable system of "self-closing trash cans built into the dust screen before the entrance doors" for the labourers' houses. This ingenious solution was driven by her unwavering commitment to address a prevalent eye disease, primarily insect-borne. Her astute understanding of the residents' needs led her to create a practical and effective solution that went beyond the mere aesthetics of architecture. In her quest to transform previously uninhabited spaces into thriving communities, Drew planted trees in front of the houses. Her belief in the innate care that even the poorest Iranians held for presenting a welcoming appearance to visitors guided her actions. By introducing greenery and life into these spaces, she brought beauty to the landscape and fostered a sense of pride and connection among the residents.

The depth of Drew's care extended far beyond the design phase. She personally visited her completed projects, conducting post-occupancy evaluations to observe how her houses were inhabited. Her genuine interest in understanding how the residents interacted with her designs was a testament to her dedication to creating spaces that truly catered to their needs. In her pursuit of functional and friendly architecture, Drew's designs became beacons of comfort and efficiency. Her vision sought to embrace residents, making their houses not intimidating structures but warm, inviting homes. This thoughtful approach resonated with the people, ensuring that her architectural marvels were cherished and embraced as integral parts of their daily lives. Through her minimal yet meaningful interventions, Dame Jane Drew demonstrated a profound sense of care and empathy, exemplifying the transformative potential of architecture as a force that elevates the lives of those it touches.⁵¹⁴

In the vibrant neighbourhoods of Bagh-Moin and Amanieh, the 1950s witnessed the emergence of magnificent residential villas, each a testament to the city's burgeoning culture and evolving social taste for architecture. These residential gems adorned the landscape, standing as epitomes of elegance and sophistication. Drawing inspiration from a harmonious blend of local traditions and modern design sensibilities, each villa bore the imprint of a thriving cultural evolution, a celebration of the city's rich heritage and contemporary aspirations. These villas took shape in the hands of visionary architects and skilled craftsmen, becoming living embodiments of the city's progress and prosperity. Every detail was meticulously crafted to reflect the evolving social fabric and the discerning tastes of its inhabitants. Balancing

⁵¹⁴ *Jane Drew Biography*, unpublished manuscript, John Morrison Archive. p. 32.

form and function, each structure exuded a sense of grandeur and warmth, offering a sanctuary that embraced its residents with grace and style. Beyond their architectural splendour, these villas became the canvases on which culture and social interactions flourished. They bore witness to the shared joys that breathed life into the city's tapestry. In the manicured gardens, the city's culture found expression, embracing the essence of elegance and refinement. Each villa became a stage for the unfolding drama of human connection, bridging the past and present and anchoring the city's identity in a landscape of timeless beauty. As the years unfolded, the legacy of these residential marvels persisted, reminding all who beheld them of the city's rich heritage and its unwavering commitment to embracing the future with open arms. The magnificent villas of Bagh-Moin and Amanieh stood as beacons of cultural significance, weaving an enchanting narrative that encapsulated the very essence of the city's soul. Their allure remains undiminished, beckoning visitors to embark on a journey through time, where the spirit of a community and the artistry of architecture converge in a symphony of wonder and awe. These splendid villas, standing tall and proud, bear witness to the city's aspirations and dreams, eternal symbols of its ever-evolving culture and unwavering love affair with the art of architecture.

After her remarkable achievements in the Iranian oil fields, Dame Jane Drew's architectural journey continued to unfold in Iran's major cities through her association with the Architects Cooperative in Tehran. Collaborating with esteemed professionals like Michel Ecochard and Ray Kingston, Drew and her partner, Maxwell Fry, took on the role of 'consultants' for various ambitious schemes in the country. As they embarked on this new chapter, their mission extended beyond architectural excellence; it was an opportunity to elevate Iran's national prestige and establish a distinct brand for Iranian architecture. Together, they endeavoured to weave a tapestry of innovation and cultural identity, leaving an indelible mark on the architectural landscape. Their expertise caught the attention of the Shah, who, with keen interest, attended their presentations on planning other Iranian cities. Their vision sought to elevate the urban fabric, envisioning spaces that harmonized with tradition while embracing the future with open arms. It was a journey of cultural homage and creative prowess, where the essence of Iran's identity was embraced and celebrated.

Evidently, her true passion lay in the transformative power of design, the ability to shape spaces that resonated with the spirit of a community and celebrated the richness of its heritage. Drew's legacy continued to thrive, woven into the fabric of Iran's architectural heritage. Her spirit of innovation, cultural appreciation, and dedication to artistic expression inspired countless architects to follow in her footsteps. As the pages of history turned, Dame Jane Drew's contribution to Iranian architecture remained a cherished chapter, a testament to the enduring impact

of an architect who embraced the nation's aspirations and dreams, weaving them into the very fabric of the built environment. Throughout her time in Iran, Drew's work demonstrated a remarkable blend of modernist principles, incorporating elements like glass curtain-walled facades and steel structures while also paying homage to local sensibilities. Her designs stood as prime examples of contemporary architecture and the application of Bauhaus theories in Iran. While some details regarding her colleagues in Iran remain unclear due to the passage of time, there is no denying the lasting significance of her contributions. Dame Jane Drew's journey in Iran showcased the power of collaboration and the enduring impact of architectural innovation in shaping the nation's aspirations and dreams. Her legacy continued to inspire architects and designers alike, a timeless reminder of architecture's transformative potential in shaping societies and leaving an indelible mark on the ever-evolving tapestry of Iran's architectural heritage. ⁵¹⁵

5.3.2 Epochal Collaboration: The Initial British-American Union

5.3.3 Exploring the Welfare Paradigm in Architecture and Urban Planning

The emergence of the Oil Consortium heralded an extraordinary chapter in American history that would see a momentous entwining of architectural and urban culture within the oil cities. For the Americans, these novel enclaves designed by the Oil Company presented a captivating opportunity to not only explore but showcase the prowess of modern urban planning as a strategic advantage in the tempestuous Cold War arena. Their ambitious vision sought to rival both the subtle sway of British informal colonialism and the unyielding grip of Russian communism, all in pursuit of securing Iran's steadfast loyalty. At the heart of their audacious hypothesis lay the bold idea of exporting architecture and urban planning as formidable instruments in

⁵¹⁵ 1996, "Dame Jane Drew," in *The Times* [London]. p. 19.

Drew, Jane (1911–1996) | Encyclopedia.com <https://www.encyclopedia.com/women/encyclopedias-almanacs-transcripts-and-maps/drew-jane-1911-1996> 8/18

Drew, Jane. "Le Corbusier as I Knew Him," in Russell Walden, ed., *The Open Hand: Essays on Le Corbusier*. Cambridge, MA: M.I.T. Press, 1977. pp. 364–373.

Maxwell, F. and Drew, J. *Tropical Architecture in the Dry and Humid Zones*. 2nd ed. Malabar, FL: R.E. Krieger Publishing, 1982. Guppy, Shusha. "Dame Jane Drew," in *The Independent* [London]. 1996. p. 14.

Whittick, A. *Drew, Jane Beverly*, in Muriel Emanuel, ed. *Contemporary Architects*. 3rd ed. NY: St. James Press, 1994. pp. 260–261.

the political gambits of the Cold War.⁵¹⁶ They fervently advocated for the untested yet alluring, Western urban programs to be extended into the realms of Iran, veiled beneath the auspices of social welfare. The façade of benevolence was intended to enhance the lives of Iranian citizens, uplifting their everyday existence while concurrently fostering economic growth within the burgeoning cities.

Under the guise of this altruistic export of social welfare, a novel colonial dimension found its way into the very fabric of architectural and building initiatives. In a manner reminiscent of the preceding informal British colonial phases in Iran, the experiences gleaned from this venture stood poised for reapplication in Western territories. A remarkable transmutation was underway as advisers, architects, and designers of welfare facilities in the West – encompassing housing, schools, hospitals, new towns, cultural havens, and recreational centres – imbibed the wisdom culled from their overseas excursions in colonies and protectorates. Armed with this newfound expertise, they swiftly ascended to the mantle of authority in these architectural typologies, driving forth a renaissance of urban progress in their own homelands. In this convergence of geopolitical intrigue and architectural aspirations, the Oil Consortium's vision proved to be an astute stratagem that transcended mere oil interests. Instead, it carved a path where the art of city-building metamorphosed into a potent instrument of diplomacy, vying for influence and allegiance on the grand stage of the Cold War. Thus, the cities born from the confluence of oil and urbanity bore witness to a profound reconfiguration of the world order, leaving an indelible mark on the annals of history.

The inception of American welfare state projects in Ahwaz, envisaged as a burgeoning modern epicentre mirroring the prosperous future of the oil province, bore profound and far-reaching objectives that reverberated through the realms of architecture and urban planning. Augmented by an encompassing array of social provisions such as insurance, pensions, healthcare, leisure, and education, their intervention in the built environment extended its reach from the creation of new towns to the establishment of social housing, schools, universities, hospitals, health centres, leisure and sports complexes, as well as the construction of vital infrastructures. These undertakings stood as the sturdy pillars of the welfare state, not just in their physical structure but in introducing an entirely fresh approach to architectural and urban design.⁵¹⁷

⁵¹⁶ Michelle, Provoost. *New Towns on the Cold war Frontier*, How modern urban planning was exported as an instrument in the battle for the developing world. 2006. Access: <https://www.eurozine.com/new-towns-on-the-cold-war-frontier-4/>

⁵¹⁷ Mark Swenarton, et al. *Architecture and the Welfare State*, Taylor & Francis Group. *ProQuest Ebook Central*, 2014. <http://ebookcentral.proquest.com/lib/delft/detail.action?docID=1783934>.

This vast and multifaceted undertaking was woven into the very fabric of citizens' lives, permeating every facet of their existence. The Americans ingeniously integrated the welfare state into the people's daily routines, thereby actualizing their post-war ambitions of establishing a comprehensive social welfare system. Yet, beyond the noble humanitarian veneer, these projects harboured political purposes, as the United States sought to foster a burgeoning consumer culture within Iran. Through the infusion of American culture, advertising campaigns, and support for labour and their social rights, the ultimate aim was to kindle an enthusiasm for enhanced productivity, igniting higher working motivations among the populace. As a result, the influence of these welfare state initiatives extended far beyond mere material construction. They engendered a profound shift in societal paradigms and values, sparking a transformative wave that swept across the Iranian landscape. These ventures, while ostensibly seeking to enhance the well-being of citizens, were also strategic endeavours in the broader Cold War theatre, signifying a demonstration of American prowess in nurturing social and economic prosperity. In this intricate tapestry of urban interventions, diplomacy, and cultural propagation, Ahwaz emerged as a tangible testament to the potency of architectural and social engineering, poised to redefine the region's destiny and its place in the unfolding global narrative.

Under the pervasive influence of American policies, the National Iranian Oil Company (NIOC) was compelled to turn its attention towards the ambitious realm of urban welfare projects. Despite lacking a clearly defined blueprint for the welfare state city, they sought inspiration from visionary architects and urban planners who could offer architectural innovations in response to the burgeoning desires of the welfare state. Tasked with the momentous responsibility of creating a conducive environment for the well-being of its citizens, these architects were called upon to propose revolutionary concepts and manifest tangible forms that would cater to the needs of the populace. Within this momentous transformation, the architects and urban planners affiliated with the Company found themselves shouldering new and pivotal roles. No longer confined to the conventional boundaries of their craft, they were now expected to eloquently articulate progressive definitions of what must be built to satiate the multifaceted demands of the government, municipality, and the industrial Oil Company. This required them to embrace a diverse array of methodologies, ingeniously adapting to the ever-changing landscape of welfare state aspirations.

Intriguingly, the architects and urban planners were not mere creators of physical structures; they evolved into masterminds of the very services that the welfare

state sought to provide. Their endeavours extended far beyond the blueprinting of buildings, as they became instrumental in devising the intricate mechanisms and services that this comprehensive welfare state vision would deliver. As the conceptualizers of these new-age cityscapes, they harnessed their ingenuity and foresight to ensure that every facet of the citizens' lives was thoughtfully addressed and harmoniously integrated into the fabric of urban planning.

In essence, this transformative period marked an epoch where architectural innovation merged seamlessly with social engineering, leading to the birth of novel urban landscapes that aimed to nurture the well-being and prosperity of the Iranian populace. The architects and urban planners, driven by a sense of purpose and civic duty, were at the vanguard of this profound metamorphosis, crafting a living testimony to the transformative power of architectural vision and its ability to shape the very essence of a nation's welfare. During this transformative era, the decision-makers influencing the built environment were not limited to architects alone; politicians emerged as central figures in shaping spatial policies. These astute politicians wielded significant influence, not just in formulating policies and launching ambitious building programs but also in engaging with major national and international construction companies, materials manufacturers, and property developers. Their collaborative efforts painted a new and intricate panorama of how the city engaged with its diverse citizenry, carefully crafting the built space to accommodate the multifarious social factors essential for welfare provision.

Amidst the prevailing zeitgeist of social welfare's paramount importance, a remarkable shift occurred concerning the ownership of industrial lands previously belonging to the Oil Company. These lands were entrusted to the very workers of the Company, empowering them to construct houses for themselves. This act of empowerment not only fostered a sense of ownership and pride among the workers but also sowed the seeds of a newfound participatory approach to urban development, wherein the beneficiaries of welfare were actively engaged in creating their living spaces.⁵¹⁸

The increasing prominence of the building industry soon engendered spirited rivalries among British, American, and Iranian architectural offices, as well as construction firms, all vying for the coveted attention and endorsement of the national government. As the cityscape underwent a radical transformation, the stakes were high for these entities to demonstrate their expertise and ingenuity in shaping the future of the nation's urban fabric. Each architectural vision

⁵¹⁸ Faateh, Mostafaa. *Fifty Years of Iranian Oil*. 1977.

brought forth a unique narrative, representing a fusion of cultural sensibilities and architectural ideologies, seeking to leave an indelible mark on the landscape and enrich the lives of the citizens. In this atmosphere of dynamic urban competition and visionary urban planning, the city's trajectory was steered by the interplay of diverse forces, encompassing politicians, architects, construction companies, and the aspirations of the citizens themselves. The outcome was an urban landscape that mirrored a nation's collective aspirations, striking a delicate balance between progress, welfare, and a newfound sense of pride in the very fabric of their built environment.

5.3.3.1 Doxiadis' Reverberations: Exploring the Impacts and Prospects of His Involvement in Ahwaz Urban Planning

As the primary stakeholder in the Iranian oil industry, the United States wielded its influential clout, extending a compelling invitation to architects and urban planners to set their sights on strategic locations within Iran, particularly the oil cities. This endeavour was propelled by a twofold objective: fulfilling the political and economic requirements of the US while concurrently positioning the nation as a leading agent of modernization. Consequently, American design firms eagerly embraced the opportunity to partake in the ambitious expansion of Iranian cities, effectively exporting American architecture to this dynamic land.⁵¹⁹ The Middle East, occupying a critical position just beneath the shadow of the USSR, took on paramount significance for the US in the context of its Cold War activities. As a result, the region emerged as a veritable playground for American architects and urban planners during the fifties, as they endeavoured to leave an indelible mark on the urban landscape, fueled by an amalgamation of innovation and diplomatic interests.

Simultaneously, the oil-rich regimes within Iran demonstrated a keen interest in enlisting the expertise of both British and American architects. A renowned architect, Victor Gruen, presented a master plan for Tehran, the capital city, while numerous other esteemed American firms flocked to Iran, intent on contributing their vision to creating new towns, especially those centred around the oil fields. Among them, the coalition of Doxiadis stood out prominently, establishing a formidable track record in the domain of planning and housing within Iran's oil-rich territories.⁵²⁰ The profound impact of Doxiadis' work was exemplified by his collaboration

⁵¹⁹ Jeffrey W. Cody. "Exporting American Architecture 1870-2000", ed. Dennis Hardy, Planning, History and Environment Series. 2003.

⁵²⁰ DIARY-DOX-NA 1, Doxiadis Diary 1957.

with the Khuzestan Development Service, a regional agency dedicated to the comprehensive development of the oil-rich Khuzestan region. His initial foray into Iran in 1957 marked the inception of a transformative journey, as he endeavoured to leave an indelible imprint on the very fabric of the oil fields. Despite the significant contributions made by these architects and their enduring architectural legacy, it is regrettable that their endeavours have often been overshadowed and neglected within the broader context of architectural history. However, their collective vision and contributions remain an integral part of the rich tapestry of Iran's architectural evolution, intertwined with the intricate threads of political ambition, economic interests, and the vibrant pursuit of modernization.

In 1950, the Ford Foundation, driven by a grand vision for global harmony and the propagation of democratic Western civilization, embarked on a momentous endeavour to support world peace.⁵²¹ One of the pivotal beneficiaries of this ambitious mission was the Greek architect and urban planner, Constantinos Doxiadis, whose groundbreaking work would have far-reaching implications for developing countries⁵²², particularly in the Middle East, promising liberty, equality, and welfare. The symbiotic alliance between Doxiadis and the American Ford Foundation bore transformative consequences, granting him the resources and support necessary to carry out his visionary projects. With unparalleled political acumen, Doxiadis skilfully forged an international network, collaborating with several American and UN officials, thereby elevating his influence and reach across global spheres.⁵²³

Central to Doxiadis's contributions was the establishment of the concept of "Ekistics," a rational and scientific theory for urban design rooted in engineering principles. This novel approach sought to address the pressing challenges of burgeoning human settlements, navigating the complexities of congested

⁵²¹ In the unique post-World War II period, a plethora of American institutions found themselves drawn into cooperative endeavours aimed at countering the proliferation of Russian communism. Prominent entities, including the State Department, the CIA, and the United Nations, alongside notable foundations like Rockefeller, Ford, and Carnegie, in conjunction with esteemed academic bastions such as MIT, Rice, and Harvard Universities, all undertook distinct roles spanning multiple dimensions of the Cold War landscape. Guided by a calculated strategy infused with emancipatory discourse, these institutions collectively wielded influence, decisively shaping the intricate tapestry of the Cold War epoch.

⁵²² In Ghana, Zambia, Sudan, Lebanon, Pakistan, Iraq and the US

⁵²³ By virtue of Doxiadis' affiliation with the Ford Foundation, he established connections with an expansive network that extended to esteemed institutions like Harvard and MIT, as well as being intertwined with the official foreign policy of the United States. A notable illustration of these affiliations emerged through the CIA-initiated "Congress for Cultural Freedom," a venture funded by the Ford Foundation. Within this context, Doxiadis stood as one of the few architects engaged in the activities of this Congress. In 1955, during the event in Milan, he delivered a lecture addressing the "Economic Progress in Underdeveloped Countries and the Rivalry of Democratic and Communist Methods." Furthermore, in 1960, he participated in the congress focused on the "New Arab Metropolis."

cities teeming with both people and vehicles. Through his gridiron city designs, meticulously tailored for human-scaled environments, Doxiadis demonstrated a keen awareness of the city's future growth, adeptly accommodating and predicting its expansion. These grid-based cities adhered to Western modernist planning and design models, conceived as vessels of freedom, peace, and progress. In a departure from traditional aesthetic-focused presentations, Doxiadis's approach was marked by objectified work presentations, comprising grids and charts akin to the rigour of computer-based analysis, underscoring the scientific precision underpinning his designs. In the realm of urban planning, Doxiadis's Ekistics stood unrivalled in terms of rationality and systematicity. It introduced a revolutionary scheme, liberating urban planning from formal strategies and monumental compositions, instead organizing urban spaces within expandable grids to accommodate unlimited growth and change. His Ekistics approach exemplified a visionary yet scientifically grounded scheme, meticulously analysing local data to mechanise design solutions.⁵²⁴ While Doxiadis suggested incorporating a hint of local architecture, his designs harmoniously coexisted with the global tenets of Ekistics. In this fusion of visionary foresight and empirical methodology, Doxiadis emerged as an instrumental figure in reshaping the trajectory of urban planning and fostering the promise of progress and well-being for generations to come.

The rational and scientific nature of Ekistics, along with Doxiadis' adept promotion of his work as a scientific discipline, made it an ideal tool for the cultural Cold War politics espoused by the Ford Foundation. Doxiadis' neutral and lucid approach resonated perfectly with the socio-political attitudes of the Foundation and the core values upheld by the United States. Consequently, a profound and symbiotic connection was forged, paving the way for future political projects in the realm of urban planning and development. Doxiadis' attitudes and beliefs were closely aligned with the Ford Foundation's aspirations. His approach encompassed the training of non-Western populations to embrace rationality and practicality, with a focus on promoting American symbols and values such as the free market, global liberty, anti-communism, and an aversion to centralized political authority. Embracing a fervent trust in science and technology as instruments for "rational action," Doxiadis viewed modern civilization as the result of the application of rationality, and he saw it as the responsibility of the United States to elevate other nations to the status of civilization.⁵²⁵

⁵²⁴ His Dynapolis and eventually Ecumenopolis, the world-encompassing city, exploded all known scales in urban planning. The neighbourhood unit, known from the English New Towns, was stretched and repeated and put in an endless spaced-out grid, until every reference to existing urban settings had vanished.

⁵²⁵ Painter, David S., and Gregory Brew. *The Struggle for Iran: Oil, Autocracy, and the Cold War, 1951-1954*. Chapel Hill: The University of North Carolina Press, 2022.

In the context of Cold War dynamics, the United States, as a democratic republic, harnessed ambiguous aid programs as a means to exert influence over other countries. This novel approach diverged from the forceful colonial instruments employed by traditional empires like Britain, signalling a shift towards a more modern approach rooted in the principles of a free and independent democracy. In this context, Doxiadis' work could be seen as a vehicle of economic imperialism, embodying the aspirations of the West in developing countries. Doxiadis' vision aimed to create cities that would be universally liked, emphasizing efficiency, peace, and Western values, with the intention of assisting third-world countries in their journey towards rational civilization and autonomy. This approach disregarded different lifestyles and sought to impose a standardized model of urban development, representing an ideological departure from the hierarchical social planning imposed by the British in their colonial pursuits.⁵²⁶

The emphasis on unrestricted growth and the belief in technological solutions for all conceivable problems further solidified Doxiadis' vision as a perfect embodiment of the USA-development ideology. His work became a potent tool through which the United States sought to exert its influence and shape the destinies of nations, transcending traditional colonial methods and embracing a more nuanced and ostensibly benevolent approach to international relations. As a part of the US aid programs, the American welfare system encountered significant challenges in navigating the intricate social complexities of Iran. Despite well-intentioned efforts, there was a fundamental misjudgment of the local social traditions and customs, leading to a misalignment between the proposed solutions and the people's actual needs. The lack of sufficient knowledge about the intricacies of the local social fabric resulted in the implementation of initiatives that often failed to hit the mark. These endeavours, driven by Western rational planning methods, encountered considerable difficulties in finding resonance within the context of deeply rooted local traditions and habits.⁵²⁷

<https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=3486851>
<https://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781469671673>
https://www.jstor.org/stable/10.5149/9781469671680_Painter
<https://public.ebookcentral.proquest.com/choice/PublicFullRecord.aspx?p=30285125>
<https://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781469671680>
<https://muse.jhu.edu/book/109697/>
<https://ebookcentral.proquest.com/lib/byu/detail.action?docID=30285125>.

⁵²⁶ Potter, Simon James. *British Imperial History. Theory and History*. London: Palgrave, 2015.

⁵²⁷ Michelle, Provoost. New Towns on the Cold war Frontier, How modern urban planning was exported as an instrument in the battle for the developing world. 2006. Access: <https://www.eurozine.com/new-towns-on-the-cold-war-frontier-4/>

Interactions with local officials proved to be a source of considerable dilemma, as the gap between Western ideals and local realities proved to be insurmountable at times. The imposition of foreign concepts, without a nuanced understanding of the intricacies of the local culture often led to misunderstandings and resistance from the very authorities meant to facilitate the aid programs. Permanent hierarchy issues posed another formidable challenge. The traditional social structure of Iran, deeply ingrained in hierarchies and local power dynamics, clashed with the egalitarian ideals of Western welfare systems, resulting in friction and resistance to change. Frustrations about the lack of cooperation further compounded the difficulties faced by the American welfare system. The unfamiliarity with local customs and the failure to effectively engage with the community led to a breakdown in communication and a lack of support for the initiatives.

In essence, the efforts of the American welfare system in Iran encountered an unbridgeable gap between the Western rational planning methods and the deeply rooted local traditions and habits. While well-intentioned, these initiatives often faltered due to a lack of cultural sensitivity and an insufficient understanding of the social complexities at play. This serves as a reminder that effective development and aid programs necessitate a deep appreciation of the local context and a collaborative approach that respects and integrates the unique customs and traditions of the communities they seek to serve.

Upon arriving in the oil cities in 1957, Doxiadis was confronted with a stark reality – Ahwaz was far from being a metropolitan hub, characterized by a dearth of comfortable transportation and inadequate services. In light of these challenges, he was likely invited to spearhead the design of a modern national housing program, serving as a transformative force in the development of the city. Doxiadis brought with him a comprehensive vision encompassing not just housing design but also planning, architecture, and architecture training. To execute this ambitious undertaking, a multidisciplinary team was assembled to conduct surveys, compile essential reports, design tens of thousands of houses, and oversee their construction. This holistic approach aimed to address the diverse needs and aspirations of the growing population in Ahwaz, ensuring that the city's expansion was both functional and aesthetically pleasing.

Among Doxiadis' notable contributions to Ahwaz's expansion was the introduction of the Home Ownership Scheme, a concept that profoundly impacted the city's development. This scheme aimed to empower citizens by offering them opportunities to own their homes, thus fostering a sense of pride, stability, and ownership within the community. By promoting homeownership, Doxiadis sought to create a vibrant urban fabric, wherein individuals and families could establish roots and build

a sense of belonging. In essence, Doxiadis' involvement in designing a modern national housing program in Ahwaz laid the groundwork for a transformative urban expansion. His multifaceted approach, coupled with implementing the Home Ownership Scheme, left an enduring legacy, shaping the city's trajectory and ensuring its development was rooted in livability, inclusivity, and community empowerment. As a result, Ahwaz witnessed a significant evolution, emerging as a dynamic urban centre with an improved quality of life for its inhabitants.

5.3.3.2 Exploring the Experiment: Anglo-American Trials of Western Welfare System in Urban Projects of Ahwaz, with Emphasis on Homeownership Schemes

In the collaborative efforts of NIOC and the British-American Consortium, Ahwaz was strategically planned to attract and retain employees as permanent residents. The vision entailed integrating the oil community into a rapidly developing landscape of diverse industries and educational facilities, including establishing a university. As the city rapidly expanded, accommodating the growing labour force became the most significant challenge. Despite constructing 370 houses in the 1940s, the demand for Company housing remained high, with only 27.5% of the labour force being assigned a Company house. Staff housing also continued to be a critical concern. The oil agents proposed a “sustainable housing building program” in 1955, recognising the urgent need to address this housing shortage. Following three years of thorough research and planning, the concept of the “Home Ownership Scheme” (HOS) took shape, becoming the pivotal architectural and urban result of the oil consortium's endeavours.⁵²⁸

The oil consortium's introduction of the “Home Ownership Scheme” (HOS) in Ahwaz provides valuable insights into the relationship between oil and the petroleumscape. The pressing issue of a housing shortage in Ahwaz was closely tied to the rapid expansion of the oil industry and the growing labour force. The demand for housing far outstripped the supply, indicating the significant population growth and urban

⁵²⁸ 1961–63, Staff Housing and Labour, Part 3, January 1961 to December 1963. Iranian Oil Participants Limited. ArcRef: 227605, Barcode: Z01586069.

Subject file relating to staff and housing issues in Iran. Part two of a series of four files: see also ARC170608, ARC227604 and Arc227606.

Specific document on file: Note No 2098, Operating Companies' Home ownership schemes and Assistance to Communities in Fields and Abadan (Khorramshahr), 12th June 1961; Forecast of Manpower and Housing position for fields Areas, 31st December 1961 to 31st December 1967, dated 31 January 1962; Note No 2287, Operating Companies' Housing Requirements, dated 19th February 1962.

development driven by the oil industry. The housing shortage challenged the oil consortium to retain employees as permanent residents in Ahwaz. Providing adequate housing was necessary to ensure a stable and dedicated workforce. The concept of the HOS was not merely about addressing housing shortages but was part of a broader urban planning effort. The oil consortium's vision was to integrate the oil community into a diversified urban landscape with industrial facilities, educational institutions, and more. This indicates that the petroleumscape extended beyond the oil fields and influenced the development of entire cities. The introduction of the HOS was a significant architectural and urban development that aimed to provide a solution to the housing challenge. It represented the oil consortium's efforts to create a sustainable and well-planned urban environment in Ahwaz, emphasizing the enduring impact of the oil industry on the city's petroleumscape.

The Home Ownership Scheme was devised as a collaborative initiative involving joint decisions between British, American, and Iranian Operating Companies. Key players such as British Petroleum, IRICON Agency Ltd., TEXACO Iran Ltd., Iran California Oil Company, and NIOC came together to establish the Iranian Oil Participants Limited on a pilot basis in 1958. This consortium was entrusted with formulating policies aimed at resolving labour housing challenges and providing support to the communities in the oil fields. The Home Ownership Scheme represented a groundbreaking solution, offering a path to permanent residency and homeownership for the oil community in Ahwaz. This scheme not only addressed the pressing need for housing but also created a sense of belonging and stability among the residents. By fostering a collaborative approach and pooling resources, the oil consortium showcased their commitment to the well-being of their employees and the communities in which they operated. The planning and execution of the Home Ownership Scheme was a testament to the concerted efforts of the British-American Consortium and NIOC to address the challenges of labour housing in Ahwaz. This transformative initiative became a cornerstone of the city's development, fostering a sense of ownership and community among its residents and solidifying Ahwaz's position as a vibrant and integral hub within the Iranian landscape.

British Petroleum Company's surveys in Ahwaz indicated that it was the most suitable centre within the oil fields to develop a successful social welfare system. Recognizing the potential of this city, the Iranian Oil Participants Limited officially selected Ahwaz as the pilot location for the "Home Ownership Scheme." This scheme was designed to demonstrate the socio-economic benefits of homeownership compared to Company-owned housing or fully private-owned housing; in line with their commitment to welfare initiatives, the British and American agents of the Oil Company sought to provide families with access to permanent housing, contingent on the income they earned from the Company. The "Home Ownership

Schemes” encompassed several approaches: the Company built and owned houses, the Company built and sold houses to the staff using a portion of their monthly salary, and the option for employees to purchase fully private dwellings. Of these options, the second approach was particularly aligned with modern Western welfare principles, allowing Company employees to gradually become homeowners during their tenure with the oil companies and finance their homes through their earnings.⁵²⁹

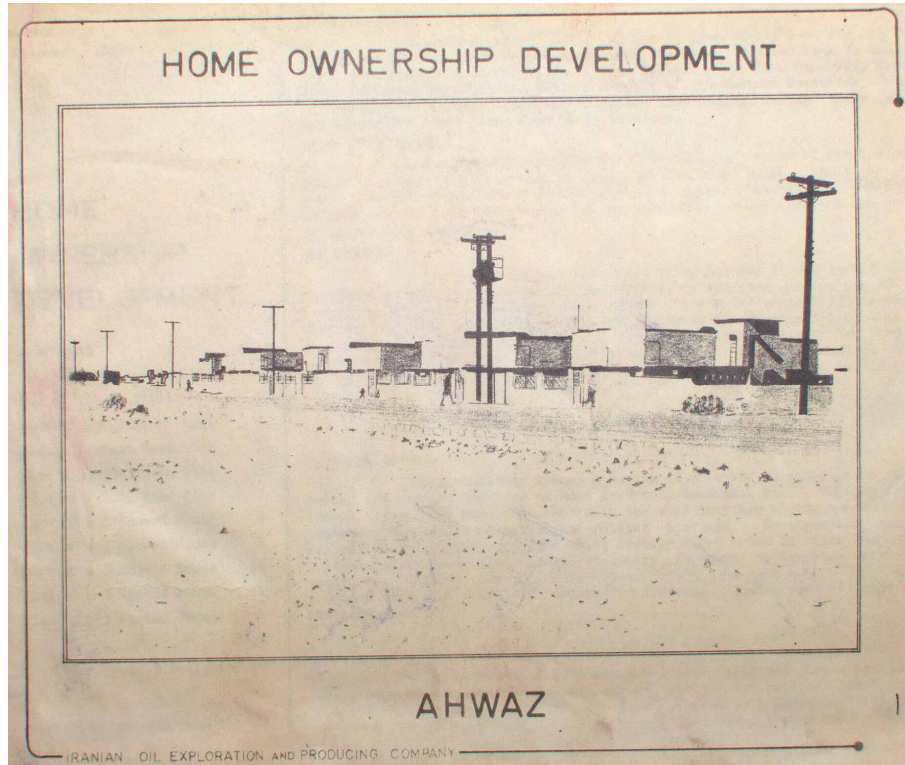


FIG. 5.1 Homeownership Scheme by Iranian Oil Participants Limited.

Source: ArcRef: 170607. Homeownership, part 1 May 1955 to November 1960. BP Archives.

Date: 1961. Accessed: February 2017.

The Company was convinced that Homeownership offered numerous advantages over Company-owned housing, and the pilot scheme implemented in Ahwaz served to validate this belief. By providing employees with the opportunity to own their homes, the method fostered a sense of ownership, stability, and pride within the community. It empowered families, allowing them to invest in their future and build assets while serving the oil companies. The success of the Home Ownership Scheme in Ahwaz demonstrated the viability of modern welfare practices in the context of urban planning and housing development. By prioritizing homeownership and providing innovative means for employees to achieve this goal, the oil consortium exemplified its commitment to the welfare and well-being of its workforce. The pilot scheme in Ahwaz stood as a beacon of progress and served as a model for future welfare ventures within the realm of urban planning and development.

Doxiadis' visionary concepts and Ekistics urban patterns exerted a profound influence on the planning and construction of new housing projects in Ahwaz. These projects were strategically located both within the city and on its periphery, serving as extensions to the existing living areas. Drawing inspiration from Doxiadis' principles of rational urban design, these new residential areas were thoughtfully integrated into the city's fabric, ensuring efficient land use and optimal accessibility to essential amenities. Moreover, Doxiadis' ideas extended beyond housing alone; they played a crucial role in planning and developing new national infrastructures at the city's heart. His multidisciplinary approach fostered the creation of a comprehensive urban landscape, encompassing not only housing but also essential facilities, transportation networks, educational institutions, and other public amenities. Additionally, the implementation of "the housing maintenance program" in 1958 further underscored the commitment to improve and upgrade labour areas within Ahwaz. This program focused on enhancing the living conditions and facilities available to the workforce, acknowledging the significance of providing dignified and comfortable living spaces for all residents, regardless of their occupation or economic background. By merging Doxiadis' innovative concepts with practical initiatives like the housing maintenance program, the city of Ahwaz experienced steady progress in its quest for urban development and welfare enhancement. These efforts reflected a holistic approach, where urban planning, infrastructure, and social welfare were interwoven to create a cohesive and sustainable urban environment for the benefit of all its inhabitants. In this way, Ahwaz bore the imprint of Doxiadis' vision and exemplified the fusion of modern urban planning ideals with the pragmatic aspirations of a flourishing city seeking to provide its residents with a high quality of life.

In 1960, IRICON Agency LTD⁵³⁰ responded to the British Board of Directors' request and agreed to collaborate on constructing 100 labour houses and their associated services in Ahwaz. ⁵³¹ The Anglo-American companies' board of directors prepared a budget of 260,000 pounds for this housing project.⁵³² It was mutually agreed that any profits from these budget additions for capital expenditure would be formally returned to NIOC, serving as the sole shareholder of the Producing Company.⁵³³ Additionally, a provision was made to transfer ownership of all properties to NIOC after a period of ten years.⁵³⁴ Recognizing the importance of additional financing for labour housing, NIOC planned to secure funding from other business sources. The plan was to hire a contractor to construct the houses, after which NIOC would rent the properties from the contractors. Subsequently, "Iranian Oil Participants Limited" approved the Producing Company's new budget addition for the construction of 300 labour houses and 110 staff houses in Ahwaz, furthering their commitment to enhancing housing opportunities for employees.⁵³⁵ The "Home Ownership Schemes" formed a fundamental part of the oil agents' vision for future housing development in Ahwaz until 1967. The plan projected the availability of 364 houses in 1961, 600 in 1963, and 1000 in 1967. These projected numbers were carefully planned to meet the Iranian government's housing needs, aiming to provide satisfactory accommodation options for the growing population in Ahwaz.⁵³⁶ In essence, the concerted efforts of IRICON Agency LTD, NIOC, and other stakeholders demonstrated a clear commitment to addressing the city's housing needs. The various housing projects and the forward-looking Home Ownership Schemes marked significant strides in fostering a sustainable and inclusive urban environment in Ahwaz, supporting the welfare and well-being of its residents.

⁵³⁰ Address: Albemarle Street, London, W.I.- source: Letter Page 10, Letter NO:1937, 10th August, 1960

⁵³¹ 1960, Arcref 233132 : resolutions approving producing company addition to capital budget for construction of 100 labour houses with services Ahwaz

⁵³² Article 59 resolutions approving Producing Company addition to capital budget for construction of 100 labour houses with services, Ahwaz., Barcode: Z01596991, Begin date: 10/08/1960, End date: 16/08/1960 ,Bib type: paper material, Company: Iranian Oil Participants Limited

⁵³³ Letter: P4 dated August, 1960, Iranian Oil Participations Limited, Resolution of the Board of Directors Pursuant to Article 59 of the Company's Articles

⁵³⁴ page 18/248 arc170608

⁵³⁵ BP Archive, ArcRef: 233132, 1960.

⁵³⁶ BP Archive, ArcRef: 227605, staff Housing and Labour, 1961-1963

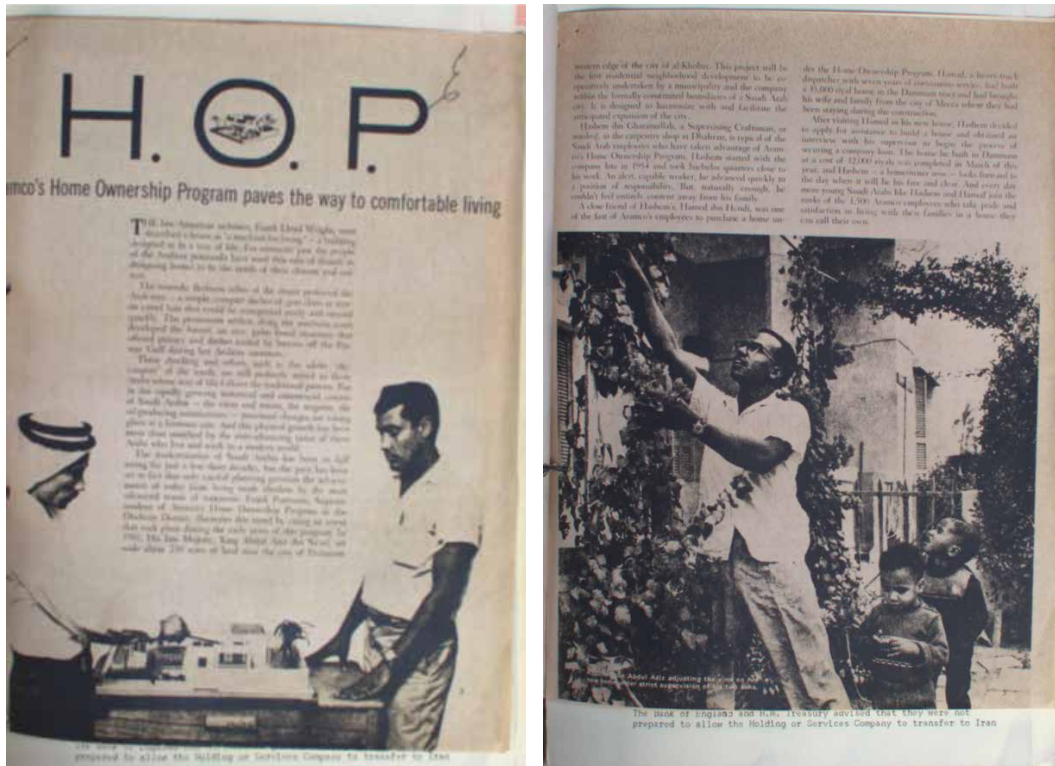


FIG. 5.2 Homeownership Scheme by Iranian Oil Participants Limited.

Source: ArcRef: 170607. Homeownership, part 1 May 1955 to November 1960. BP Archives.
 Date: 1961. Accessed: February 2017.

In 1961-62, a comprehensive program of assistance projects for community development was proposed to align with the Company's policy of integration into the municipality of Ahwaz. This program primarily focused on enhancing urban services and amenity buildings, aiming to foster the healthy growth of housing communities within the city, thereby promoting social convenience for its citizens. The ultimate goal was to secure the program's acceptance into the municipality and be closely integrated with the existing urban fabric. One of the key components of this program involved the construction of housing under the Home Ownership Scheme (HOS), along with additional Company-owned housing. The target was to add approximately 2000 houses to the existing Company community within a two-mile radius of Khorramkushk Depot. Emphasizing the urgency of addressing the city's housing needs, particular attention was given to accelerating the completion of houses in Ahwaz, focusing on providing sufficient housing for staff

members. Consequently, a five-year program was designed to build 780 staff houses and 2,250 labour houses in Ahwaz.⁵³⁷ It is important to note that the initial request for staff and labour houses did not cover the entirety of the anticipated requirements; it was only a portion of the overall housing needs. As such, an additional request was made later to secure further substantial funding to meet the remaining balance of the housing requirements. By formulating and implementing this comprehensive assistance program, the Company demonstrated its commitment to the welfare and well-being of its workforce and the broader community in Ahwaz. The collaborative efforts towards enhancing housing options and urban services showcased a dedication to creating a sustainable and inclusive urban environment, fostering a sense of belonging and prosperity among the residents.⁵³⁸

⁵³⁷ Home ownership scheme by Iranian Oil Participants Limited, 1961, Source: BP Archive

⁵³⁸ Iranian Oil Participants Limited, Extract from Meeting on 11th December, 1963

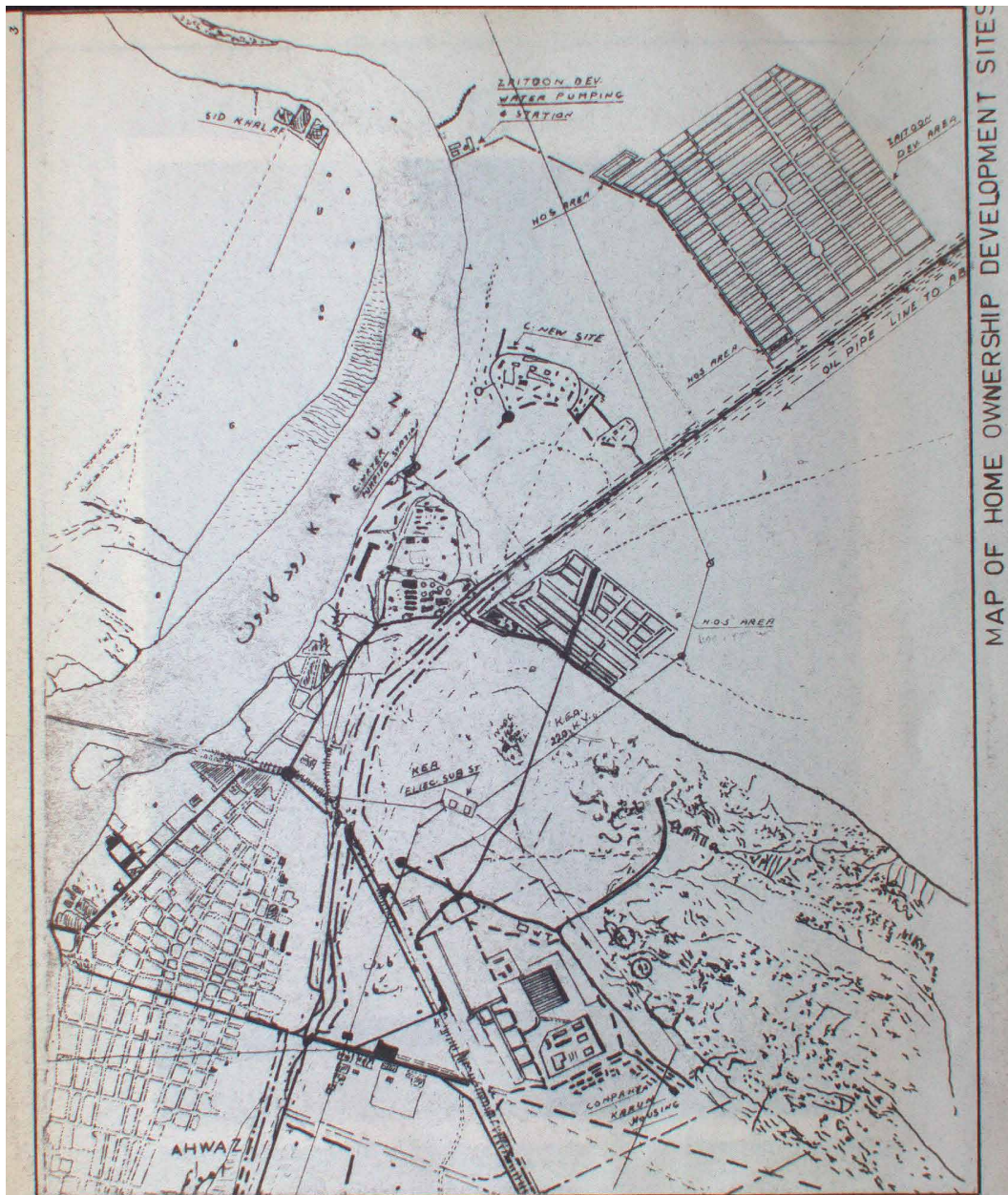


FIG. 5.3 Map of Home Ownership Development.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.

Date: 1961. Accessed: February 2017.

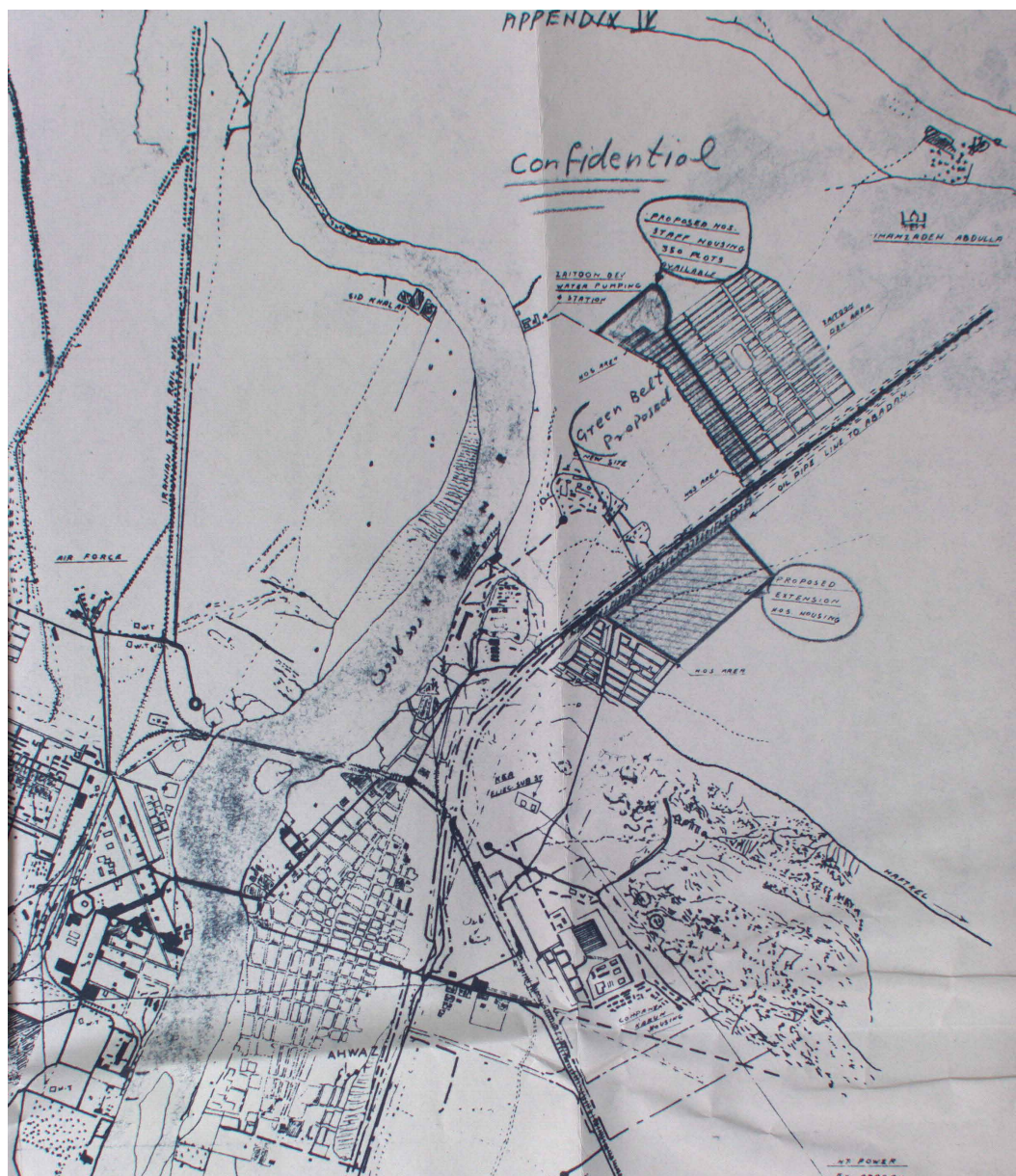


FIG. 5.4 Homeownership Scheme by Iranian Oil Participants Limited.

Source: Homeownership, part 1 May 1955 to November 1960. ArcRef: 170607. Barcode: Z01512484. BP Archives.
Date: 1960. Accessed: February 2017.

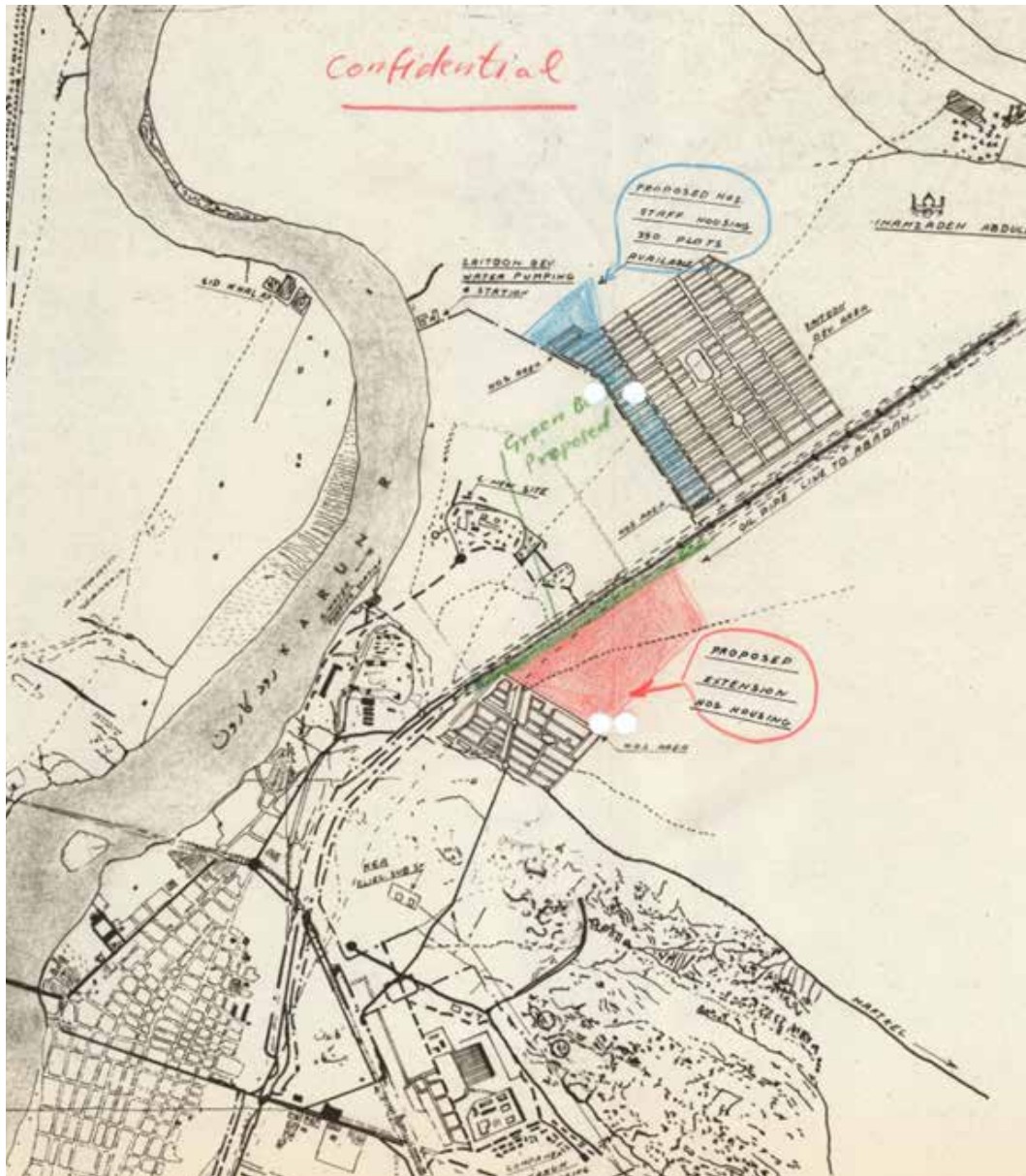


FIG. 5.5 Red: Proposed Extension HOS. Housing. Green: Green Bound proposed. Blue: Proposed HOS. Staff Housing, 350 plots Available. Zeitoon Dev. Area. Company Karun Housing. New Site.

Source: Homeownership, part 1 May 1955 to November 1960. ArcRef: 170607. Barcode: Z01512484. BP Archives.

Date: July 1960. Accessed: February 2017.

In 1966, Ahwaz's bright and promising future as the oil fields' central hub and its potential for diverse industrial growth convinced the Company to make further investments in the housing scheme.⁵³⁹ The Company was determined to provide better financial and technical resources to design and construct various new houses on freehold lands.⁵⁴⁰ In their endeavour to expand the housing scheme, they successfully persuaded the national government that these freehold lands could be developed with the condition that their ownership would eventually be transferred to the Anglo-American Oil Companies' properties.⁵⁴¹ By the end of 1966, the Iranian Oil Operating Companies collectively allocated a substantial sum of 1,400,000 Rials (equivalent to 294,000,000 Rials in today's currency) for the implementation of this expanded housing scheme. The successful execution of this initiative hinged on the close cooperation of the National Iranian Oil Company, which played a pivotal role in securing land for the project, either free of charge or at a nominal price. Additionally, the National Iranian Oil Company shared the cost of certain utility services, further facilitating the project's financial feasibility. One of the critical factors that made this housing scheme accessible to employees was the provision of a maximum of twenty-year, interest-free loans. These loans were granted to Oil Company employees who wished to participate in the scheme, making it financially viable and within reach for a broader range of individuals. Through this comprehensive approach, the Company assumed a leading role in providing housing accommodation in Ahwaz. This ranged from providing subsidies for individual families to commissioning social housing through corporations, with the overarching goal of making high-quality housing widely accessible to all employees.

In essence, the Company's efforts showcased a genuine commitment to the welfare and well-being of its workforce and the community of Ahwaz. By investing in the expansion of the housing scheme and collaborating closely with the National Iranian Oil Company and the government, they created an environment where employees could not only work but also thrive, living in comfortable and secure homes that would foster a sense of belonging and stability for years to come.

In an effort to expedite the construction of labour housing and ease the financial burden on its members, the British agents proposed an innovative scheme. They envisioned collaborating with a European concern that would provide the necessary financing for housing construction. In return, the European contractor would be awarded the building contract for these housing projects. Under this scheme,

⁵³⁹ Henniker, Edward "Major Nationalisation: The Anglo-Iranian Oil Company, 1951, Britain vs. Iran" (2013).

⁵⁴⁰ A total sum of 1,400,000 pounds was released by the Iranian Oil Operating companies, Henniker, Edward "Major Nationalisation: The Anglo-Iranian Oil Company, 1951, Britain vs. Iran" (2013).

⁵⁴¹ Home ownership scheme by Iranian Oil Participants Limited, 1961, Source: BP Archive

the European contractor would build and finance the housing and then lease the properties to NIOC at a rental rate that allowed the contractor to recoup their capital investment over a ten-year period. The lease agreement would entail the following terms: first, a fixed lease period of approximately ten years; second, the rent charged would be designed to enable the contractor to recover both their capital investment and reasonable interest on it; third, NIOC would have the option to purchase the houses at the end of the lease for nominal amounts. In its capacity as the lessor, NIOC would then lease these houses to the Operating Companies under similar terms: a ten-year lease period with corresponding rental rates. The Operating Companies, in turn, would rent the houses to their employees, ensuring that the rents recovered from the employees contributed to fulfilling the obligations to NIOC.⁵⁴² Furthermore, in an effort to minimize the reliance on imported furniture and promote local sourcing, the construction of the houses prioritized obtaining furniture from local suppliers whenever possible. This approach not only supported the local economy but also contributed to a more sustainable and self-sufficient housing project. By employing such innovative financial and leasing arrangements, the housing projects in Ahwaz became a collaborative effort between international contractors, NIOC, and the Operating Companies. This cooperative approach not only facilitated the swift construction of much-needed housing but also eased the financial strain on all parties involved, ultimately benefiting the residents of Ahwaz and contributing to the city's overall growth and prosperity.

The implementation of the Home Ownership Scheme in Ahwaz was envisioned to yield various social and commercial benefits for the Company. The foremost social gain was the cultivation of a satisfied and committed workforce deeply rooted in the community. By providing employees with the opportunity to own their homes, the Company aimed to foster a sense of belonging and stability among its workforce. Employees who owned their homes were more likely to have a stronger sense of responsibility towards their work, family, and future retirement, as they were invested in the long-term prosperity of both themselves and the community. Beyond the social advantages, the Home Ownership Scheme also presented significant commercial benefits for the Company. A comparison of the initial costs of providing Homeownership with the costs of constructing and maintaining Company-owned houses revealed that the annual gross loans did not exceed the Operating Companies' expenditure for an equivalent number of houses.⁵⁴³ Implementing the Home Ownership Scheme resulted in substantial annual savings for the Company.

⁵⁴² Staff Housing and Labour, Part 1 1954-1957

⁵⁴³ BP archive, ArcRef : 170607, Home ownership, part 1, 1955 to 1960

This cost-effectiveness stemmed from the financial burden of constructing the houses being shared with the European contractor under the leasing arrangement.

Consequently, the Company could allocate its financial resources more efficiently, redirecting the saved funds towards other essential projects or investments. Overall, the Home Ownership Scheme proved to be a win-win proposition for the Company. Not only did it engender a contented and dedicated workforce, but it also demonstrated cost-effectiveness in comparison to the traditional approach of constructing and maintaining Company-owned houses. This innovative scheme not only served the immediate housing needs of the employees but also contributed to the long-term financial sustainability and success of the Company's operations in Ahwaz.

The Home Ownership Scheme in Ahwaz reflects the oil industry's influence on urban planning and housing solutions, highlighting the interconnectedness between oil-related development and the evolving petroleumscape of the region. It underscores the oil consortium's commitment to creating a functional and attractive living environment for its workforce in the city. The implementation of the Home Ownership Scheme (HOS) in Ahwaz went beyond just providing houses; it also involved the creation of a comprehensive master plan for urban development, marking one of the initial modern urban plans for the city. This master plan aimed to facilitate the integration of staff and labour employee housing in the depot (New Site) and HOS sites with a prominent commercial and social amenity centre situated centrally to serve the community. The commercial and social amenity centre was meticulously planned as a cohesive unit, with strict control over the design and materials used to construct individual buildings. This measure ensured a harmonious and aesthetically pleasing urban environment, with careful consideration given to the overall appearance and functionality of the centre. To support the efficient execution of this plan, a comprehensive program was put in place, including a mobile plant workshop, a central construction group, and a central materials department. These elements were instrumental in streamlining the construction process and ensuring a consistent and high-quality outcome in all phases of development.

Furthermore, the new housing projects were thoughtfully located both within the city and on its periphery, extending the existing living areas. The urban planning for these housing projects was inspired by Doxiadis' Ekistics urban patterns, reflecting a rational and scientific approach to urban design. Doxiadis's concepts played a crucial role in shaping housing developments and the layout of new infrastructures at the heart of the city. Through this comprehensive approach to urban development, Ahwaz underwent a transformation that showcased a harmonious integration of housing, commercial, and social amenities, all contributing to creating a vibrant

and sustainable urban environment. The HOS master plan set a precedent for future urban planning in Ahwaz, emphasizing the importance of thoughtful design, collaboration, and consideration for the well-being and prosperity of the community.

5.3.3.3 Case Example: Zeitun Neighbourhood

Towns and residential zones developed in Ahwaz were heavily influenced by the concepts of Ekistics introduced by Doxiadis. American architects, working under the Oil Company, played a significant role in shaping the urban landscape of Ahwaz, opting for an orthogonal gridiron pattern that extended from Karun to the East. This modernist urban planning approach veered from the previous social hierarchical zoning, adopting a more rational and functional spatial organization. The gridiron pattern provided a robust foundation for the city's future expansion, enabling easy circulation for vehicles like cars, which were symbols of freedom and progress. Inspired by modern urban practices in the US, the planners envisioned a city that would efficiently accommodate the growing population and cater to their needs. In the Ahwaz suburbs of Zeitun and Behrooz, approximately 769 low-cost homes were constructed, forming distinct, separated towns. Each town was carefully designed, featuring wide access roads and subdivided into smaller residential quarters. These quarters consisted of row houses, community centres, market buildings, and public services. Their design's repetitive square neighbourhood units echoed Doxiadis' urban patterns, embracing modern urban planning principles. While the overall extension of Ahwaz followed a universal arrangement suitable for the Middle East's hot climate, the local impacts and cultural traditions did not significantly influence the central identity of the buildings—the architecture aligned with the global scales of modernization, with only subtle indigenous touches incorporated. The structures were characterized by a restrained modern design, employing modern materials yet adorned with vernacular brick patterns, which reflected a nod to local architectural heritage.

Among the various residential zones developed in Ahwaz, the Zeitun Employees' residential zone emerged as the most significant, embodying an urban image designed to be both identifiable and familiar to the citizens. This area was carefully planned and executed to create a cohesive and aesthetically pleasing environment that would resonate with the residents. On the other hand, the Zeitun Labours' residential zone presented a different scenario. It consisted of endless low-rise but high-density development areas, characterized by narrow alleys and grey concrete slums, with small row houses tightly packed together. While these houses provided

detached living spaces for improved air circulation, the overall layout lacked the urban planning finesse seen in the Zeitun Employees' zone.

In contrast to the Zeitun Labours' residential zone's somewhat naive development, the results of the Home Ownership Scheme (HOS) were highly efficient and effective. The HOS brought about a level of professionalism and thoughtful urban planning that greatly enhanced the living conditions for its residents. The houses developed under HOS were strategically located in urban plots, surrounded by streets with easy access and no dead ends, promoting a sense of openness and connectivity within the community. Compared to the other residential areas, the HOS developments showcased a more modern and rational approach to housing, considering the residents' specific needs and the local climate. This emphasis on efficiency and effectiveness in urban planning contributed to the success of the Home Ownership Scheme, making it a notable achievement in the overall urban development of Ahwaz.

In summary, the towns and residential areas in Ahwaz exemplified the fusion of modern urban planning ideas and architectural styles, combining the practicality of gridiron patterns with minor indigenous influences. The result was a cohesive and efficient urban environment, although some critics argued that the buildings lacked distinct contextual elements deeply rooted in the local cultural identity. Nonetheless, these developments marked a significant step towards Ahwaz's modernization and urban expansion, contributing to the city's transformation into a thriving and progressive hub in the region. For instance, the Zeitun Employees' residential zone and the Home Ownership Scheme developments stood out as examples of well-planned and efficiently executed urban projects, offering improved living standards for their residents. While challenges persisted in some areas of the city, the success of the HOS demonstrated the potential of thoughtful urban planning in creating vibrant and comfortable living spaces in Ahwaz. Many of these planned residential areas established by oil companies had layout, design, and architectural features influenced by their goals of creating comfortable and functional living environments for their workforce. The towns and residential areas in Ahwaz exemplify the transformation of the city's urban landscape as a result of the oil industry's presence, reflecting the evolving petroleumscape characterized by urbanization, architectural diversity, and cultural exchange.

The fusion of modern urban planning ideas and architectural styles in Ahwaz's towns and residential areas was intrinsically linked to the petroleumscape concept. The petroleumscape in Ahwaz was marked by rapid urbanization and population growth driven by the oil industry. As a result, modern urban planning concepts were implemented to accommodate the expanding workforce and their families, emphasizing the practicality of gridiron patterns. This urbanization directly resulted

from the oil industry's presence and influence. The incorporation of architectural styles in these urban developments reflected the blending of Western modern influences with minor indigenous elements. This fusion of styles represented the diverse cultural and architectural impacts brought about by the presence of international oil companies. Moreover, the coexistence of modern planning concepts and indigenous influences in Ahwaz's urban developments is indicative of the cultural exchange and interaction that occurred in the petroleumscape. The oil industry facilitated the convergence of different cultural elements and architectural practices.



FIG. 5.6 Home Ownership Development, Looking North from the Qurait road & Qurait road site.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.
Date: 1961. Accessed: February 2017.



FIG. 5.7 Home Ownership Development, Looking North from the Qurait road & Qurait road site.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.
Date: 1961. Accessed: February 2017.

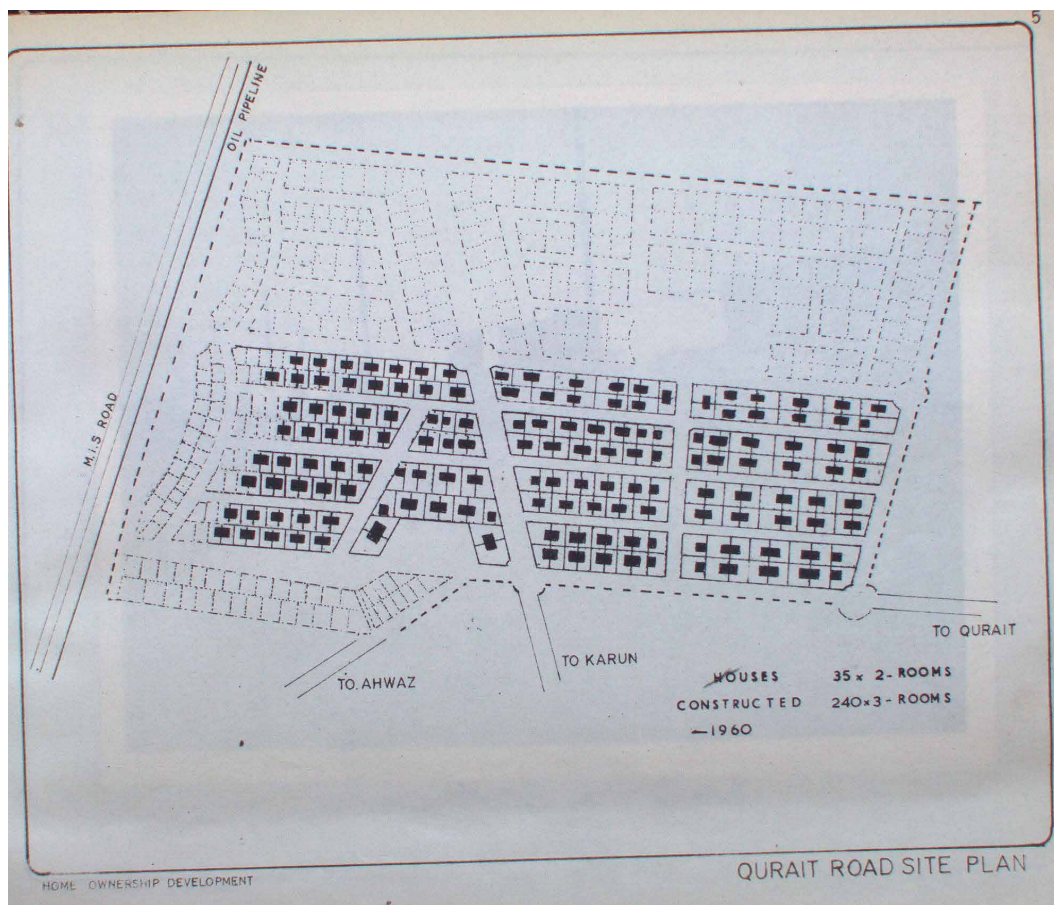


FIG. 5.8 Zeitun Karmandi (Labourers' Residential Zone).

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.

Date: 1961. Accessed: February 2017.

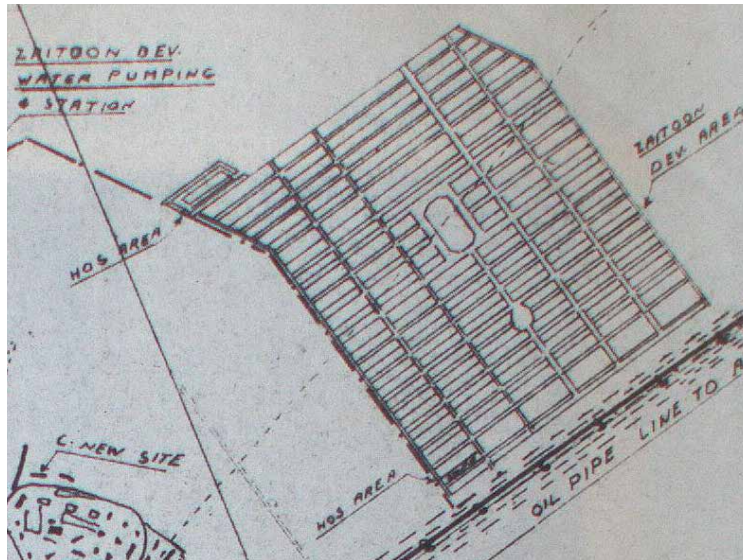


FIG. 5.9 Zeitun Karmandi (Employees' Residential Zone).

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives. Date: 1961. Accessed: February 2017.

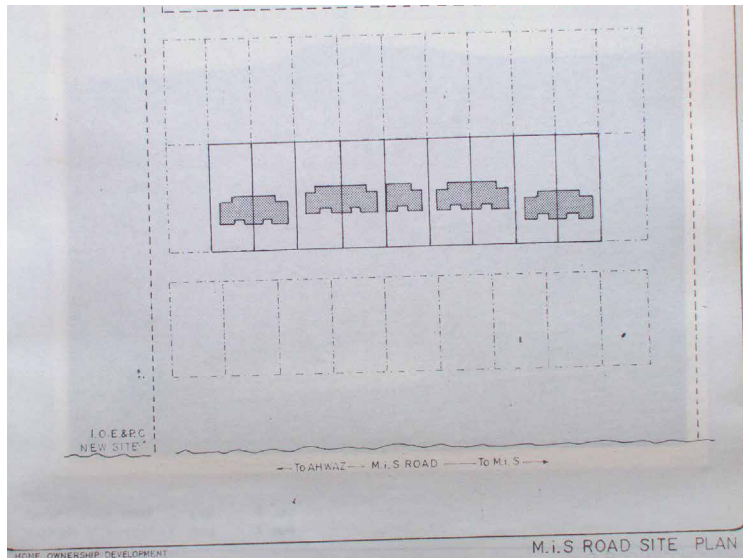


FIG. 5.10 Zeitun Karmandi (Employees' Residential Zone).

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives. Date: 1961. Accessed: February 2017.

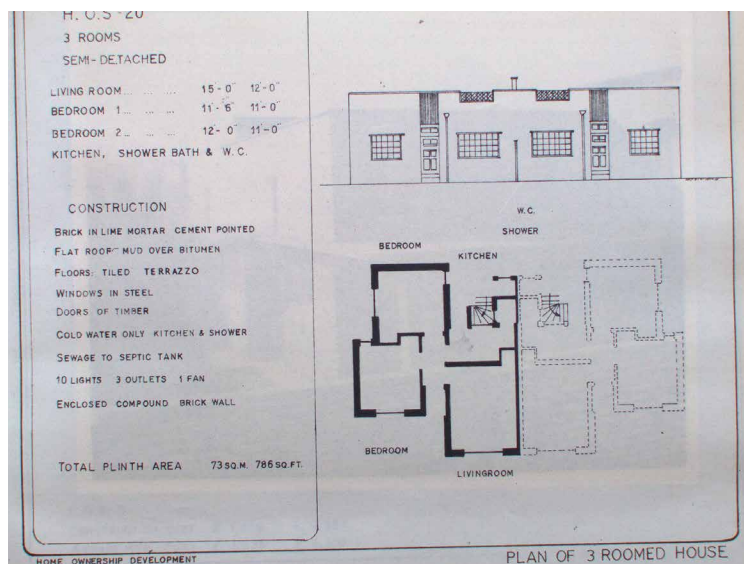


FIG. 5.11 Plan of 3 Roomed House.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.
Date: 1961. Accessed: February 2017.



FIG. 5.12 3-Roomed House.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.
Date: 1961. Accessed: February 2017.

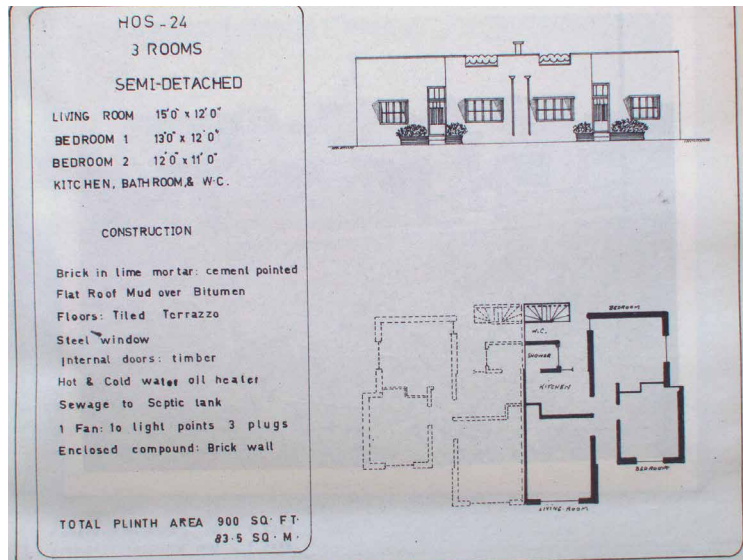


FIG. 5.13 Plan of 3 Roomed House.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.
Date: 1961. Accessed: February 2017.



FIG. 5.14 3 Roomed House.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.
Date: 1961. Accessed: February 2017.

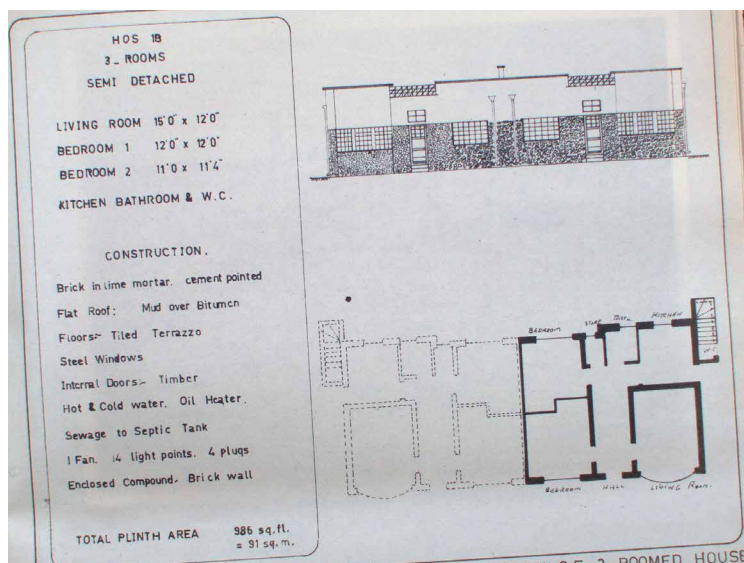


FIG. 5.15 Plan of 3 Roomed House.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.
Date: 1961. Accessed: February 2017.



FIG. 5.16 3 Roomed House.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.
Date: 1961. Accessed: February 2017.

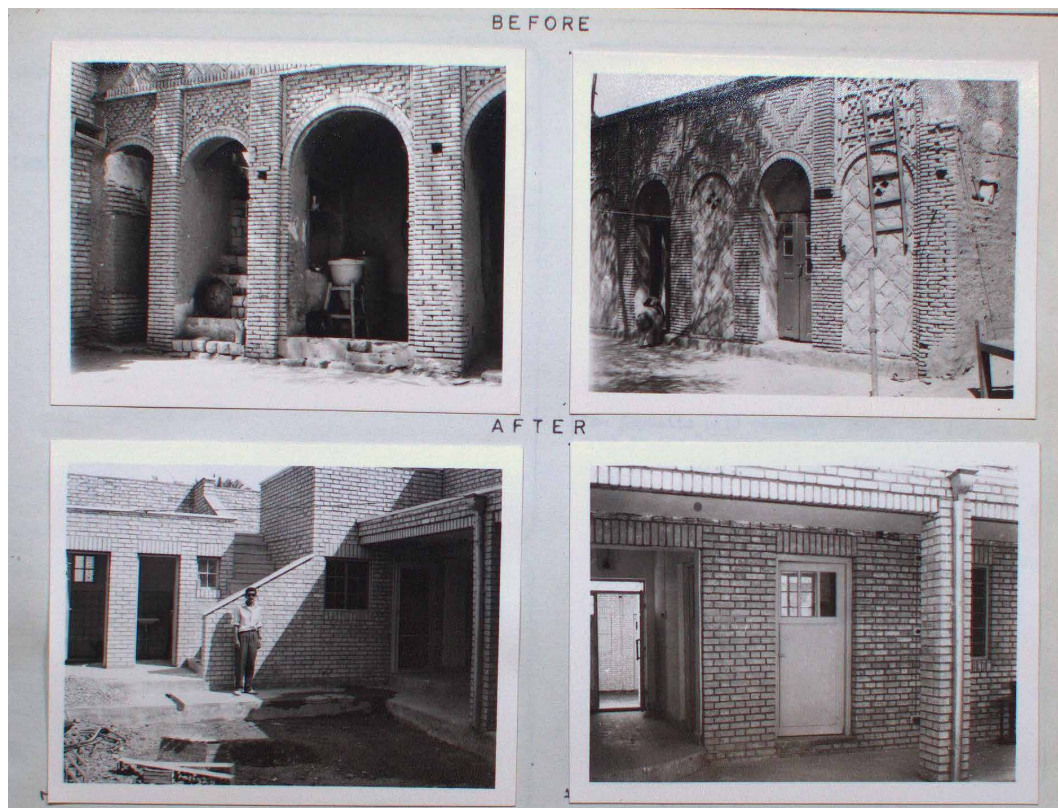


FIG. 5.17 A Home for a Labor Employee Built on Private Land in Ahwaz Town. This Special H.O. Development House Replaces a Dilapidated Mud Brick Dwelling. Special Design.

Source: Home Ownership Development, Ahwaz. ArcRef: 233117. Barcode: Z01596963. BP Archives.

Date: 1961. Accessed: February 2017.

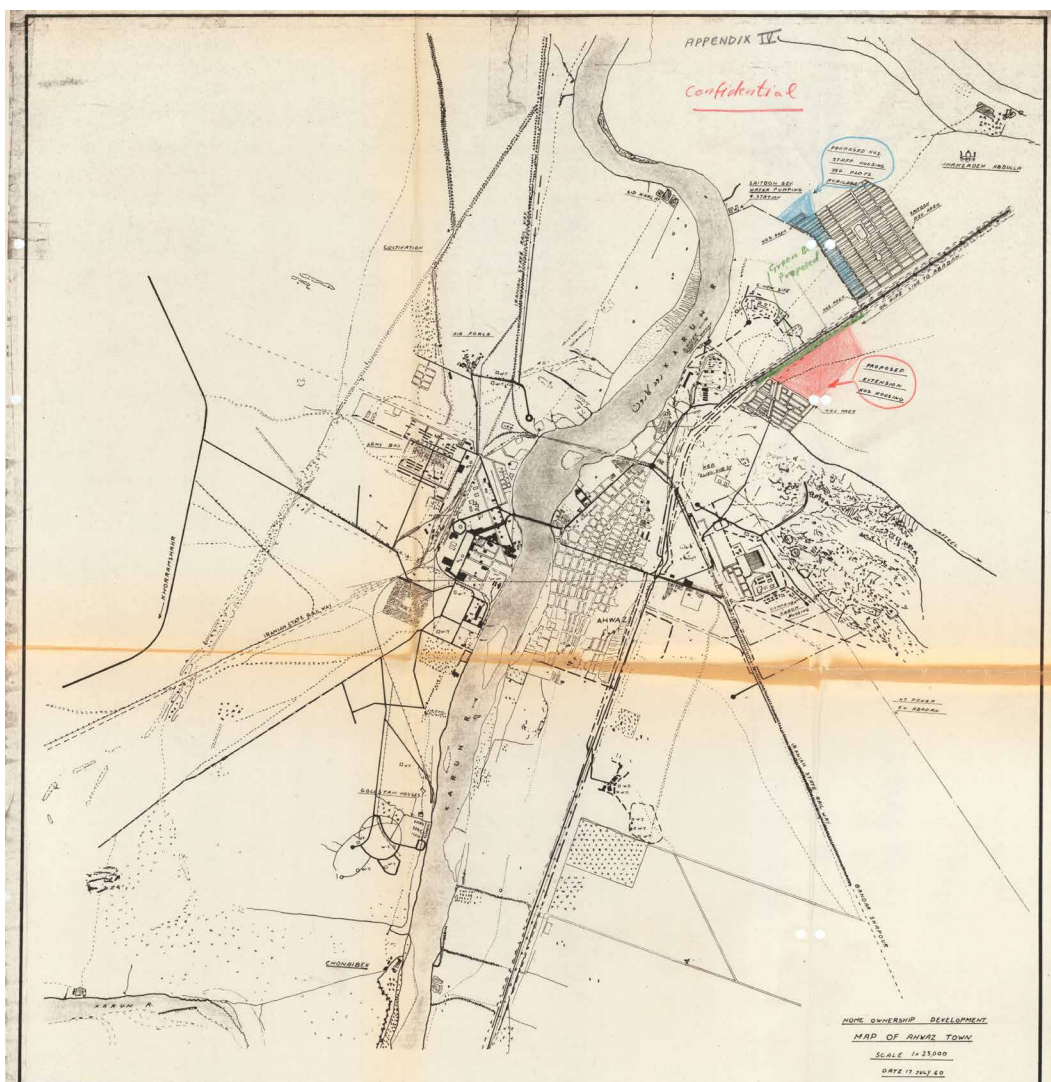


FIG. 5.18 Home Ownership Development, Map of Ahwaz Town.

Source: ARC170607_002, BP Archives

Date: 1960 Accessed: February 2017

5.4 The Rise of Individual Iranian Visionaries and Urban Strategists

5.4.1 Ali Adibi: The Architect Extraordinaire Trained in the British Tradition

In the mid-1960s, as the Plan Organization was established and urban growth accelerated throughout the country, the Iranian government recognized the importance of developing comprehensive regional and urban master plans for key cities, including Ahwaz. To spearhead this endeavour, the City Planning and Architectural Unit within the Ministry of Housing and Urban Development took charge, receiving support from the High Council for Urban Planning. Focusing on urban planning and strengthening municipal institutions triggered internal discussions and critiques against the prevailing counterculture of Anglo-American involvement in the city's development. Iranians began to question the extensive influence of American welfare state ideology and commissions in shaping the architectural landscape of the period. As a result, there was a growing desire to reduce the overwhelming influence of foreign actors and enhance the role of the Iranian state in urban planning and architectural developments.

The master planning process presented a unique opportunity for Iranian professionals to assert their own vision and promote a more homegrown approach to urban development. Despite their previous Western-oriented training and design influences, Iranian professionals sought to showcase their expertise and create urban plans that resonated with the local context and cultural identity. Through this coordinated effort, the Comprehensive Plan of Ahwaz emerged as a testament to the growing autonomy and capability of Iranian urban planners and architects. The plan aimed to strike a balance between acknowledging the influence of their previous Western-oriented training and incorporating elements that represented the aspirations and needs of the Iranian society. It marked a critical juncture in Ahwaz's development, where an increasing emphasis on internal expertise and the unique vision of Iranian professionals would shape the city's urban landscape. This shift signalled a significant step towards greater ownership and agency in the city's future, paving the way for a more locally grounded and culturally rooted approach to urban planning and architectural design.



FIG. 5.19 Comprehensive Plan of Ahwaz.

Source: Ahwaz Master Plan by Ali Adibi
Date: 1965. Accessed: January 2019

In 1967, the task of creating the first Comprehensive Plan for Ahwaz was entrusted to the renowned Iranian architect and urban planner Ali Adibi and his Consulting Engineers Institute. His British training and expertise influenced the decision to employ Ali Adibi for this significant undertaking, making him an ideal candidate for developing a visionary urban plan for the city. At that time, the National Iranian Oil Company played a pivotal role in the development of Ahwaz, as it held substantial ownership of lands within the city. This influence contributed to the Company's involvement in selecting the architect and supporting the implementation of the Comprehensive Plan.

The Comprehensive Plan for Ahwaz followed a planning framework established in Victor Gruen's and Farmanfarmaian's 1968 urban proposal for Tehran, another major city in Iran, adopting critical factors such as the socio-economic concerns of new immigrant populations residing in the city's suburbs and shantytowns. Ali Adibi and his team recognized the significance of addressing the challenges faced by these immigrant communities, striving to create a cohesive urban plan that catered to their needs and improved their living conditions. The Comprehensive Plan aimed to foster a more inclusive and integrated urban environment, providing better access to amenities, services, and job opportunities for the city's growing population. Through this planning effort, Ali Adibi and his Consulting Engineers Institute sought to create a more sustainable and equitable urban landscape for Ahwaz, considering its residents' diverse social and economic realities. The Comprehensive Plan served as a blueprint for the city's future development, reflecting a commitment to address the pressing issues of urbanization and urban growth in a holistic and forward-looking manner. Ultimately, the Comprehensive Plan for Ahwaz marked a significant step towards more thoughtful and people-centred urban planning in the city, signalling a shift towards a more inclusive and responsive approach to urban development in Iran.

The development of the Comprehensive Plan for Ahwaz in the late 1960s was a monumental planning project undertaken in Iran. To create a comprehensive and effective plan, Ali Adibi and his team conducted extensive studies and analyses of various aspects of Ahwaz, including its social, economic, political, physical, and environmental characteristics. In the first phase of the planning process, Adibi meticulously examined and identified three fundamental aspects of Ahwaz. Firstly, he delved into the city's historical characteristics, considering its geographic and atmospheric elements to understand its unique identity and context. Secondly, he thoroughly examined Ahwaz's social and economic features, aiming to grasp the dynamics of the city's population and economy dynamics. Lastly, he assessed the physical attributes of Ahwaz, including its infrastructure, land use patterns, and built environment. In the second phase, Ali Adibi projected the city's expansion

rate over the next 25 years, strategically planning to guide the growth of its social and economic elements. This phase involved three key steps: projecting the rate of change of social and economic factors, envisioning the method and speed of the city's expansion, and outlining the associated elements related to the city's development. It is crucial to note that Ahwaz's geographic location and its position in the oil-rich regions of Iran made it a significant centre for the oil industry. The presence of the National Iranian Oil Company and its substantial ownership of lands in the city further emphasized the importance of planning Ahwaz's growth and development in a strategic and thoughtful manner. Through the Comprehensive Plan, Ali Adibi sought to create a cohesive and sustainable urban environment that could accommodate the city's growth and improve the living conditions of its residents. This master plan represented a forward-thinking and comprehensive approach to urban planning, incorporating a thorough analysis of various factors to ensure Ahwaz's prosperous and harmonious future.

While analysing Ahwaz's socio-economic characteristics, Ali Adibi's research revealed valuable insights into the city's agricultural and industrial sectors. Of the total area of the township, which measured 11,048 square kilometres, only 139,308 hectares were allocated to farming. The primary agricultural products in Ahwaz included pulses, grains, and oilseeds, indicating the region's focus on traditional farming practices. Besides the dominant oil industry, which employed a substantial workforce of 2,053 people, several key industrial workshops were situated around the city. Notable examples included the Shush Textile Plant, which had 800 production workers and 15 office workers, and the Sugar Refinery, located in Haft Tapeh, employing 480 workers. Additionally, the Iran_Mey factory in Kout-e-Abdollah had 29 workers. The recent establishment of the Ahan Navard of Iran and a pipe factory further reflected the diversification and growth of the industrial sector in Ahwaz.

Ali Adibi's analysis also sheds light on the city's population density and growth over the years. In the year 1335, the approximate area of the city was 25 square kilometres, accommodating around 120,098 people. This indicated a population density of nearly 4,800 individuals per square kilometre during that period. By 1967, aside from the central area, the largest and most populated part of Ahwaz, the city had expanded to include 19 additional residential neighbourhoods, illustrating the city's urban growth and development. The comprehensive study of Ahwaz's socioeconomic landscape provided valuable data and insights that served as a solid foundation for formulating the Comprehensive Plan. By considering the city's existing agricultural, industrial, and population characteristics, the master plan aimed to

address Ahwaz's current needs and future growth in a well-informed and strategic manner.⁵⁴⁴

Ali Adibi's Comprehensive Plan for Ahwaz in the late 1960s, while extensively examining various aspects of the city, reflected a profound connection to the concept of petroleumscape. The intricate interplay between the city's socio-economic characteristics, industrial sectors, and population growth was inherently tied to the presence and impact of the oil industry in Ahwaz. The city's designation as a significant centre for the oil industry, marked by the presence of the National Iranian Oil Company and its substantial ownership of lands, underscores the strategic importance of planning Ahwaz's growth in the context of the petroleumscape. The socio-economic landscape analysis reveals the dominance of the oil industry as a significant employer, with a substantial workforce dedicated to oil-related activities. The establishment of industrial workshops, including the Shush Textile Plant and the Sugar Refinery, further highlighted the diversification and growth of the industrial sector, driven, to a large extent, by the economic influence of oil. The expansion of the city and the creation of additional residential neighbourhoods also correlated with the growing population associated with the oil industry's development.

Moreover, Ahwaz's geographical location within the oil-rich regions of Iran amplified the petroleumscape concept, emphasizing the city's role in extracting, producing, and managing oil resources. The presence of the National Iranian Oil Company as a significant landowner and contributor to the city's development signified the intricate relationship between urban planning, socio-economic considerations, and the oil industry. Therefore, as a forward-thinking and comprehensive approach to urban planning, the Comprehensive Plan was a response to the challenges and opportunities presented by the petroleumscape. It seeks to create a cohesive and sustainable urban environment that accommodates the city's growth and aligns with the unique socio-economic dynamics shaped by the oil industry. In this way, the planning efforts embodied in the Comprehensive Plan are integral to understanding how the petroleumscape concept manifests in Ahwaz's urban fabric and developmental trajectory.

Ali Adibi's survey of the existing neighbourhoods in Ahwaz revealed several deficiencies in terms of facilities and amenities. While schools were adequately provided for, the neighbourhoods lacked recreational, sports, and medical facilities. Additionally, there was a shortage of public baths, shops, and other civic amenities, highlighting the need for further development and infrastructure improvements.

⁵⁴⁴ Ahwaz Master Plan by Ali Adibi, 1960. Published by the Plan Organization of Iran.

The neighbourhoods in Ahwaz were connected through vacant lands that primarily belonged to entities like the National Iranian Oil Company (NIOC), National Railways, and private landowners. These empty spaces presented opportunities for future urban development and expansion. To better understand the housing situation in Ahwaz, Adibi conducted a comprehensive survey. He found that in 1946, there were a total of 23,098 residential units in the city, accommodating a population of 120,098 people. Assuming an average of five members in each family, he calculated a total of 24,020 units required for the city. Based on this analysis, Adibi concluded there was no significant housing shortage in Ahwaz then.⁵⁴⁵

Adibi categorized the existing houses in Ahwaz into three groups. First were the shanty towns, such as Rafsh Abad and the southern part of the city, which were not considered suitable for living and needed reconstruction. The second category included areas like the south part of the city (between Pahlavi and Zendan streets), Risandegi, a part of old Ahwaz, Asieh Abad, and a portion of the Fouladavand neighbourhood, which required significant repairs and improvements. The third category consisted of houses in good condition, but due to the lack of housing and construction standards, only a regional survey was conducted for this group. Construction materials used for house making in Ahwaz included brick, baked clay, raw clay, stone, Hasir (dried leaves of date trees), and wood, among others. The survey indicated that 53% of the habitable houses were constructed from brick and stone, while the remaining 47% were made from baked or raw clay. Ali Adibi's comprehensive survey and analysis formed a crucial basis for formulating the Comprehensive Plan for Ahwaz. By identifying the areas that required reconstruction or improvement and considering the existing housing materials and conditions, the master plan aimed to address the city's housing needs and promote a better living environment for its residents.⁵⁴⁶

Ali Adibi's analysis of the quality of education and educational facilities in Ahwaz provided valuable insights into the city's literacy rate and the state of its educational institutions. In 1946, the literacy rate in Ahwaz was relatively low, with only 29.9% of the total population aged ten years and older being literate. However, by 1966, there was a significant improvement, and the overall literacy rate had risen to 60.5%. Among the literate population, about 62.5% were men, while 36.6% were women. In terms of education among the youth, the survey indicated that Ahwaz had a considerable student population. In 1966, the total number of individuals between the ages of 7 to 24 years was 86,519, out of which approximately 48,676 or 56.3%

⁵⁴⁵ Ahwaz Master Plan by Ali Adibi, Published by the Plan Organization of Iran. 1960.

⁵⁴⁶ Ibid.

were students. To cater to the educational needs of the city, Ahwaz had a substantial number of schools. There were 55 elementary schools and 15 high schools in the city. However, it was noted that some of these schools lacked suitable facilities, which highlighted the need for further investments in educational infrastructure. Apart from the elementary and high schools, Ahwaz also had several kindergartens, contributing to early childhood education in the city.

Additionally, there were two professional schools and one university: The University of Jundi Shahpour, which included an agriculture faculty and a medical school. These higher education institutions played a crucial role in providing specialized education and training to the youth of Ahwaz. Ali Adibi's analysis of the educational landscape in Ahwaz delivered valuable data for the Comprehensive Plan. By understanding the city's educational needs and identifying areas for improvement, the master plan aimed to promote the development and accessibility of quality education for the city's residents, contributing to Ahwaz's overall growth and progress as a modern and thriving urban centre.

The analysis conducted by Ali Adibi regarding the physical and environmental aspects of Ahwaz shed light on various important issues affecting the city's health, water supply, recreational facilities, and religious institutions. Ahwaz's geographical location in a flat area with a slight slope from North to South led to the formation of stagnant water pools in many locations, which created health problems for the residents. The Karoun River served as the most significant water reserve for the township, but unfortunately, it suffered from contamination due to industrial water pouring into it. Despite this, many people in Ahwaz relied on the Karoun River for their drinking water, except for those living in NIOC housing complexes, which had access to purified water. The state of public health in Ahwaz was deemed unsatisfactory due to various factors, including the presence of swamps, the use of contaminated Karoun river water for drinking, inadequate sewer facilities, insufficient garbage collection, and dust caused by wind. This highlighted the urgent need for improved sanitation and health infrastructure in the city. Ahwaz's health facilities included seven hospitals, 11 clinics, and four laboratories, indicating the presence of some medical services in the city. However, the analysis also revealed plans for constructing a health and medical centre near the Abadan intersection to enhance medical services further.

Regarding shopping centres, the Bazaar and main commercial transactions were concentrated on Pahlavi Avenue and the streets crossing its path, indicating the focal points for economic activities in the city. In terms of recreational centres, Ahwaz had eleven sports clubs and one playing field, showcasing the available options for sports and recreational activities. The recent establishment of more public parks also

indicated efforts to provide residents with recreational spaces. For governmental and religious facilities, Ahwaz housed a significant number of government or government-affiliated organizations, mainly located along the banks of the Karoun River. The city also had 40 mosques, ten Islamic religious organizations, four Islamic schools, a shrine, a church for the Americans, a synagogue for the Jewish community, and a Catholic church, highlighting the religious diversity and significance of religious institutions in the city. By examining these various aspects, the Comprehensive Plan for Ahwaz aimed to address the city's shortcomings and plan for its future development, ensuring residents' healthier, more sustainable, and well-balanced urban environment.⁵⁴⁷

The analysis of urban facilities in Ahwaz revealed both the existing strengths and shortcomings in essential services provided to the residents. The water supply in Ahwaz relied on the Karun River, which served as the city's drinking water source. However, due to the disposal of sewage into the river, the water became contaminated, posing a significant health concern for the residents. The sewer system in Ahwaz was in a deplorable condition, with some areas resorting to disposing of waste by dumping it into shallow wells and others relying on unsuitable septic tanks. This highlighted the urgent need for proper sewage treatment and management in the city. Electricity services were available round-the-clock, providing power to the Karun River's eastern and western banks. The city had a substantial number of subscribers connected to the electrical grid for residential and commercial purposes.

Telecommunication services, including telephone and telegraph, were accessible in Ahwaz, ensuring that the city remained connected to the rest of the country and facilitating communication and information exchange. The city had a slaughterhouse located near the Karun River. Still, it lacked adequate facilities and was not hygienic, calling for improvements in the city's handling and processing of meat. For burials, the old cemetery for Muslims was located near the Abadan intersection, providing a final resting place for the deceased. In terms of public hygiene and cleanliness, Ahwaz had 23 public bathhouses available to the residents, promoting good sanitation practices in the city. Overall, while Ahwaz had access to some basic urban facilities, there were evident challenges in the areas of water and sewage management, sanitation, and waste disposal. These findings served as crucial inputs for the Comprehensive Plan of Ahwaz, aiming to address these deficiencies and develop a more functional and well-equipped urban infrastructure for the city's future.

⁵⁴⁷ Ahwaz Master Plan by Ali Adibi, Published by the Plan Organization of Iran. 1960.

In investigating extant thoroughfares and transportation networks, Ali Adibi's comprehensive analysis of the Ahwaz urban landscape revealed a series of challenges inherent to the terrestrial conduit within the city's thoroughfares. Principal among these predicaments was the city's expansion, a phenomenon hitherto devoid of antecedent urban planning tenets, thus engendering a confluence of diverse issues. This expansion precipitated a twofold escalation in the daily movement of residents within the urban milieu, necessitating a prudent consideration of indigenous lifestyles amidst nascent urban proliferation and metamorphosis. A secondary predicament was manifested by the presence of a railway traversing the urban expanse, which has, in turn, instigated a conundrum of traffic-related quandaries. Moreover, a prevailing dispersion and disjointedness among neighbourhoods become evident in the city's northeastern quadrant, specifically within localities such as Asieh Abad, Hasir Abad, and Karoun. In this sector, the intricate network of streets stands bereft of a cohesive framework, further compounding navigational challenges and urban coherence. Notably, Adibi's discernment also encompassed the unique geostrategic locale of Ahwaz. This city's strategic position is evidenced by its incumbency as host to three airports and two railway stations, thereby substantially augmenting the already substantial burdens borne by extant transportation infrastructure.

Ali Adibi's meticulous investigation of Ahwaz's master plan underscored the intrinsic tribulations entrenched within the terrestrial roadways. These challenges emanate from the city's haphazard expansion, the presence of an intersecting railway network, and the spatial fragmentation of particular districts. The city's strategic orientation, characterized by its trio of airports and dual railway stations, further amplifies the difficulties confronting the city's traffic management and urban planning imperatives.

In his capacity, Adibi encountered the intricate challenges inherent to a swiftly burgeoning urban centre devoid of any antecedent urban planning framework. Concurrently, he grappled with the necessities arising from the contemporary rapid metamorphosis of the urban fabric, even as he endeavoured to orchestrate the prospective blueprint of the city. Integral to the broader governmental initiative aimed at the city's modernisation, Adibi assumed the responsibility of producing the habitation of inhabitants within appropriately designated residential precincts. Intrinsic to this endeavour was the imperative to provide unfettered access to central educational institutions, healthcare facilities, and commercial hubs, thereby manifesting the convergence of essential amenities. Nonetheless, implementing these land-oriented reforms was marred by a constellation of complexities, the culmination of which rendered their realization an elusive aspiration. Ali Adibi was confronted with the multifaceted challenges stemming from Ahwaz's rapid and unstructured growth, a city that had evolved without the guiding framework

of prior urban planning. This absence of foundational urban design principles engendered a series of intricate predicaments that demanded astute attention and innovative solutions.

In his role as a key figure in the government's larger agenda to modernize the urban landscape, Adibi's mandate encompassed the strategic allocation of living spaces for the city's burgeoning populace. This allocation aimed to harmonize residential areas with key infrastructural nodes, including educational institutions, healthcare facilities, and commercial centres. The intention was to create well-integrated neighbourhoods that would enhance the quality of life for the residents, fostering a cohesive and functional urban fabric. However, the actual execution of these land reforms encountered numerous obstacles and complexities. The intricate interplay of historical, socio-economic, and administrative factors posed formidable challenges to the seamless realization of Adibi's vision. The city's rapid transformation and the urgency of accommodating its expanding population often clashed with the intricacies of urban planning and development.

Issues such as property rights, existing land use patterns, and infrastructure limitations added layers of complexity to the implementation process. Administrative hurdles, bureaucratic inefficiencies, and resource constraints further exacerbated the difficulties in executing the envisioned reforms. Additionally, the need to strike a balance between the preservation of heritage areas and the imperative for modernization led to nuanced debates and compromises. As a result, the initial zeal and ambition behind Adibi's master plan encountered obstacles that hindered the full realization of its objectives. The evolving urban landscape presented an intricate tapestry of challenges that resisted easy resolution. This complex interplay of factors ultimately contributed to the narrative of ongoing transformation and adaptation, with the realization that the task of urban planning is a dynamic and iterative process. Ali Adibi's efforts to address the challenges of an unplanned, rapidly developing city and to usher in comprehensive reforms aimed at modernizing the urban environment encountered a confluence of complexities. The interplay of historical legacies, administrative intricacies, and urban dynamics underscored the multifaceted nature of urban planning, demonstrating that the pursuit of a modernized urban landscape is an ongoing journey shaped by an array of contextual factors.⁵⁴⁸

⁵⁴⁸ Ahwaz Master Plan by Ali Adibi, Published by the Plan Organization of Iran. 1960.

5.4.1.1 Charting the Trajectory of City Growth and its Determinants

Rooted in the inherent duality of the city, encompassing distinct realms of occupational activity and residential habitation, the paramount aspiration of Adibi's Master Plan rested upon forging a cohesive nexus between these constituent elements. Within this framework, the imperative was to seamlessly interlink working domains with living quarters, thus affording a harmonious synergy conducive to a balanced urban milieu. Contravening the backdrop of safeguarding traditional regional urban settlement paradigms and the city's indigenous cultural ethos, a salient paradox emerged wherein the implementation of expansive thoroughfares dissected erstwhile traditional urban fabrics and previously barren tracts of arid land. While ostensibly aiming for urban connectivity, these newly forged broad vehicular arteries inadvertently cleaved through established urban morphologies. Concomitantly, they ushered in a transformation whereby real estate values adjacent to these arterial conduits surged precipitously. Alas, this surge in property prices predominantly translated into financial gains, eclipsing the broader social and cultural benefits envisioned by the reimagined master plan.⁵⁴⁹

At the core of Adibi's strategy lay three pivotal assumptions, each underpinning diverse pathways towards attaining overarching goals: Assumption I adhered to the trajectory dictated by the present contours of the city's expansion. This approach entailed a pragmatic alignment with the existing developmental vectors, capitalizing on the momentum already underway. Assumption II, in stark contrast, hinged upon an expansive perspective that integrated the city's expansion within the broader ambit of regional economic growth. This holistic viewpoint encapsulated the city's transformation within a dynamic regional economic context, potentially fostering a harmonized symbiosis between urban proliferation and regional economic dynamism. Assumption III, intriguingly, adopted a hybrid methodology that amalgamated the preceding two paradigms. By harmoniously fusing the extant city expansion trajectory with the overarching vision of regional economic advancement, this assumption aspired to pivot the city into an industrially oriented nucleus.⁵⁵⁰ In summary, the quintessence of Adibi's Master Plan lay in its meticulous endeavour to unite the dichotomous spheres of work and habitation within the urban matrix. In doing so, the master plan inadvertently engendered a tension between the preservation of traditional urban fabric and the impetus for modernization, exemplified by the cleaving impact of expansive thoroughfares. The ascendancy of property values along these routes, while fostering economic growth, concurrently

⁵⁴⁹ Ibid.

⁵⁵⁰ Ahwaz Master Plan by Ali Adibi, Published by the Plan Organization of Iran. 1960.

underscored the plan's susceptibility to inadvertently prioritizing monetary gains over broader social and cultural dividends. This intricate interplay was navigated through a triad of assumptions, each charting distinct trajectories towards the realization of the overarching urban transformation goals.

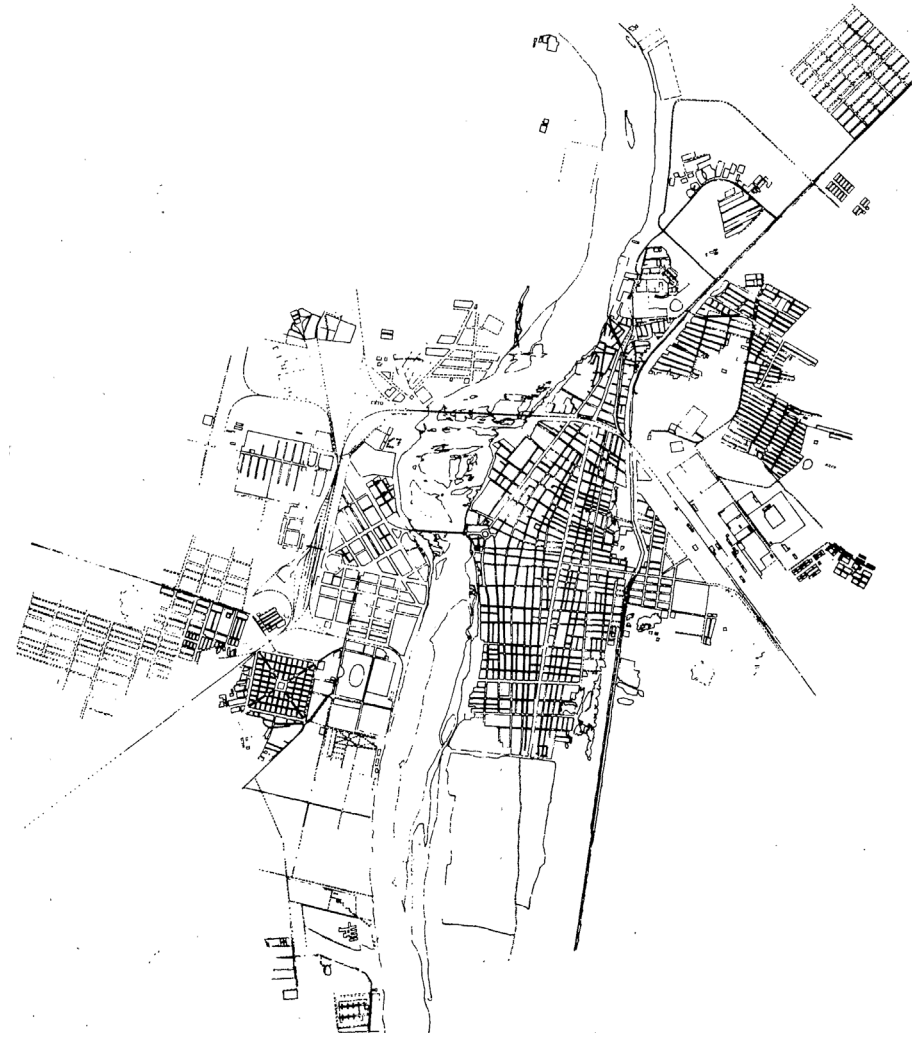


FIG. 5.20 Ahwaz Map.

*Source: Ahwaz Master Plan by Ali Adibi
Date: 1965. Accessed: January 2019*

5.4.1.2 Anticipating Growth Momentum and Land Utilization Patterns

Ali Adibi's meticulous urban planning process was deeply anchored in a visionary projection of Ahwaz's future population. This projection informed the allocation of urban space, defining the city's growth boundaries and shaping its density patterns. With a forecasted population of 732,000 residents, Adibi's comprehensive plan delineated an approximate urban area spanning 80 square kilometres. Within this calculated expanse, his master plan delineated distinct zones characterized by varying population densities:

- **Low-Density Area:** This zone anticipated a population density of 135 people per hectare. This calculation emphasized spacious habitation, reflecting a deliberate effort to provide residents with ample living space, fostering a sense of openness and comfort.
- **Average-Density Area:** The second zone was projected to accommodate an average population density of 250 people per hectare. This intermediary density range sought a balance between communal interaction and personal living space, ensuring a harmonious coexistence of residents.
- **High-Density Area:** Within this high-density zone, an estimated population density of 500 people per hectare was envisioned. This density spectrum accommodated a larger populace within a given area, maximizing land utilization while catering to urban efficiency.

These projected density patterns underscored Adibi's systematic approach to urban development, where each density category was meticulously aligned with specific zones, aiming to optimize land usage and ensure a functional and harmonious living environment for Ahwaz's future inhabitants.

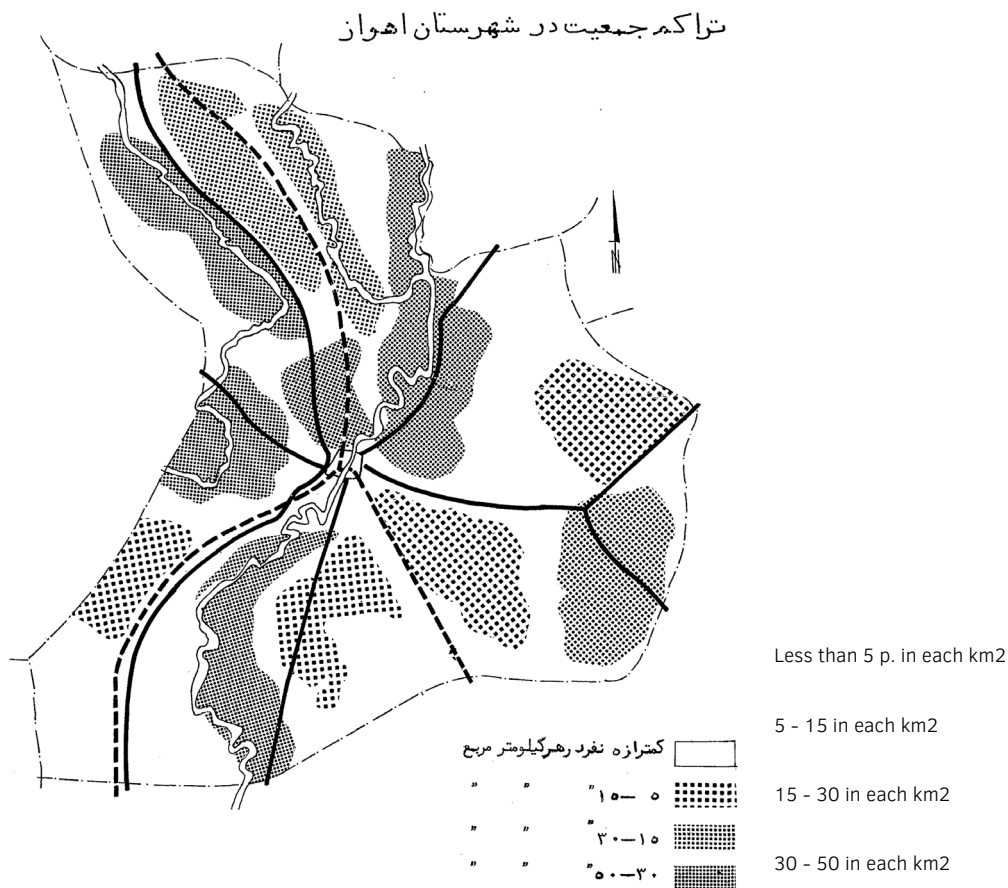


FIG. 5.21 Population Density of Ahwaz.

Source: Ahwaz Master Plan by Ali Adibi

Date: 1965. Accessed: January 2019

5.4.1.3 Envisioning the Evolution of City Facilities

Along with the city's industrialisation, plans for more housing and workers' towns were considered. In the Master Plan, on average, 300 square meters of land was considered for every housing unit, ranging from 100 sq. meters for high-density areas to 80 sq. meters for low-density areas. Education centres included kindergarten, elementary schools, and high schools. In the Master Plan, three to four hospitals were considered for every 1000 population. In 1991,

Ahwaz needed 61 clinics, nine hospitals with 300 beds, eight childcare centres, and 36 public baths. Because of the current trade mode, Pahlavi Ave. and the surrounding areas were considered for the purpose of building business centres. Most of the government offices were located northwest of Karun. The Plan suggests that other areas be used for this purpose. In the Master Plan, the planting of more parks, open spaces, and trees in various parts of the city was suggested. ⁵⁵¹

Adibi Projected the city's expansion in the next 25 years and planned to direct socio-economic factors' growth. It was impossible to predict future population growth based on past experiences, especially for a limited area that has undergone many changes. ⁵⁵² The Karoun River was an extremely valuable source of irrigation for Khuzestan. The sugar cane produced here competed with Cuba's output. Ahwaz was planned to become an industrial city so that it could absorb more population.

The drinking water for the residents of Ahwaz, from 120 to 150 litres a day, had to be considered to be 200 litres per day per person in the future. For 732,000 people in 1370, this would equal 14,600 cubic meters per day. A sewage network plan was designed but must be revised since it did not seem adequate. The city's power was supplied by the *Dez* dam and seemed sufficient. The telephone system had to be expanded to meet the city's future needs since the facilities were inadequate. Two fire stations in the city and some close to the industrial zones were planned to be constructed. ⁵⁵³

Adibi's Master Plan for Ahwaz exhibited a holistic and comprehensive approach, addressing various facets of urban development to ensure the city's evolution was harmonious, functional, and responsive to the needs of its population. Here's a breakdown of the plan's key components: ⁵⁵⁴

- **Housing and Workers' Towns:** Adibi's plan factored in the need for additional housing units and workers' towns in alignment with the city's industrialisation. Each housing unit was allocated an average of 300 square meters of land, with dimensions varying according to the density of the area.

⁵⁵¹ Ibid.

⁵⁵² On the basis of natural population growth, which projects the population of Ahwaz in 1370 as 382000. On the basis of the country's urban population, which gives Ahwaz 450,000 in 1370. On the basis of the population of Ahwaz in the past years. In 1327 the population was 82000, in 1335 it was 220098, in 1343 it was 165185. On this basis the population of Ahwaz in 1370 is projected to be 10146000.

⁵⁵³ Ahwaz Master Plan by Ali Adibi, Published by the Plan Organization of Iran. 1960.

⁵⁵⁴ Ibid.

- **Education Centers:** Education infrastructure was carefully outlined, encompassing kindergarten, elementary schools, and high schools to cater to the educational needs of the population.
- **Healthcare Facilities:** The Master Plan prioritized healthcare provision, with the projection of three to four hospitals for every 1000 residents. A comprehensive healthcare network included clinics, hospitals, childcare centres, and public baths to ensure the well-being of the population.
- **Business Centers:** Pahlavi Avenue and its surroundings were earmarked as strategic sites for the establishment of business centres, capitalizing on their current trade mode and potential for commercial growth.
- **Government Offices:** The plan acknowledged the need to distribute government offices more evenly across the city rather than clustering in the northwest of Karun.
- **Parks and Open Spaces:** Recognizing the importance of green spaces, the plan suggested planting more parks, open areas, and trees throughout the city to enhance aesthetics and recreational opportunities.
- **Population and Growth:** Adibi's projections for the city's expansion over the next 25 years were guided by socioeconomic factors. Given the city's dynamic nature, the plan acknowledged the challenge of predicting future population growth.
- **Water Resources:** The Karoun River's significance as an irrigation source was highlighted. The plan addressed the need to allocate sufficient water for residents, projecting a higher water consumption per person in the future.
- **Infrastructure and Services:** The plan delved into various infrastructural aspects, including sewage network plans, power supply from the Dez Dam, expansion of the telephone system, and the establishment of fire stations for safety.
- **Industrialization and Absorption of Population:** The plan's design for Ahwaz as an industrial city underscored its potential to absorb a growing population through economic opportunities.

Ali Adibi's Master Plan encapsulated a comprehensive vision for Ahwaz's development, embracing housing, education, healthcare, commerce, government, urban greenery, and infrastructure. This integrative approach aimed to create a dynamic, functional, and vibrant urban environment that could accommodate the city's anticipated growth while enhancing the quality of life for its residents.

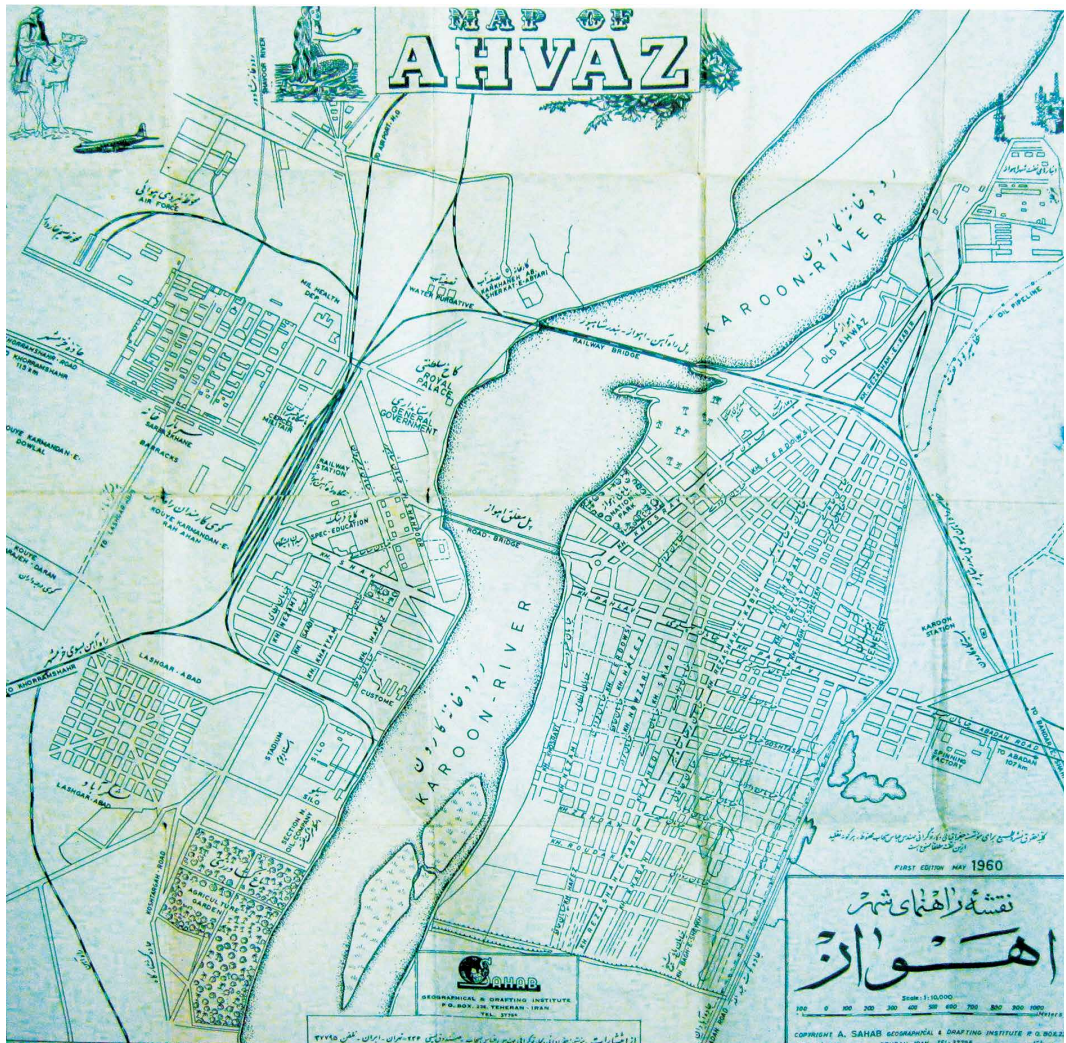


FIG. 5.22 Ahwaz Map.

Source: Shahab Geographical & Drafting Institute, Iranian National Library Archives

Date: 1960. Accessed: January 2017

5.4.1.4 Breathing Life into the Strategy: Plan Implementation, Regulatory Framework

The Urban Development Organisation, a central entity responsible for shaping Ahwaz's urban landscape, comprised a diverse array of key personnel and representatives. This assembly encompassed a Committee Chief who functioned as the mayor, a Technical Bureau Director, a Plan & Budget Organization representative, four individuals representing the citizenry, and a representative from consulting engineers, pooling a broad spectrum of expertise and perspectives. Within the realm of the regulatory framework, the Urban Development Organisation's charter advocated for a structured approach informed by a series of fundamental Rules and Regulations. These regulations served as a robust framework that guided the city's growth and development:

- **Zoning Laws:** Zoning laws delineated the allocation of urban space for specific functions, facilitating the strategic coexistence of residential, commercial, industrial, and recreational zones while optimizing land usage.
- **Neighbourhood Laws:** Neighbourhood laws focused on the systematic organization of neighbourhoods, emphasizing cohesive design, functional infrastructure, and social amenities that fostered a sense of community and well-being.
- **Construction Laws:** Construction laws delineated standards and guidelines for urban development, ensuring adherence to safety codes, architectural aesthetics, and sustainable building practices.
- **Health Laws:** Health laws underscored the importance of public health and hygiene by outlining guidelines for sanitation, waste management, and the provision of healthcare facilities.
- **Housing Ordinances:** Housing ordinances prioritized the creation of quality living spaces, addressing factors like housing density, quality standards, and access to essential utilities and amenities.
- **Renovation Regulations:** Renovation regulations governed modifying and preserving existing structures, ensuring that urban evolution was mindful of historical and architectural heritage.

These Rules and Regulations collectively formed the backbone of Ahwaz's urban governance, offering a structured framework that balanced the city's growth with the preservation of its heritage and the enhancement of its citizens' quality of life. The

diverse composition of the Urban Development Organisation and the comprehensive regulatory framework attested to a meticulous, inclusive, and forward-thinking approach to urban planning and development.⁵⁵⁵

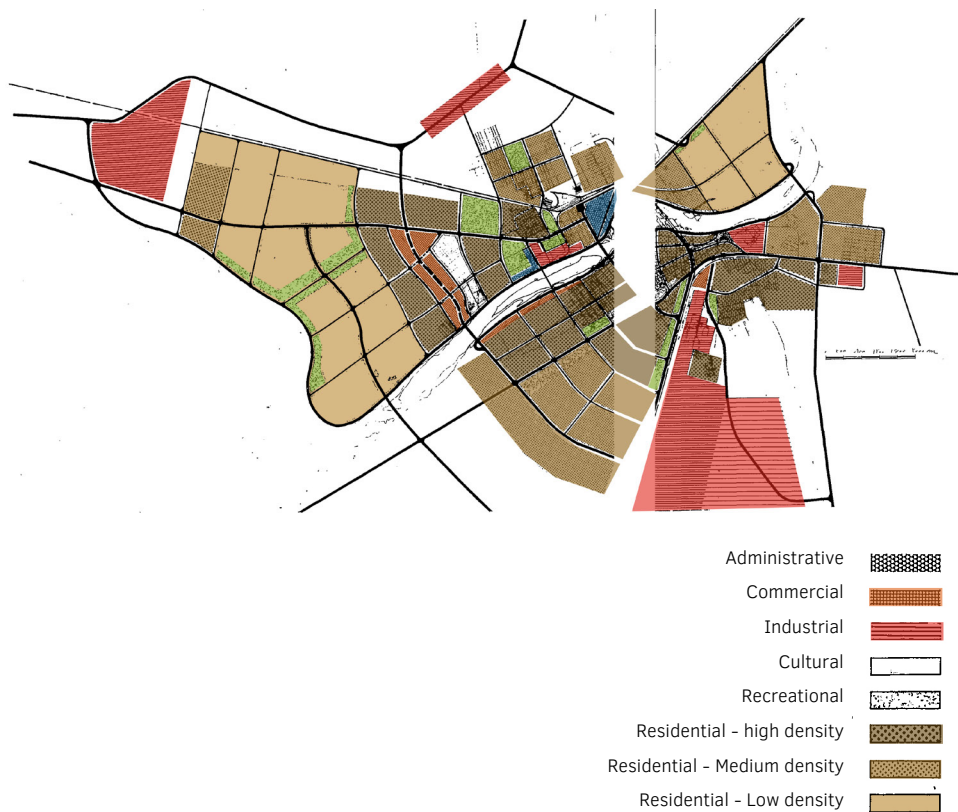


FIG. 5.23 Existing Urban Land Functions.
Source: Ahwaz Master Plan by Ali Adibi, p. 58 (edited by the author)
Date: 1965. Accessed: January 2019

⁵⁵⁵ Ahwaz Master Plan by Ali Adibi, Published by the Plan Organization of Iran. 1960.



FIG. 5.24 Proposed Urban Land Functions.

Source: *Ahwaz Master Plan* by Ali Adibi, p. 54 (edited by the author)

Date: 1965. Accessed: January 2019

5.4.1.5 Crafting the Grand Design: The All-Encompassing Land Use General Plan

The culmination of the various proposals and strategic initiatives for the city's development found tangible expression through the intricate cartography of Ahwaz's land use map. Within this cartographic representation, the intricate interplay of divergent urban functions was visually manifest – a spatial tableau that encapsulated

the meticulously devised road network alongside the orchestrated allocation of distinct functions encompassing residential, commercial, industrial, and public domains. This map, a distillation of contemplative urban foresight, presciently outlined the prospective physiognomy of the city as envisaged for the year 1991.

The blueprint for Ahwaz's evolution entailed a calculated delineation of the cityscape into specific allocations. It was envisioned that the urban tapestry would be woven with deliberate proportions: residential quarters would command a substantial 40% of the urban expanse, while an intricate network of streets and alleys would traverse 30%, industrial precincts were designated for 7%, commercial enclaves for 3%, railway arteries for 4%, and verdant sanctuaries and communal spaces were earmarked for an expansive 16%.

A pivotal facet governing the realization of this master plan was the imperative for private enterprises, national entities, and governmental bodies to adroitly align their developmental undertakings with the comprehensive plan. This plan effectively emerged as an authoritative beacon, delineating the normative parameters of land utilization. By adhering to this orchestrated blueprint, diverse stakeholders harmonized their initiatives with the overarching urban vision, fostering a holistic and cohesive urban evolution.

In summation, the embodiment of divergent proposals and strategic endeavours culminated in the form of Ahwaz's land use map, a graphic representation of the envisaged urban fabric. This cartographic elucidation cogently demarcated the calibrated distribution of urban functions, intricately weaving together residential, commercial, industrial, and public domains. As a veritable guidebook, this map symbolized the governance framework that impelled diverse developmental actors – be they private, national, or governmental – to navigate their projects within the contours of the comprehensive plan, thereby harmonizing the city's urban trajectory with a unified vision.⁵⁵⁶

During the period of Adibi's urban design endeavours, Ahwaz was characterized by an array of preexisting neighbourhoods and districts, each with its distinctive fabric and functions. The city's central district emerged as the nucleus of the highest population concentration. Adjacent to this vital core lay the staff residential zone and Camp-Low, both of which garnered strategic importance. In this context, the "Abadani va Maskan" (Construction and Housing) Ministry had recently undertaken the construction of residential units, ushering in a novel architectural milieu.

⁵⁵⁶ Ibid.

Furthermore, the contours of urban evolution encompassed the conception of new housing enclaves within the periphery of the urban expanse. A definitive trajectory was delineated in the blueprint of the city, outlining intentions to alleviate housing shortages and uplift living standards. Specifically, plans were underway to erect novel residential dwellings within the interstitial spaces that characterized the informal settlements situated between the Kuy-e-Fooladvand and Asieh-Abad locales. This strategic intervention aimed to engender a transformation of these marginalized sectors, uplifting the living conditions of their inhabitants while concurrently contributing to the broader urban metamorphosis.

Ali Adibi's master plan unfolded against the backdrop of preexisting neighbourhoods and districts that collectively formed Ahwaz's urban tapestry. The central district stood as the epicentre of high population density, flanked by significant zones such as the staff residential area and Camp-Low. The dynamic landscape of urbanization was further augmented by the intervention of the "Abadani va Maskan" Ministry, which had recently introduced new residential accommodations. Moreover, the strategic positioning of upcoming housing initiatives within the crevices of the urban terrain, notably between Kuy-e-Fooladvand and Asieh-Abad, underscored the comprehensive and forward-thinking nature of the urban transformation envisaged by Adibi's master plan.

These existing neighbourhoods typically did not have any sports, hobbies, or health facilities (the schools, Hammams, shops, etc.) to respond to the welfare ambitions of the government. The rectangular streets close to each other divided the towns into small blocks. Usually, the children played on the roads due to the lack of safe playgrounds. As a result, residents' welfare and health were always at risk. In general, in the central part of the city, there were no neighbourhoods that Adibi could claim to be proper living districts.

The extant neighbourhoods within Ahwaz were notably deficient in essential amenities catering to holistic well-being, spanning sporting, recreational, and healthcare facilities. The prevailing urban milieu lacked pivotal institutions such as schools, public baths (Hammams), and commercial establishments, engendering a palpable dearth in facilities that aligned with the government's welfare objectives. The overarching urban structure was characterized by densely arranged rectangular streets, creating a fragmented urban landscape subdivided into diminutive blocks. This disposition invariably inhibited the integration of comprehensive amenities within the neighbourhoods.

A prevailing consequence of this spatial configuration was the conspicuous absence of secure and designated recreational spaces. Lacking safe playgrounds, children

were often relegated to using the streets as impromptu play areas. This predicament not only compromised the children's safety but also posed a broader risk to the overall well-being and health of the residents. The scarcity of suitable recreational facilities within the neighbourhoods thus compounded the challenges of fostering a healthy and enriching environment.

Consequently, the absence of comprehensive welfare-oriented amenities within the central urban expanse gave rise to a disconcerting reality. The urban fabric, characterized by closely-knit streets and an absence of dedicated recreational spaces, hindered the realization of a holistic living experience. Adibi's discernment underscored the lacuna in the creation of proper living districts within the central sector of the city, compelling a reevaluation of the urban morphology to effectively address the residents' well-being and quality of life. ⁵⁵⁷



FIG. 5.25 Different Boundaries of Ahwaz.

Source: Ahwaz Master Plan by Ali Adibi, p. 47 (edited by the author)

Date: 1965. Accessed: January 2019

⁵⁵⁷ Ahwaz Master Plan by Ali Adibi, Published by the Plan Organization of Iran. 1960.

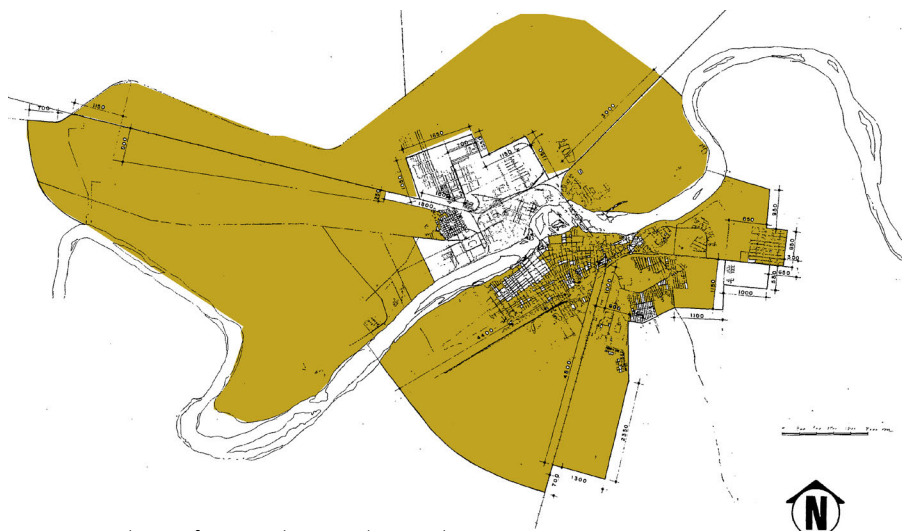


FIG. 5.26 Prediction of Future Urban Boundaries in the Coming 25 Years.

Source: Ahwaz Master Plan by Ali Adibi, p. 58 (edited by the author)

Date: 1965. Accessed: January 2019

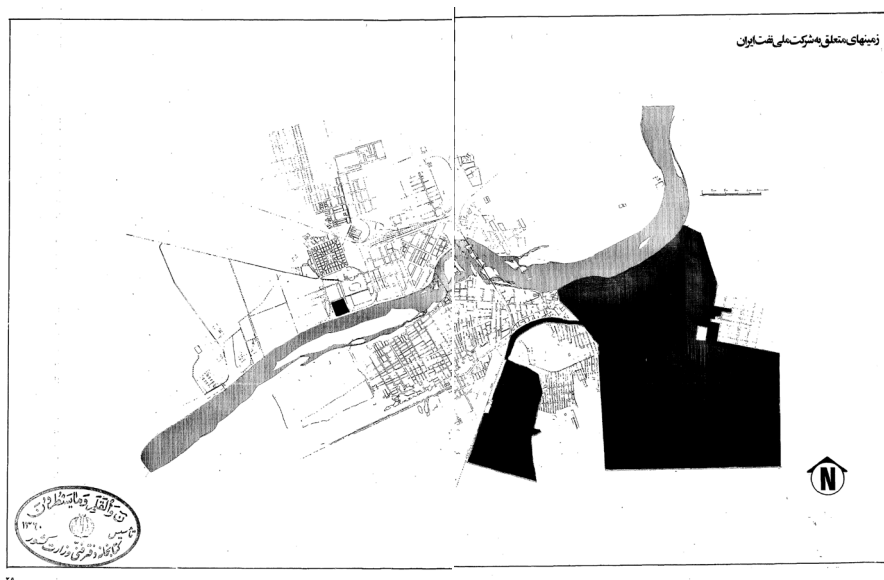


FIG. 5.27 Properties of the Oil Company.

Source: Adibi Master Plan

Date: 1965. Accessed: January 2019

5.4.1.6 Sculpting Vision into Reality: The Elegance of Design

Approximately fifty per cent of the city's populace comprised immigrants who had gravitated to Ahwaz to capitalise on the envisioned citywide welfare initiatives. These individuals sought enhanced autonomy and economic prospects, coupled with the allure of societal advancement fostered by education and progress. Ali Adibi's discerning evaluation of the urban landscape recognized this influx as a pivotal driving force for the city's population expansion, a trajectory anticipated to intensify in tandem with burgeoning industrialization.

In Adibi's perceptive analysis, this ongoing surge in population was prognosticated to undergo heightened momentum, a direct consequence of the city's industrialization drive. Concomitantly, he perceived the welfare-oriented society as the sentinel tasked with sustaining and nurturing the bedrock attributes of freedom and diversity within the urban landscape. Consequently, his endeavour was meticulously calibrated to uphold the foundational tenets of a welfare society, epitomized by equitably disseminating economic resources and social advantages amongst each denizen. To fulfil this imperative, Adibi propounded the indispensability of a cohesive organizational framework, one that could engender a profound sense of communal partnership and collective responsibility. Central to this vision was the empowerment of residents, enabling them to actively identify themselves as stakeholders with a vested interest in the communal well-being. This participatory ethos sought to align urban development with the foundational principles of a welfare society, channelling the city's trajectory towards an equitable and harmonious coexistence.

Remarkably, Adibi's perspicacious analysis delved into the gender dynamics within the urban labour force. In his calculations, the labour participation rate was estimated at 24.61%, with a strategic goal to augment female workforce participation to an impressive 50% by the year 1991. This prescient inclusion underscored Adibi's commitment to progressive socio-economic paradigms, aiming to amplify gender parity within the city's occupational landscape.

In summation, Ali Adibi's comprehensive evaluation of Ahwaz's demographic dynamics astutely recognized the influx of immigrants as a pivotal demographic driver. He meticulously aligned his urban vision with a welfare society's foundational principles, envisaging equitable economic and social advantages distribution. Through a participatory framework, he sought to harness the collective agency of residents, thereby nurturing a cityscape marked by freedom, diversity, and harmony. Adibi's foresight was not only confined to physical infrastructure but extended

to gender dynamics, as he aspired to elevate female workforce participation as a manifestation of progressive urban evolution.

Adibi's strategic urban blueprint encompassed the partitioning of the city's residential domain into distinct community enclaves, each existing as discrete and self-contained units. This organizational paradigm sought to establish demarcations between the residential and non-residential sectors through the strategic deployment of main thoroughfares and arterial roads. The intent behind this spatial segregation was to foster functional compartmentalization and enhance the efficiency of urban operations. Central to Adibi's proposed Comprehensive Plan was the judicious allocation of land for residential purposes. This allocation was underpinned by a comprehensive analytical framework, intricately woven from various dimensions:

- **Population Density Variation:** Adibi's calculations incorporated the diverse spatial patterns of population density within the city. These variances guided the allocation of residential zones, ensuring optimal distribution based on the concentration of inhabitants.
- **Projected Population Growth:** The master plan's efficacy was amplified through its proactive anticipation of population growth over a quarter-century span. This forward-looking approach enabled the allocation of adequate space for residential expansion in alignment with projected demographic trends.
- **Differential Neighbourhood Density:** Adibi's methodology accounted for the multifaceted densities characterizing distinct neighbourhoods. These calculations factored in variables such as vacant lands as well as areas requiring reconstruction, thereby facilitating an equitable allocation of residential space across neighbourhoods.
- **Land Requirement Estimation:** Guided by a meticulous appraisal of urban dynamics, Adibi's plan employed accurate estimations to determine the requisite land areas for each residential zone. These estimations synthesized various data points to comprehensively portray the city's evolving spatial requirements.

Ali Adibi's visionary Comprehensive Plan was intrinsically grounded in a rigorous analytical framework. The division of the city's residential domain into discrete community organizations was strategically designed to foster operational efficiency. The allocation of residential land was underpinned by a multifaceted calculus, which meticulously considered factors such as population density distribution, anticipated growth trajectories, neighbourhood disparities, and land requirement estimates. This

methodological rigour underscored Adibi's commitment to a holistic, forward-looking urban transformation.

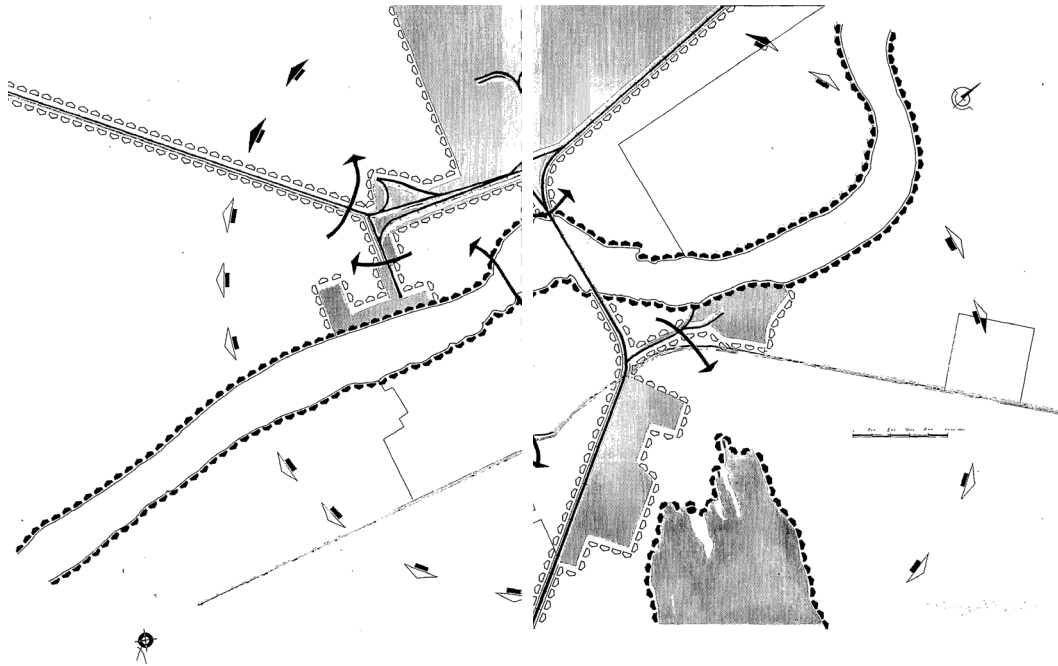


FIG. 5.28 Directions of Future Urban Extension.

Source: *Ahwaz Master Plan* by Ali Adibi, p. 47

Date: 1965. Accessed: January 2019

Ali Adibi's meticulous urban planning efforts entailed a nuanced approach to determining distinct densities within various zones of Ahwaz. The city was stratified into three key zones, each characterized by a specific residential density paradigm, thereby shaping the urban landscape in a coherent and functional manner.

- **Low-Density Zones:** These zones were earmarked for single-flat detached or semi-detached houses, each catering to a single-family unit. Within this category, the allocation of residential space was governed by a maximal threshold of 125 individuals per acre of land. This demarcation preserved a sense of spaciousness and allowed for harmonious single-family habitation.

- **Medium/Average Density Zones:** This category encapsulated neighbourhoods featuring two or three-flat houses, providing accommodations for two-family units. The residential space allocation within this tier ranged between 125 to 250 individuals per acre of pure residential land. This intermediate density regime accommodated multiple households while maintaining a balanced urban environment.
- **High-Density Zones:** The high-density zones comprised dwellings ranging from individual houses to medium-sized apartments and high-rise structures accommodating multiple families. Each acre of residential land was anticipated to accommodate a population between 250 and 500 individuals within these zones. This density spectrum facilitated efficient land utilization while accommodating a more substantial populace.

A pivotal facet of Adibi's design lay in the partitioning of land use within each residential zone. Approximately 40 per cent of the total area within each zone was allocated for residential purposes, ensuring a reasonable balance between habitation and auxiliary functions. The remaining 60 per cent was judiciously designated for urban public amenities such as streets, alleys, and other communal facilities. This distribution optimised land utilisation and facilitated the seamless integration of essential urban infrastructure.

Adibi's stratification of Ahwaz into distinct residential zones underscored his commitment to a harmonized and functional urban landscape. His calculations of population density per acre within each zone were a testament to his empirical precision, enabling the calibration of urban growth in a manner that aligned with the city's evolution and its residents' well-being.

Within each delineated residential zone, Ali Adibi meticulously orchestrated the integration of a central public space that catered to diverse communal needs and facilitated social interactions. His designed public spaces served as a multifunctional hub, harmonizing various amenities to ensure residents' convenience and enhance their quality of life. Comprising essential facilities for the holistic well-being of the inhabitants, this central public space encompassed schools, playfields, parks, libraries, local Shops, post offices, telegraph, and Telephone centres.

Ali Adibi's meticulous integration of central public spaces within residential zones in Ahwaz directly relates to the petroleumscape's impact on urban planning and communal life. The establishment of central public spaces within residential zones was essential for fostering a sense of community among the diverse population drawn to Ahwaz by the oil industry. These spaces served as gathering points where

people from different cultural backgrounds could come together, socialize, and engage in communal activities. In the petroleumscape, where people relocated for work, these spaces played a crucial role in building a sense of belonging and social cohesion. The petroleumscape was characterized by the rapid growth of industrial and urban areas. The inclusion of well-planned public spaces in residential zones was a reflection of efforts to enhance the quality of life for the city's inhabitants. The oil industry recognized the importance of creating livable communities to attract and retain a skilled workforce, which is a significant aspect of the petroleumscape's impact on urban planning. Ali Adibi's approach to integrating central public spaces in Ahwaz's residential zones was a response to the unique challenges and opportunities presented by the petroleumscape. It aimed to create vibrant, cohesive, and livable communities within the context of rapid industrialization and urban growth driven by the oil industry.

Adibi's master plan underscored the imperative for these facilities to be accessible within a convenient radius. This accessibility was assured through strategic placement – either as an integrated compound or dispersed within the neighbourhood – ensuring that no journey to these amenities exceeded a ten-minute walking distance. The meticulous selection of these central public space locations rested with the urban department of the municipality. This decision-making process amalgamated the prioritization dictated by the Comprehensive Plan with the neighbourhood's latent potential, thereby harmonizing practicality with urban foresight.

The internal streets within these residential zones were conceived as thoroughfares primarily for localized communication, replete with limited vehicular access. Adibi's plan further extended to subdividing these zones into discrete smaller sections. Each of these subdivisions was meticulously structured to cultivate an autonomous framework. This framework accommodated essential community infrastructure, including schools and playgrounds, specifically tailored to cater to the needs of the local children.

Adibi's master plan for each residential zone exemplified a holistic vision. He aimed to foster a sense of community by strategically integrating central public spaces, facilitating educational and recreational pursuits, and amplifying convenience through access to vital amenities. These spaces epitomized his commitment to designing an environment that nurtured well-rounded human development and harmonious communal living.

In Adibi's Plan, there were architectural suggestions to increase the general culture of the citizens, such as the suggestion to create an extensive public library, several local libraries, several theatres, and educational spaces for adults.

Ali Adibi's visionary urban plan extended beyond physical infrastructure to encompass a comprehensive approach to fostering the intellectual and cultural development of the city's citizens. Recognizing the intrinsic role of culture in enhancing the quality of urban life, his design proffered architectural recommendations that sought to elevate the general culture of Ahwaz's populace.

- **Extensive Public Library:** A focal point of his recommendations was the proposal for an expansive public library. This central knowledge repository was envisioned as a bastion of learning and intellectual growth. Such an institution would provide citizens with access to a wide array of books, resources, and materials, nurturing a culture of lifelong learning and fostering intellectual curiosity.
- **Local Libraries:** In addition to the central public library, Adibi's plan advocated for the establishment of several local libraries across the city. These smaller-scale libraries would be strategically positioned within neighbourhoods, ensuring easy access for residents. This decentralized approach aimed to democratize access to information and educational resources, making them an integral part of everyday life.
- **Theatres:** Recognizing the significance of the performing arts in cultural enrichment, Adibi's plan included providing multiple theatres. These cultural venues would serve as platforms for artistic expression, fostering creativity and providing citizens with opportunities to engage in cultural events, theatrical performances, and artistic exhibitions.
- **Educational Spaces for Adults:** Adibi's vision extended to educational spaces dedicated to adults. Beyond formal education, these spaces were conceived as hubs for continuous learning and skill development. Workshops, seminars, and training sessions could equip adults with practical knowledge, enhancing their employability and contributing to personal growth.

By integrating these architectural suggestions, Adibi's plan sought to create an environment conducive to intellectual and cultural enrichment. These recommendations aimed to empower citizens with access to diverse sources of knowledge, artistic expression, and personal development opportunities. Ultimately, this holistic approach aimed to foster a society of well-rounded individuals, contributing to the city's cultural vibrancy and overall quality of life.

During the period under consideration, the health situation within Ahwaz was beset with deficiencies, with existing healthcare institutions proving inadequate to meet the population's needs. Addressing this imperative, the augmentation of hospitals and healthcare centres emerged as a vital component of Ali Adibi's comprehensive plan. The city necessitated a heightened presence of healthcare infrastructure to ensure the well-being of its residents, a priority he firmly advocated. Concurrently, Adibi's prescient vision encompassed bolstering the city's hospitality sector. Informed by the prospective demands of a growing urban landscape, his counsel extended to constructing two additional hotels, each poised to cater to the burgeoning influx of visitors. This strategic recommendation underlined Adibi's commitment to cultivating a cityscape aligned with contemporary needs and burgeoning aspirations.

Foreseeing a transformative industrial trajectory, Adibi's future-oriented plan envisioned Ahwaz as a distinctive industrial nucleus. Informed by pragmatic considerations such as wind direction, he strategically designated the southwestern region, proximate to railways and main thoroughfares, as the focal point for heavy industries. Simultaneously, a modern industrial park earmarked for light industries was slated to be established adjacent to the Zeitun residential zone. To harmonize industrial and residential spheres, Adibi's master plan advocated for the interposition of green belts to demarcate these zones. This demarcation not only upheld the city's aesthetics but also fostered a harmonious coexistence between industrial and residential domains.

Strategically central to Adibi's vision was the transformation of Pahlavi Avenue and its vicinity – an epicentre of commercial activity – into a contemporary main Bazaar. To this end, vehicular movement within this zone was proscribed, fostering a pedestrian-friendly urban milieu. The grand design further entailed the establishment of expansive malls at key junctions, offering citizens modernized retail experiences. This vision cascaded to each neighbourhood, where local shops were proposed to invigorate community cohesion and accessibility.

Ali Adibi's prescient urban plan adroitly addressed the health situation and the burgeoning hospitality sector, augmenting healthcare institutions and advocating for the establishment of new hotels. His astute industrial strategy encompassed the strategic distribution of heavy and light industries while preserving urban aesthetics through green belts. The metamorphosis of Pahlavi Avenue into a modern central Bazaar, replete with pedestrian-friendly spaces and the proposal for local shops, exemplified his commitment to elevating urban functionality and the overall quality of life.

Ali Adibi's urban analysis manifested a discerning examination of two pivotal modes of urban circulation: firstly, the linkages between residential and occupational spheres, and secondly, the connections between living quarters and entertainment zones. Guided by this insightful analysis, he advocated for a strategic restructuring of urban movement patterns, predominantly orchestrated along the main urban thoroughfares, to optimize vehicular flows and minimize their intrusion into residential zones. Envisioning the urban landscape for the subsequent quarter-century, Adibi's discernment culminated in the classification of six distinct types of urban circulation:

- **City's Main Highways:** Serving as arterial conduits, these main highways facilitated the efficient movement of people into Ahwaz from external locales, seamlessly connecting residential zones with industrial precincts. This strategic linkage aligned with the city's industrial aspirations, fostering a dynamic synergy between various sectors.
- **Main Streets:** Beyond facilitating intra-city mobility, these principal streets fulfilled the dual role of delineating and segregating diverse neighbourhoods. Adibi's astute vision recognized their function as spatial dividers, orchestrating urban organization while accommodating essential vehicular flow.
- **Auxiliary/Branch Streets:** Catering to internal movements within individual districts and linking contiguous neighbourhoods, these auxiliary and branch streets functioned as intricate neural pathways, ensuring localized accessibility and connectivity.
- **Local Alleys for Residential Connection:** Intimate residential connections were facilitated through local alleys, interlinking homes with branch streets. This fine-grained network reflected the microcosmic interactions within neighbourhoods, fostering a sense of community.
- **Local Alleys for Public Centre Connection:** These local alleys were strategically devised to facilitate access between homes and public centres within each neighbourhood. This design element underscored the inherent interplay between private life and communal facilities, thereby nurturing a sense of collective belonging.
- **Green Boulevards and Entertainment Parks:** Acknowledging the potential of preexisting routes, such as the Karun Riverbanks, Adibi's vision reimaged these spaces as vibrant green boulevards and recreational enclaves. This innovative transformation aimed to infuse urban spaces with leisure and entertainment possibilities, fostering a balanced urban experience.

Adibi's comprehensive urban analysis foregrounded the intrinsic importance of streamlined movement within the cityscape. His proposed classification of urban circulation epitomized a deliberate orchestration of vehicular flows while concomitantly nurturing community interactions, aligning with industrial imperatives, and enhancing urban aesthetics through the creation of green boulevards and entertainment parks. This strategic vision encapsulated his commitment to the holistic evolution of Ahwaz as a dynamic, functional, and harmonious urban centre.

Adibi's visionary urban plan extended to the strategic design of the railway infrastructure, introducing multifaceted proposals that aimed to optimize railway integration, enhance safety, and harmonize rail-related activities with urban living.

- **Two-Level Junctions:** Adibi's plan called for a paradigm shift in the design of railway and street junctions. His vision advocated for the conceptualization of these junctions in a two-level configuration. This innovative approach would facilitate separating rail and road traffic, mitigating congestion and streamlining vehicular movement. Such an arrangement not only optimized transportation logistics but also contributed to overall urban functionality.
- **Green Belts:** Recognizing the imperative to mitigate potential disruptions posed by railways traversing through residential zones, Adibi's master plan underscored the creation of green belts on both sides of the railway tracks. These verdant buffers would serve as functional and aesthetic dividers, effectively segregating residential areas from the railway infrastructure. This design intervention upheld the dual goals of safety and urban aesthetics.
- **Railway Relocation:** Adibi's prescient vision extended to reconfiguring the existing railway network within the Khoram-Kushk neighbourhood. His counsel advocated for the relocation of the railway line from its current path within the old residential zone. This strategic realignment aimed to circumvent potential conflicts arising from the coexistence of railway operations and residential habitation.

Adibi's railway-centric proposals exemplified his commitment to creating a symbiotic relationship between urban life and transportation networks. The notion of two-level junctions sought to enhance transportation efficiency, while the establishment of green belts along railway tracks demonstrated his sensitivity to safety and aesthetics. Additionally, the proactive relocation of railways within residential zones exemplified his overarching aspiration to harmonize urban functions and optimize the quality of life for the city's inhabitants.



FIG. 5.29 Existing Residential Neighborhoods.

Source: Ahwaz Master Plan by Ali Adibi, p. 32

Date: 1965. Accessed: January 2019

5.4.1.7 Infrastructures

Ali Adibi's visionary urban plan was underscored by a proactive approach to infrastructure development, symbolic of his commitment to importing global welfare state expertise to Ahwaz. His strategic proposals extended to pivotal facets of urban life, including transportation and utility systems.

- **Karun Bridges:** Recognizing the significance of efficient transportation networks, Adibi's plan advocated for the construction of two additional bridges across the Karun River. These bridges were conceived to streamline movement along the river, reducing congestion and enhancing overall urban mobility. This strategic recommendation showcased his dedication to optimizing transportation infrastructure for the city's benefit.

- **Drinking Water Pipes System:** Adibi's comprehensive plan revealed a focused effort to enhance the city's utility infrastructure. The data provided underscored that the drinking water pipes system was in the final stages of construction, poised to be imminently completed. This initiative reflected his pragmatic approach to securing essential resources for the city's residents, underscoring his commitment to their well-being.

Adibi's infrastructural propositions aligned with his overarching objective of ushering welfare state expertise to Ahwaz. The strategic proposals for additional Karun bridges aimed to elevate urban mobility, while the imminent completion of the drinking water pipes system highlighted his pragmatic approach to securing essential resources for the city's inhabitants. These endeavours collectively exemplified his dedication to enhancing the city's functional capacities, aligning with global best practices in urban development.

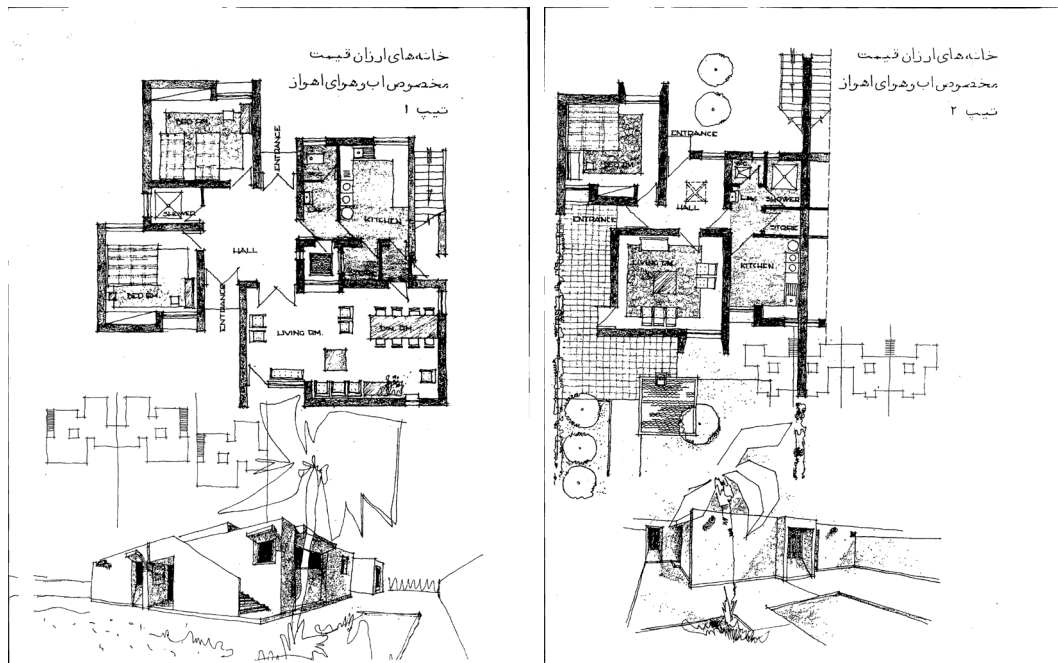


FIG. 5.30 Affordable Houses Based on Ahwaz Climate, Types I&II.

Source: Ahwaz Master Plan by Ali Adibi, p. 54

Date: 1965. Accessed: January 2019

5.4.1.8 State's organisations and offices

Most of the government institutes were located on the western side of Karun. In the Comprehensive Plan of Ahwaz, it was suggested that this area be transformed into the official centre of the city. The city's cultural centre will also be located in this area, next to Jondy Shapur University. After the construction of the new bridge, the connection between the eastern and western sides of the city and its offices and cultural centres would be more complete.

Ali Adibi's masterful urban plan extended to the strategic reconfiguration of government institutions within Ahwaz, a transformation that resonated with his broader vision of enhancing urban functionality and cultural centrality.

- **Official Centre Transformation:** Adibi's plan recognized the significance of consolidating government functions within a cohesive locale. To this end, his master plan proposed the transformation of the western side of the Karun River into the official centre of the city. This strategic reorganization aimed to centralize administrative activities and streamline government operations, fostering greater efficiency and accessibility.
- **Centre and University Proximity:** Adibi's vision extended to the co-location of the city's cultural epicentre and Jondy Shapur University within the proposed official centre. This synergistic placement fostered a symbiotic relationship between education and cultural vibrancy. The university's proximity augured intellectual engagement and dynamic discourse well, bolstering the city's cultural and academic tapestry.
- **Connectivity:** The imminent construction of a new bridge emerged as a pivotal enabler in enhancing urban connectivity. This new bridge was poised to bridge the geographical gap between the eastern and western sectors of the city. Beyond its physical role, the bridge promised to foster greater integration between the two sides, facilitating the seamless movement of residents, visitors, and institutional stakeholders.

Adibi's transformative proposals exemplified his astute understanding of urban dynamics. The envisaged official centre and cultural hub within the western side of Karun epitomized his commitment to optimizing administrative operations and cultivating intellectual vitality. The anticipated bridge served as a conduit for enhanced connectivity, effectively bridging geographical divides while nurturing a more unified and accessible urban landscape. These elements collectively underscored his dedication to Ahwaz's holistic and progressive evolution as a functional, culturally enriched, and harmonious urban centre.

Amidst Ali Adibi's comprehensive urban planning endeavours, a distinct challenge emerged in the form of external influences, particularly the efforts of the United States to propagate its economic ideology of a free-market framework to foster a culture of consumption within Iran. The imposition of such economic concepts represented a dynamic tension between traditional socio-economic paradigms and the external push towards embracing a consumer-driven ethos. Adibi's visionary urban plan took cognizance of this challenge, as it navigated the delicate balance between preserving indigenous values and responding to global economic pressures.

Moreover, the intention to explore oil resources in the northern parts of Ahwaz marked a significant juncture in implementing Adibi's plan.⁵⁵⁸ This strategic pivot held transformative potential for the city's economic trajectory. However, despite its potential, this course of action was ultimately abandoned before it could be realized, signalling a complex interplay of geopolitical, economic, and environmental considerations.

The juxtaposition of these dynamics underscores the multifaceted nature of urban development, where local aspirations, external influences, economic ideologies, and resource exploration converge to shape a city's growth trajectory. Despite encountering such challenges and shifts, Adibi's plan exemplifies a visionary attempt to navigate these intricate threads to manifest a holistic urban vision for Ahwaz.

⁵⁵⁸ Mojtahedzade, R. & Namavar, Z. *In search of urban identity of Ahwaz: Dar Jost-ejooye hovviati shahri e Ahwaz*. Road, Housing and Urban Development Research Center. 1394/2015.

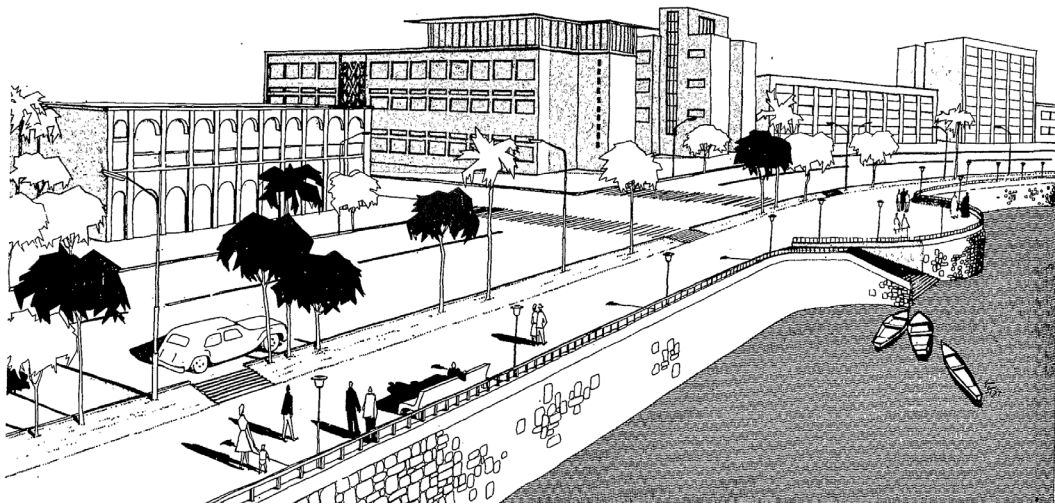
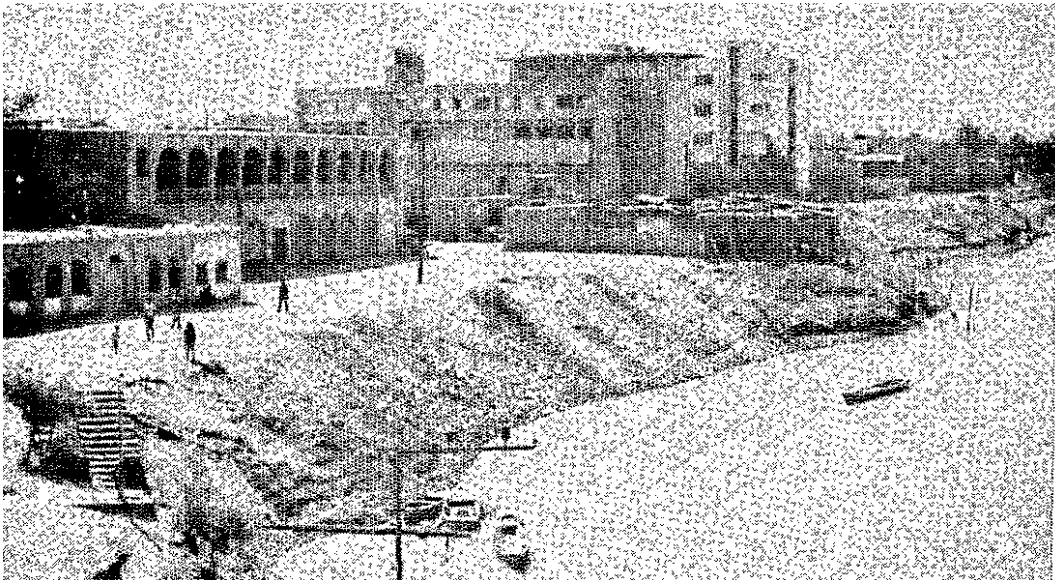


FIG. 5.31 Comparison between the Current Situation of the Western Side of the Karun River, South of the Suspended Bridge, and the Proposed Plan for it in the Comprehensive Plan.

Source: Ahwaz Master Plan by Ali Adibi, p. 54

Date: 1965. Accessed: January 2019

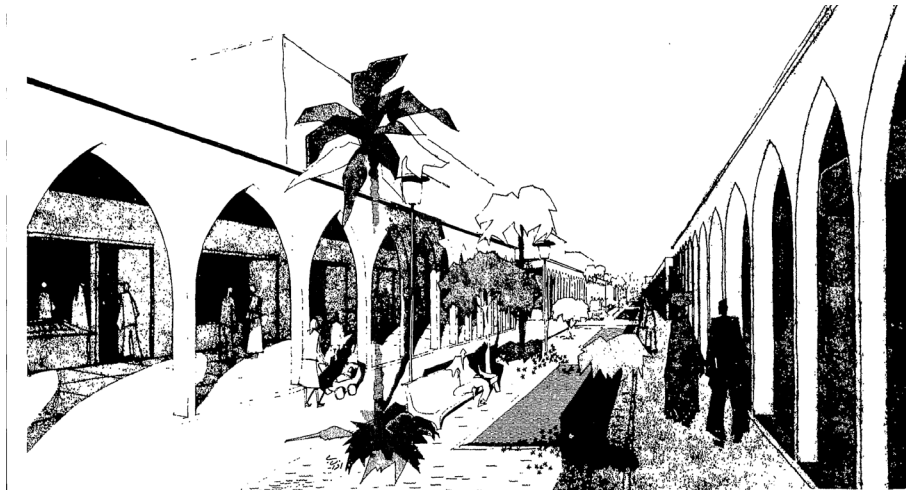
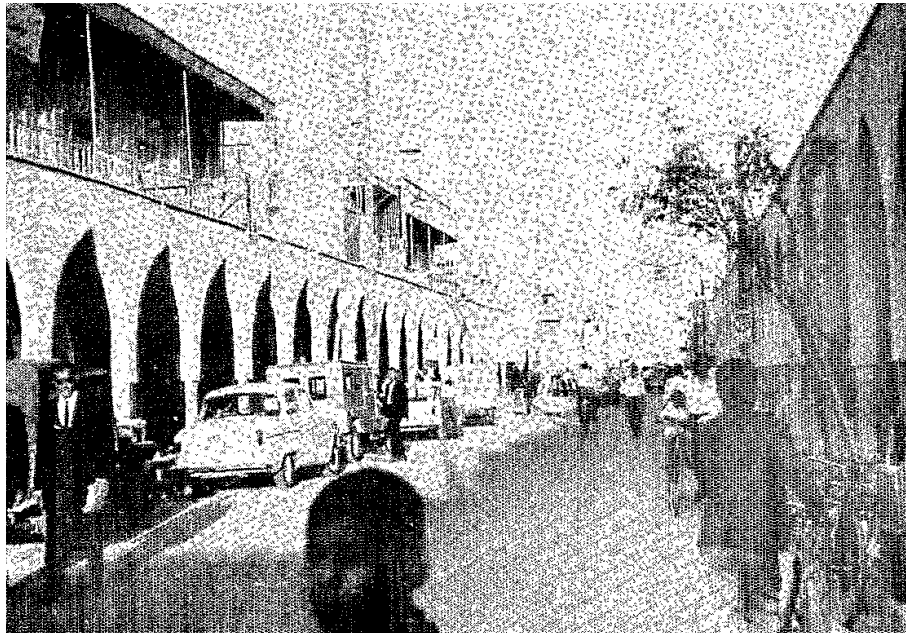


FIG. 5.32 Comparison between the Current Situation of Pahlavi Avenue and its Proposed Plan as the Main Bazaar of the City.

Source: Ahwaz Master Plan by Ali Adibi, p. 54

Date: 1965. Accessed: January 2019

مرکز فرهنگی واجتماعی شهر

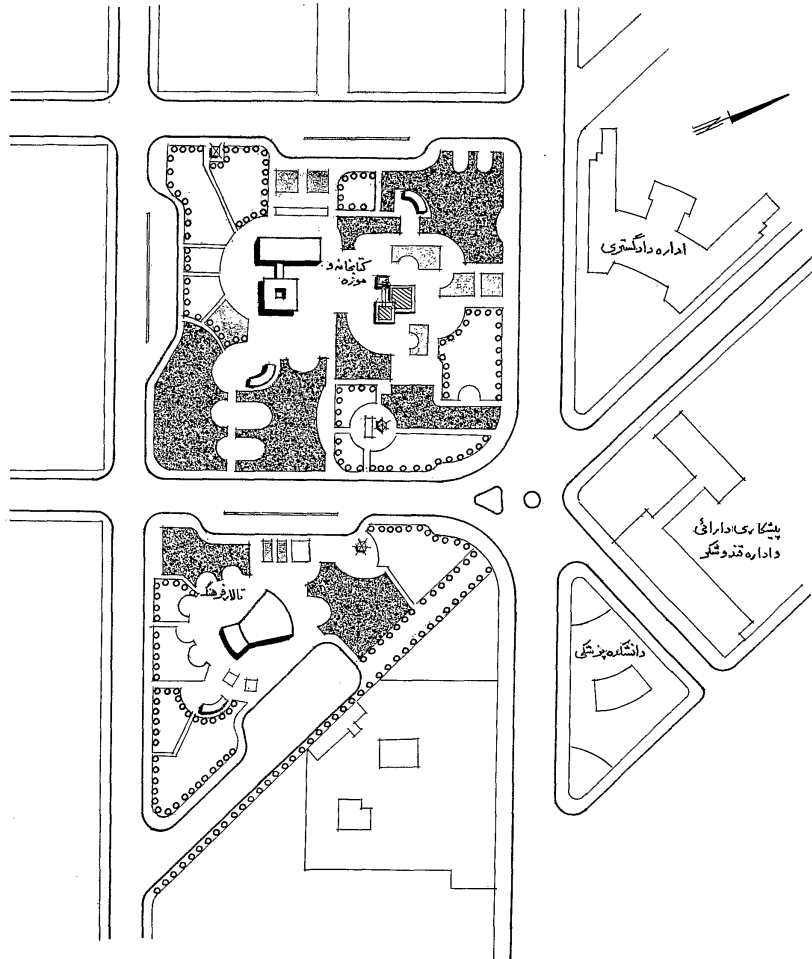


FIG. 5.33 The Cultural and Social Center of Ahwaz.

Source: Ahwaz Master Plan by Ali Adibi, p. 54

Date: 1965. Accessed: January 2019

5.5 A Catalyst of Change: Unveiling Iran's White Revolution

The White Revolution, introduced by Shah Mohammad Reza Pahlavi in the early 1960s, was a comprehensive set of reforms to modernise and transform various aspects of Iranian society. Following the pronounced commitment of the Pahlavi regime to industrial modernization during the 1950s, the subsequent decade, the 1960s, emerged as a pivotal juncture in Iran's trajectory of modernization, specifically with regard to the redistribution of land. As the 1960s commenced, the Iranian state's authoritative consolidation aimed at diminishing local power dynamics by expropriating land holdings, thereby disrupting the nexus between wealth and autonomy historically associated with local landowners. This transformative phase was spearheaded by Shah Mohammad Reza Pahlavi, whose strategic enactment of a comprehensive land reform law and program stood as a tangible manifestation of this endeavour. This legislative initiative mandated the relinquishment of property ownership by local landholders, with subsequent redistribution among the labouring class.

The multifaceted agenda encompassed not only land reforms but also women's suffrage, education reform, rural and agricultural development, and industrial expansion. The White Revolution was characterized by a vision of progress, modernization, and a departure from traditional norms, ultimately seeking to propel Iran into a new era of socio-economic growth. The impact of the White Revolution was not limited to social and economic spheres; it also extended to the realm of building, architecture, and urban planning. The reforms instigated a series of transformations in urban landscapes and architectural practices, influencing the physical manifestation of Iran's modernization efforts.

- **Urban Infrastructure and Planning:** The White Revolution emphasized the need for infrastructural development in urban areas. This led to investments in roads, transportation networks, utilities, and public services, transforming the physical fabric of cities. The focus on urban infrastructure aimed to facilitate economic growth, connect previously isolated regions and improve urban residents' overall quality of life.
- **Housing and Residential Development:** With the influx of rural migrants to urban centres, housing demands surged. To address this, the government initiated housing projects that aimed to provide affordable and modern dwellings for the urban population. These projects introduced standardized architectural designs, focusing on functionality and efficiency.

- **Architectural Modernization:** The White Revolution's ethos of progress and modernization was reflected in architectural aesthetics. Modern architectural styles and design principles emerged, often inspired by Western models. Innovative construction materials and techniques were integrated into new buildings, reflecting contemporary architectural trends.
- **Educational and Cultural Institutions:** The reform's emphasis on education led to the establishment of new schools, universities, and cultural centres. Architecturally, this translated into the construction of modern campuses, libraries, and cultural venues designed to facilitate learning and intellectual growth.
- **Industrial Development:** Industrial growth and economic diversification were integral components of the White Revolution. As industrial zones expanded, their architectural and spatial requirements evolved. Factories, warehouses, and industrial complexes were built with functional and efficient designs to accommodate the evolving manufacturing landscape.
- **Public Spaces and Recreational Facilities:** The White Revolution recognized the importance of public spaces for fostering community interactions and leisure activities. Parks, recreational facilities, and cultural centres were established to enrich the urban environment and enhance the quality of life for residents.
- **Architectural Education and Expertise:** The modernization agenda necessitated a pool of skilled architects, urban planners, and engineers. To meet this need, architectural education and training were bolstered, leading to the emergence of a generation of professionals equipped to shape the built environment in alignment with the modernization goals.

The White Revolution left an indelible mark on Iran's building, architecture, and urban planning. The reforms spurred infrastructural development, architectural modernization, and urban transformation aligned with progress and modernity's overarching objectives. The architectural legacy of this era reflects a dynamic interplay between traditional values and contemporary aspirations, exemplifying how socio-economic reforms can manifest in the built environment. In tandem with the land reform measures, the Iranian state undertook a calculated effort to facilitate the repercussions of dispossession experienced by former landowners. This was fostered by allotting shares from state-owned Iranian industries, which had already witnessed a prosperous development trajectory since the preceding decade. Notably, these land reforms and the resultant abolition of landlordism served as the inaugural stride in the Shah's holistic vision known as the "White Revolution." This multifaceted agenda encompassed six cardinal principles aimed at ushering forth

social, political, and economic enhancements within Iran. The year 1963 marked a pivotal milestone as a national referendum solidified public approval for the sweeping reforms embedded within the White Revolution. The ambitious contours of the White Revolution materialized in the comprehensive nationalization of the country's forests and the equitable redistribution of land among approximately 2.5 million families.⁵⁵⁹

Nonetheless, the fervently pursued land reform initiative encountered significant political, economic, and social setbacks, leading to a cascade of consequences. While conceptualized with the intention of ushering in a new era of equitable land distribution, the practical implementation of the reforms was fraught with challenges. Central to the shortcomings of the land reform was the incapacity of the national state to adequately compensate for the pivotal role formerly played by landowners. The anticipated infrastructural facilities necessary to facilitate modernized farming techniques and efficient labour management were either inadequately developed or entirely absent. Consequently, the agricultural sector witnessed a notable disparity between the envisaged modernization objectives and the real-world challenges posed by insufficient resources. The resultant disillusionment among stakeholders, including the labouring class, was pronounced and palpable.

The effects of these deficiencies reverberated through the economic landscape. The fragmentation of agricultural land ownership, a direct consequence of the reform, inadvertently reduced overall agricultural productivity. This decline immediately impacted the national economy, where agriculture traditionally held a substantial role. The realities on the ground effectively stymied the aspiration to enhance agricultural production and elevate its significance within the broader economic framework. The intricate interplay of these factors culminated in a complex web of consequences. The dissonance between the reform's objectives and the actual outcomes contributed to a sense of dissatisfaction and disillusionment among affected parties. Additionally, the diminished agricultural output further strained the national economy, undermining the reform's intended positive impact. The net result was a disheartening paradox: a reform aimed at revitalizing landownership dynamics and invigorating the agricultural sector paradoxically led to a decline in productivity and economic contribution. While conceived with noble intentions, the land reform initiative encountered significant hurdles that translated into political, economic, and social disappointments. The insufficiency of the state in adequately supporting the transition, coupled with the fragmentation of land ownership, impeded the modernization of agriculture and hindered its role within the national economy. This

⁵⁵⁹ The main disadvantage for religious domination from the white revolution was the effect of land reforms that caused them to lose vast amounts of properties, formerly transferred to them from reach people as religious gifts (*vagf*).

intricate interplay of factors ultimately underscored the complexities inherent in implementing ambitious reforms within a multifaceted societal context.

The implementation of the White Revolution engendered notable social challenges, particularly evident in industrial centres like Ahwaz. Among the consequential social ramifications, a pronounced mass migration of rural labourers to Ahwaz emerged as a prominent phenomenon. The burgeoning oil industry in the city offered enticing prospects of employment, prompting a surge of young Iranians to converge upon these urban centres in pursuit of livelihoods. In stark contrast to their previous support structures provided by extended families, these migrants found themselves navigating an unfamiliar landscape characterized by elevated living costs, social isolation, and substandard living conditions. This influx of individuals dramatically reshaped the demographic landscape of Ahwaz. Notably, the city's population surged significantly from 155,054 in 1963 to 201,275 in 1966, representing an increase of 64.7%. This growth was underpinned by adding 81,177 individuals, with approximately 47,768 of these comprising migrants. Consequently, this data indicated that, over the preceding decade, a 2.7% annual natural growth rate had been augmented by a further 4% due to other contributing factors.

The migration factor also engendered distinct patterns in terms of population distribution by gender. The male population outnumbered their female counterparts, a discrepancy attributable to the migrant influx. This gender disparity witnessed a temporary reduction when migration decreased between 1956 and 1963. However, the resurgence of migration from 1963 to 1966 led to a revival of the gender imbalance in favour of males. Considering age composition proved crucial for comprehensive demographic analysis, as it significantly influenced economic and educational planning. In 1946, approximately 33.7% of Ahwaz's population comprised individuals below the age of 10, a figure that increased to 34.1% by 1966. Examining the economically active segment of the population provided insights into the labour dynamics. In 1946, among those over the age of ten, 44.1% (35,128 individuals) were part of the economically active cohort, with 32,773 individuals employed and 2,355 seeking employment. By 1966, this percentage had risen significantly to 64.8% (47,922 individuals), with 43,711 employed and 4,211 unemployed. The decline in the number of economically active individuals in 1966 can be mainly attributed to an increased inclination towards education, evidenced by a simultaneous rise in the number of students.

Within this temporal framework, the city of Ahwaz grappled with the coexistence of two divergent development trajectories. On the one hand, the governmental apparatus undertook deliberate endeavours to enhance the urban fabric, marked by initiatives such as constructing parks and verdant landscapes. Conversely,

the city experienced the uncontrolled proliferation of suburban areas, eroding its original urban form and leading to unsettling discord and disarray. This dynamic was emblematic of the duality inherent in the era's development narrative. The governmental initiatives aimed at urban enhancement were underscored by establishing parks and green spaces, a testament to the authorities' commitment to fostering a more appealing and organized urban environment. These efforts were consonant with a vision of progress that sought to elevate the aesthetic and functional aspects of the city. However, this vision contrasted the unintended outcomes of rapid urban expansion. The unregulated growth of suburbs, characterized by haphazard construction and a lack of comprehensive urban planning, eroded the city's spatial coherence and architectural harmony. This unplanned suburbanization trajectory led to urban chaos and visual disharmony, juxtaposing the intended progress with the unintended consequences of such growth.

Furthermore, the societal transformation propelled by the White Revolution gave rise to emergent social requisites, prompting Shah to augment the original principles with 13 new tenets over time. Notably, these additions predominantly centred on urban and architectural domains. The urban landscape was imbued with new regulations encompassing the construction of dwellings in rural areas, the rejuvenation of towns and villages, efforts against land and real estate transactions, and the vigorous suppression of corruption. The narrative of Ahwaz's development during this epoch encapsulates a dichotomy between controlled enhancement and unchecked expansion. The government's endeavours to beautify urban spaces through parks and greenery stood in stark juxtaposition to the encroaching discordance brought about by unplanned suburban growth. These complexities were further compounded by the augmentation of the White Revolution's principles to address evolving societal needs, particularly within the realms of urbanism and architecture. This confluence of factors underscored the multifaceted nature of development efforts during this transformative period.

In the period of 1958-59, a significant administrative decision was undertaken by the Board of Ministers to address urban development in the Kerit zone of Ahwaz. This decision involved the transfer of ownership of underutilized lands within this zone to the National Oil Company. The intended purpose was to facilitate the construction of residential accommodations for the company's workforce.⁵⁶⁰ This strategic move by the government was aligned with the vision of swift urban progress, specifically encapsulated by the development projects known as "Chaharsad-dastgah" and "Kuy-

⁵⁶⁰ Arc ref: 330/27340, Iranian national library archives.

Sepidar.” These initiatives were intended to catalyze urban growth and expansion. However, unforeseen challenges were ignited, ushering in a series of consequential complexities within the city.

The immediate aftermath of these projects marked the emergence of critical predicaments that would profoundly influence Ahwaz’s urban fabric and societal dynamics. The construction of densely populated neighbourhoods, initially intended to provide housing for the working class, precipitated the onset of significant challenges. A particular issue stemmed from the rapidity of development, resulting in the creation of newly established neighbourhoods characterized by dense populations and a palpable absence of a coherent sense of place. The implications of this development approach were profound, contributing to the emergence of numerous social predicaments that would come to define the city’s landscape.

Among the consequences was an influx of lower-income strata of society finding themselves residing within these newly constructed neighbourhoods. This demographic shift, juxtaposed with the accelerated pace of development, created an environment where inhabitants lacked a profound connection to their surroundings. The absence of a well-defined sense of place worsened social issues, further exacerbated by inadequate living conditions, limited access to essential services, and an overall lack of social cohesion. While successful in generating housing for the labouring class, the urban expansion initiatives inadvertently laid the groundwork for the city’s subsequent social complexities. In response to ongoing urbanization, the government initiated further residential development in the suburbs of Zeitun and Behrooz. These low-cost housing projects were conceived as a means to address the housing needs of labourers, yet they also contributed to the broader narrative of hasty urbanization and the challenges it entailed. The pivotal decisions made in the late 1950s to promote rapid urban development through the allocation of unused lands had far-reaching implications for Ahwaz. The resultant dense neighbourhoods, which arose devoid of a distinct sense of place, precipitated numerous social dilemmas. The trajectory set by these initiatives would continue to shape the city’s socio-spatial dynamics in the years to come.

During the 1960s, Ahwaz underwent a phase of urban expansion that gave rise to diverse neighbourhoods characterized by a confluence of multifunctional elements. This era witnessed the emergence of neighbourhoods with distinct primary functions that were interwoven to create a complex urban tapestry. An illustrative example is the Karun Industrial area, which exemplified this trend by harmonizing various functions within its bounds. The Karun Industrial area, notable for housing the central workshop serving the Khuzestan oilfields, served as a microcosm of the multifunctional urban development of the time. Within its confines, this area

accommodated industrial facilities and exhibited an amalgamation of American-style residential housing, interconnected streets, recreational amenities, and critical institutions such as the substantial Artisan School and a dedicated labour clinic. The juxtaposition of these diverse functions in a single neighbourhood symbolised the era's urban development ethos, which sought to create vibrant and self-sustaining pockets of urban life. The coexistence of industrial operations alongside residential enclaves mirrored a holistic vision of urban living, where residents could seamlessly navigate between work, leisure, education, and healthcare within close proximity.

The infusion of American-style housing, streets, and recreational facilities reflected an aspiration for modernity and efficiency. American design principles heavily influenced this architectural and urban planning approach, aiming to enhance livability and functionality. The inclusion of amenities like the Artisan School and the labour clinic underscored a commitment to human development and well-being, mirroring an approach that recognized the symbiotic relationship between a thriving populace and urban vitality. In retrospect, the urban expansion during the 1960s manifested in creating neighbourhoods with multifunctional cores. The Karun Industrial area encapsulated this paradigm by harmonizing industrial activity with residential living while also incorporating educational, healthcare, and leisure amenities. This composite urban landscape was a reflection of the era's ideals of modernization, efficiency, and holistic urban living.

5.5.1 **Fueling Progress: Milestones in the Oil Industry since the Onset of the White Revolution**

The role of the National Oil Company in supporting the White Revolution of Iran is a significant aspect of historical examination. A pivotal moment in this support occurred in 1972 when the National Oil Company commemorated the tenth anniversary of the White Revolution. This commemoration was paralleled by the publication of a periodical known as "The Daily Memo" or "Yaddasht-e-Rooz," which aimed to critically analyze the advancements within the oil industry during this transformative period. The White Revolution, catalyzed by the initiatives of the Shah, witnessed notable improvements within the Iranian Oil industry. Manifestations of progress were evident as the industry aligned itself with Shah's vision of harnessing the nation's oil resources to their maximum potential. This alignment materialized

through the consummation of several novel agreements by the National Iranian Oil Company.⁵⁶¹

In a pivotal juncture in 1965, the National Iranian Oil Company formalized six joint venture oil agreements with foreign oil entities. The essence of these agreements lay in the exploration and exploitation of designated sectors within the offshore district of the Persian Gulf.⁵⁶² This collaborative approach marked a significant stride towards capitalizing on Iran's oil wealth. The National Iranian Oil Company further bolstered its commitment by entering into a substantive agreement with the ERAP group in 1966. Within the framework of this arrangement, the National Iranian Oil Company assumed the role of the employer, while the ERAP group functioned as the contractor. The scope of responsibilities encompassed exploratory activities, drilling endeavours, production operations, transportation logistics, and essential investments to facilitate these multifaceted operations.⁵⁶³ These developments underscore the National Oil Company's pivotal role in advancing the Iranian oil sector during the White Revolution. The alignment of goals between Shah's aspirations for economic modernization and the oil industry's pursuit of progressive growth resulted in the establishment of collaborative agreements that propelled the industry toward unprecedented achievements. The National Oil Company solidified its commitment to optimizing Iran's oil resources following the broader national agenda through such partnerships.

The White Revolution, characterized by a sequence of domestic reforms and ensuing industrial progress during the 1960s, played a pivotal role in securing Iran's autonomy within the realm of international diplomacy. Rooted in the pursuit of mutual advantage, these reforms facilitated Iran's engagements in trade and cultural interactions with its neighbouring nations, the Eastern European bloc, the United States, and the Soviet Union. Central to this strategy was the ambitious intention of concurrently cultivating ties with both sides of the Cold War divide, namely the United States and the Soviet Union. Despite this dual approach, the relationship

⁵⁶¹ Crude oil production had increased more than four times for 1.3 million barrels to 4.5 million barrels per day, while exports had risen from 0.9 million barrels to approximately 4.3 million barrels daily this year. As result of extensive exploration new reservoirs have been discovered and the number of fields in production had been increased from 8 fields to 28. The increase of crude oil exports and the raising of the posted prices of Iranian crude oil together resulted in an increase in the Iranian Government's oil revenues from Rls 24 billion to Rls 142 billion in 1979. Under the arrangement signed in February 1971, Iran's oil revenues increased still further.

⁵⁶² As a result of these agreements the Iranian government received the sum of 190 million dollars in royalties. These agreements are famous as the "75-25" deals. Later, the other Middle Easter oil producing countries follows Iran's oil policy and signed similar agreements.

⁵⁶³ Oil magazine, page 2

with the United States emerged as the most substantial and influential. The intricate nature of Iran's transformation demanded a cadre of expertise, leading to a notable influx of American advisers, engineers, urban planners, and architects. Their presence was not only instrumental in the execution of Shah's far-reaching economic modernization endeavours but also carried profound implications for Iran's military development. The paramount objective was to bolster the nation's armed forces, a goal that necessitated extensive external assistance.

In parallel with these developments, the propagation of Western culture gained momentum under the influence of American presence. This cultural diffusion had profound and lasting effects on the fabric of Iranian society, contributing to the growth of Western ideals and practices. The multifaceted role of these American experts encompassed the realms of economy and military and left an indelible mark on the socio-cultural landscape. The strategic alignment with Western powers, particularly the United States, was underpinned by shared interests and the strategic imperative to fortify Iran's regional influence. The symbiotic partnership with the United States, characterized by an influx of skilled professionals and the transference of Western cultural norms, further solidified Iran's position on the global stage.

The White Revolution's intrinsic connection to domestic reforms and industrial advancements facilitated Iran's foreign policy independence through mutual benefit-oriented engagements. This was manifest in cultivating diplomatic, trade, and cultural relationships with neighbouring states, Eastern Europe, the United States, and the Soviet Union. The preeminence of the United States in contributing to various facets of Iran's development underscored the efficacy of this engagement strategy. Simultaneously, this partnership engendered the proliferation of Western cultural influences, imprinting a lasting legacy on Iranian society.

5.6 Conclusion to the Chapter

In the aftermath of World War II, Iran's geopolitical landscape underwent a significant transformation, with Ahwaz emerging as a focal point due to American oil interests in the Iranian oil fields. This marked a pivotal juncture that propelled Ahwaz into the realm of modern global lifestyles, precipitating substantial shifts from the previous period of British influence. This historical context was marked by intricate interactions between British and American forces, characterized by countercultural dynamics. However, during the Cold War era, the paramount concern for both Anglo-American powers converged on a singular imperative: securing access to oil resources for economic and political advantages. The quest for oil became a central tenet of the global power struggle as the United States, and its British counterparts vied for control and influence over these vital energy resources. This epoch underscored the intricate interplay of political, economic, and strategic agendas that informed the actions of these superpowers. In other words, Ahwaz's post-World War II trajectory was intrinsically linked to the geopolitical manoeuvrings of American oil interests, which heralded a new era of global interconnectedness and represented a departure from the earlier British hegemony. This transition period witnessed complex interactions between various powers, underpinned by the shared concern to secure access to oil to further economic and political aspirations, particularly during the Cold War era.⁵⁶⁴

The post-World War II era witnessed an inherent inevitability in the competition between the British and American powers for dominant positions within the Iranian oil industry. This contest for influence was characterized by a multifaceted interplay of cultural, economic, and political motivations, which subtly underpinned the urban project of Ahwaz's industrialization and standardization. At the heart of this urban endeavour lay a comprehensive mission with cultural, economic, and political dimensions intricately interwoven. The transformation of Ahwaz into an industrial hub was not merely a matter of infrastructure and economic expansion; it was a

⁵⁶⁴ Painter, David S., and Gregory Brew. *The Struggle for Iran: Oil, Autocracy, and the Cold War, 1951-1954*. Chapel Hill: The University of North Carolina Press, 2022.

<https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=3486851>

<https://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781469671673>

https://www.jstor.org/stable/10.5149/9781469671680_Painter

<https://public.ebookcentral.proquest.com/choice/PublicFullRecord.aspx?p=30285125>

<https://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781469671680>

<https://muse.jhu.edu/book/109697/>

<https://ebookcentral.proquest.com/lib/byu/detail.action?docID=30285125>.

deliberate and strategic move designed to shape the fabric of the city's modern urban spaces. These spaces were envisioned to profoundly impact the lifestyles of its inhabitants and their engagement with the contemporary concept of modernity itself. During this pivotal era, the contours of a welfare-oriented approach to urban development were laid down, encapsulating the core ethos of enhancing the city's residents' well-being and quality of life. In tandem, architectural and urban endeavours were directed towards aligning with these principles, seeking to translate them into tangible design elements and spatial arrangements. This confluence of socio-economic ideals and urban planning manifested a concerted effort to synthesize progress, modernity, and improved living conditions within Ahwaz's urban landscape. In this unfolding narrative, the urban project emerged as a dynamic canvas upon which cultural, economic, and political aspirations converged. The city's transformation was guided by an intrinsic understanding that urban spaces could serve as agents of change, moulding people's experiences of modernity and shaping the trajectory of the city's development. This era, therefore, marked the initiation of a nuanced and comprehensive approach to urban planning that extended beyond the physical realm to encompass holistic societal advancements.

A salient attribute of the American plans during this period was their pronounced focus on fostering community cohesion and social integration within urban environments. This commitment to community building was encapsulated by the concept of "emancipation machines", a metaphorical notion aimed at engendering spaces facilitating freedom, engagement, and collective identity. Integral to this vision was the creation of communal gathering spaces, such as squares and community centres, which served as the crucible for social interaction and cohesion. The strategic positioning of public urban spaces held a more profound significance beyond their physical attributes. These spaces were envisioned as catalysts for cultivating a collective mindset receptive to the tenets of an open democratic society. This transformational objective was part of a broader global modernization endeavour that encompassed democratic urban planning and fundamental reforms in the equitable distribution of urban amenities to establish a robust social welfare system. The growing reliance on automobiles, emblematic of changing modes of transportation and urbanization, fundamentally reshaped social interactions within public spaces. The increased dependence on cars inherently reconfigured the dynamics of communal engagement, with implications for the nature of interactions and social bonds in shared urban areas.

The challenge of the United States to influence Iran's economic landscape with its free-market principles was a significant dynamic during that period. This imposition of economic ideology sought to foster a culture of consumerism, which in turn had substantial implications for Iran's society, including Ahwaz. The introduction

of American economic paradigms aimed at nurturing a consuming culture was catalyzed by various factors, including technological advancements and the availability of disposable income due to increased oil revenues. As the commodities market expanded, items like fashionable clothing, gadgets, and entertainment took centre stage. These commodities served not only as symbols of modernity but also as conduits for the amplification of leisure time afforded by the surplus oil capital.⁵⁶⁵ The proliferation of consumer goods reshaped lifestyles and values within Ahwaz and beyond. It engendered shifts in consumption patterns, transforming the way people spent their leisure time and interacted with products. This transformation also extended to the urban landscape, influencing the types of businesses, markets, and entertainment venues that emerged. In this context, Ahwaz, as a significant urban centre, likely experienced the ramifications of this evolving consumer culture. The city's social fabric, economy, and urban planning were likely influenced by the influx of consumer goods, the expansion of markets, and the changing patterns of leisure and entertainment. This intersection of consumerism, technology, and economic ideology marked a distinctive period in Ahwaz's development, shaping not only its urban landscape but also its social dynamics and cultural ethos.

The architecture that characterized Ahwaz during the Cold War era was emblematic of the prevailing political economy of the time. This architectural landscape bore the imprints of the era's ideologies, particularly in the context of the Cold War dynamics. The urban transformation was evident in various aspects, including the proliferation of new housing blocks, the emergence of modern malls, the expansion of road networks, and the establishment of parking lots. These architectural developments were integral to an urban renewal effort that corresponded with the rise in car ownership, ultimately contributing to a transformation that inadvertently led to increased human isolation from one another and their immediate environments. The repetitive design of new housing blocks and the advent of malls reflected the ethos of consumerism, which was intrinsic to the Cold War political economy. These architectural expressions aimed to cater to the needs and aspirations of a society increasingly engaged in consumption and leisure activities. Simultaneously, the widening of streets and the creation of parking lots aligned with the burgeoning car culture, indicating a shift in transportation patterns and preferences. However, the unintended consequence of these architectural endeavours was a sense of isolation. The proliferation of new housing blocks, although providing modern amenities, may have inadvertently contributed to a sense of sameness and disconnection from traditional community ties. The focus on cars and expanded road networks inadvertently led to a more car-centric urban environment, isolating individuals from

⁵⁶⁵ Sadler, Simon. "The Varieties of Capitalist Experience." *Architecture and Capitalism* / [Edited by] Peggy Deamer. [Contributors: Peggy Deamer ; Daniel Cobb ...] 2014. S. 115-129.

pedestrian-friendly spaces and interactions. This transformation is emblematic of the broader trend of suburbanization prevalent during this era.

The American endeavour to introduce new towns to pursue liberty and modernisation underscored a profound belief in the transformative power of urban planning. This approach was coupled with the implementation of a modern urban management system. However, akin to the British influence that preceded it, the American policy tended to disregard the city's cultural underpinnings, leading to the transplantation of foreign preferences onto the urban landscape guided by preconceived notions. In effect, the representatives of both Western nations encountered challenges in aligning their initiatives with the city's cultural heritage, rendering their efforts notable failures in this regard. While the American urban goals bore high expectations of achieving transformative urban planning outcomes, they encountered practical limitations. The imposition of foreign ideals did not resonate with the local culture, which did not readily embrace these new and imposing urban patterns and spaces. Despite the ambitious aspirations, the American vision failed to fully materialise as intended, falling short of creating a stable democratic mentality that could effectively secure their policy objectives. A case in point was the characteristic open layout plan, which symbolized the ideals of an open society. Regrettably, this emblematic layout did not translate successfully on the ground. The anticipated impact of this layout on fostering democratic values and a sense of community cohesion did not unfold as initially envisioned. In other words, the American urban ideals encountered challenges that mirrored earlier experiences under British influence. The intricate interplay between foreign concepts and local cultural realities posed hurdles that were challenging to overcome. This narrative underscores the complexities of urban planning and the necessity of deeply understanding and respecting the cultural fabric of a city, as well as acknowledging the inherent limitations in the translation of foreign ideals onto an existing urban landscape.

In the subsequent decade, adjustments to the American approach became imperative within the context of evolving national priorities. Pursuing a successful oil policy remained paramount, and the pivotal role of Iran's influential and affluent Shah underscored the urgency of this objective. During this period, nationalist architects sought to assert their own architectural identity, reflecting a desire to maintain their unique cultural heritage and values. While they acknowledged the enduring relevance of core principles inherited from modern planning—such as democracy and emancipation—they were keenly aware that architecture and urban planning could not be mere technical endeavours devoid of cultural context. Instead, they recognized that these disciplines could reflect their society's intrinsic cultural nuances. In contrast to the foreign models that had preceded them, these

nationalist architects sought to infuse their designs with a solid grounding in local cultural values. They envisioned architecture and urban planning as platforms for projecting an authentic image of their society—one that was shaped by a collective ethos deeply rooted in their culture. The 1970s emerged as a pivotal era marked by the crystallization of individually experienced spaces, socially engaged design philosophies, and an environmentally attuned perspective. Iranian architects and urban planners embarked on the transformative journey of translating their national theory into tangible reality. This marked a significant departure from foreign-influenced models and represented a turning point towards a more authentically Iranian architectural and urban identity.⁵⁶⁶

⁵⁶⁶ Newsletter O 65, December. ArcRef: 134844F. BarCode: Z01622278.. BP Archives Date: 1963
The British Survey Popular Series: Persia. ArcRef: 134844D. Barcode: Z01622275. BP Archives. Date: 1959.
The Banker, Middle East Oil: Europe's life Blood? By Eilfred King. ArcRef: 134844B. BarCode: Z01622273. BP Archives. Date: 1956.
New Refinery Projects; General. ArcRef: 72337. Barcode: 66002. BP archives. Date: 1947-51.

6 Ahwaz's Enduring Legacy

Interweaving Capitalist Narratives and Antidotes to Communism

Time frame

1973 (The oil nationalization in practice) -1979 (The Islamic Revolution)

Main questions

- How did Iranian architects and planners strategically investigate and foster a national brand, shaping a distinct identity in the petroleumscape of Ahwaz?

6.1 Introduction to the Chapter

Amidst the global oil crisis of the 1970s, Iran found itself embarking upon a consequential epoch marked by an oil-driven economic upsurge, profoundly reshaping its newfound autonomy and positioning the nation on the precipice of prosperity. This surge in demand for Iranian oil and its associated manufactured products, particularly from the United States, ignited a wave of private American investments within Iran's borders. This, in turn, facilitated a heightened influx of international investments while smoothing the conduits for enhanced export capabilities. The inception of capitalistic forces bore the fruits of rapid economic expansion, primarily attributed to the oil agreement of 1973, a pivotal catalyst that reverberated across the national economic landscape. Within this tapestry, the Shah of Iran, with the aspiration of tethering Western nations to the sphere of Iranian oil, directed state funds toward realising his cultural aspirations and inclinations. In this pursuit, the avenue of environmental development assumed a strategic mantle artfully wielded to propel his political ambitions and engender a vibrant sense of national pride. Responding to Shah's capitalist aspirations and driven by a quest to discern distinct Iranian characteristics intrinsic to architecture, the trajectory of Ahwaz's architectural narrative was forged along the countercultural path.

Much akin to the chronicle woven within numerous major Iranian cities, Ahwaz's countercultural narrative took root during the 1970s, yielding an array of novel sociopolitical and cultural aspirations. Architecture, emerging as an interconnecting conduit, materialised as a poignant expression of the capital influx—its inception irrevocably linked to the advent of oil within Ahwaz's realm—melding seamlessly with the burgeoning cultural evolution transpiring within urban spaces. As the fulcrum of Iran's oil commerce transitioned from Abadan to Mahshahr and Shahpur ports—owing to their superior capacities for accommodating larger vessels—Ahwaz assumed an instrumental role as the nation's pivotal oil hub. Functioning as both a mediator and intermediary for developed countries, it took on the mantle of an essential conduit in place of Abadan. A profusion of meticulously designed edifices catering to managerial habitation and administrative functions manifested across the urban expanse, a noteworthy feat comprising an impressive ensemble of 2000 residential structures established in 1974—each nestled upon the lands nationalised post the oil movement. This confluence of oil-driven economic ascent, Shah's strategic aspirations, and the pursuit of unique architectural motifs coalesced

to forge the distinct trajectory of Ahwaz's architectural counterculture⁵⁶⁷, a journey epitomising the intricate interplay of economic dynamics, cultural paradigms, and spatial design.



FIG. 6.1 Front Page of Newspaper: "Iran's Control Over Oil Commenced".

Source: Ettela'at Newspaper of July 1973. Iranian National Library Archives.

Date: July 1973. Accessed: January 2017

Positioned within the confines of its capitalist framework, Iran embarked upon the zenith of an era marked by the profound materialisation of ideals, where the urban landscape metamorphosed into a compelling lexicon through which the nation's prosperity was narrated. This juncture witnessed a notable evolution as representation burgeoned into an alternate avenue for environmental interaction, underscoring the mature stages of capitalism's⁵⁶⁸ evolution. During this pivotal epoch, the National Oil Company entered into synergistic partnerships with various

⁵⁶⁷ Pugh, Emily. *Architecture, Politics, and Identity in Divided Berlin*. Culture, Politics, and the Built Environment.. Pittsburgh, Pa.: University of Pittsburgh Press. 2014.

Raizman, David Seth. *History of Modern Design*. Seconded. Upper Saddle River, New Jersey: Pearson Prentice Hall. 2011.

⁵⁶⁸ Glyn, Andrew. *Capitalism Unleashed : Finance Globalization and Welfare*. Oxford: Oxford University Press. 2006.

Stretton, Hugh. *Capitalism, Socialism and the Environment*. Cambridge: Cambridge University Press. 1976.

Wright, Ian. *The Social Architecture of Capitalism*. St. Louis: Federal Reserve Bank of St Louis. 2004.

Aureli, Pier Vittorio, and Temple Hoyne Buell Center for the Study of American Architecture. 2008. *The Project of Autonomy : Politics and Architecture Within and against Capitalism*. Forum Project. New York: Temple Hoyne Buell Center for the Study of American Architecture.

Deamer, Peggy. *Architecture and Capitalism : 1845 to the Present*. Hoboken: Taylor and Francis. 2013.

national ministries, collectively emblematic of their interwoven agreements and collaborative endeavours. Within this collaborative milieu, Iranian architects and urban planners assumed pivotal roles, seized by a singular opportunity to contribute to the crystallisation of the national anti-communism stance—a strategic endeavour tailored to underpinning Iran’s oil-centric capitalism during the flourishing era of oil-driven economic surge.⁵⁶⁹



FIG. 6.2 Images Showing the Lack of Fuel in American and European Cities.

Source: <https://www.kpbs.org/news/2013/10/16/the-1973-arab-oil-embargo-the-old-rules-no-longer>
 Date: 1973. Accessed: January 2022

Amidst these synergies, individual architectural marvels akin to urban landmarks materialised as a testament to these collaborations. One such illustrious creation was the Jondhi-Shapour University (1968-1978), a magnum opus attributed to the visionary architect Kamran Diba, appointed by imperial decree. This architectural emblem, among others, mirrored the synergy between the state’s aspirations and the artistic prowess of the nation’s architects. Beyond the realm of aesthetics, the national administration employed an arsenal of spatial instruments to meticulously choreograph the city’s expansion, intrinsically rooted in its overarching objectives.

⁵⁶⁹ Wright, Ian. *The Social Architecture of Capitalism*. St. Louis: Federal Reserve Bank of St Louis, 2004.

This was epitomised by the inception of the second Comprehensive Plan of Ahwaz, a concerted endeavour uniting the Iranian monarchy, the national planning institute, and the consultative expertise of Dr. Ali Adibi's esteemed consultancy. This ambitious venture, a testament to collective vision, came to fruition during the transformative 1970s. Ali Adibi, the pivotal architect of this orchestrated growth, was summoned anew by the National Iranian Oil Company—a vital custodian of the city's lands—for a second stint, a testament to his instrumental role in shaping the city's landscape. The narrative of Iran's capitalism, at this zenith of expression, unravelled through a tapestry woven with collaborative agreements, architectural finesse, and strategic city planning—interwoven threads that collectively forged the remarkable panorama of a nation stepping boldly into the fold of modernity.

The preceding era of neglected urban planning bore the essence of socio-economic collaboration, entailing the comprehensive revitalisation and modernisation of Ahwaz. This endeavour encompassed multifaceted objectives: engendering urban stability in tandem with the city's expansion and fostering the tenets of American consumerist culture. However, a paradigm shift marked the arrival of the new Comprehensive Plan, wherein urban and architectural dynamics—transitioning from agricultural to industrial ethos—became integral components interwoven with the prevailing political landscape. In the wake of the transformative oil capital surge, Ahwaz's urban fabric underwent profound alteration, its contours shaped by the imperatives of this newfound wealth reservoir. Notably, oil emerged as a potent source of affluence and influence for the national administration, precipitating increased land acquisition fuelled by the allure of the region's black gold. This economic propulsion was a driving impetus behind the development initiatives, consequently compelling the selection of architects and urban planners affiliated with the imperial milieu. The influx of newly-arrived immigrants, hailing from diverse origins, was strategically channelled into these nascent urban arenas, a reservoir of labour to propel the burgeoning industrial endeavours.



FIG. 6.3 Iran Extracts Oil in the UK.

Source: Khake-e Naft Magazine, No. 361. Iranian National Library Archives.

Date: 1971. Accessed: January 2017

This orchestrated transformation was inextricably linked to media orchestration, wielded as a tool for pervasive control over the propagation of these directed changes. Consequently, Ahwaz's narrative underwent a memorable transformation, steered by the confluence of wealth, power, strategic planning, and media manipulation. The juncture witnessed the genesis of an elaborate welfare system, an oasis of prosperity that cast its benevolent shade over the oil-rich cities. Notably, Ahwaz's welfare network surpassed the nation's prominent urban centres, exerting an influence comparable to, if not eclipsing, the capital itself. The revival of Ahwaz from its former state of abandonment unfurled a tapestry woven with socio-economic partnership, architectural innovation, and deliberate urban metamorphosis. The intricate interplay between economic forces, strategic planning, and media control transpired as a unique tableau, ultimately shaping Ahwaz into a dynamic crucible of modernisation and progress.



FIG. 6.4 NIOC and Shell Sign Agreement.

Source: Iran Oil Journal. Iranian National Library Archives.
Date: 1972. Accessed: January 2017

The blossoming of welfare within the urban framework served as an illuminating testament to the burgeoning authority of the Iranian government—a newfound nucleus propelling the city's expansive journey. This duality presented a complex tableau; on the one hand, Iran reaped substantial benefits, yet this narrative failed

to resonate harmoniously within Western corridors. Amidst this narrative, the tide of burgeoning liberalism, emerging with an enigmatic duality, engendered a socio-economic paradox. The mid-1970s witnessed the crescendo of wage-related societal pressures, fomenting an undercurrent of unrest. This crystallised in the form of massive labour strikes, underscored by the resounding voices of both the labour force and the citizenry. This confluence of events ultimately cast a shadow over the once unstoppable momentum of urban growth, impeding its rhythm. However, a more seismic transformation loomed on the horizon—an upheaval that would reverberate across the global stage. The Western world harboured increasing discontent, perceiving Iran's surging monopoly as an undesirable equilibrium. This sentiment catalysed a revolutionary torrent in 1979, erasing Iran's unanticipated monopoly from the world map. Subsequently, a prolonged period of conflict—an eight-year war from 1980 to 1988—became the crucible through which the Western world endeavoured to dismantle Iran's newfound stronghold. The narrative of welfare's growth within the urban sphere illuminated the ascendancy of Iran's governmental authority, accentuating its centrality in guiding the city's burgeoning trajectory. Yet, this narrative was far from harmonious, punctuated by the dialectics of liberalism and societal pressures. Ultimately, this intricate tapestry led to a defining point of rupture—the Western world's decisive efforts to dislodge Iran's sudden ascendancy—unleashing a chapter of upheaval that resonates across history's annals.

This chapter serves as an intricate interpretation, meticulously unravelling the paradigm shift in the constellation of critical players—transcending from the Anglo-American stage to the stage confiscated by the Iranian national echelon. The resultant countercultural undercurrents reverberating through the oil cities' spatial dynamics stand as a testament to the potency of this transformative shift. This endeavour aspires to elucidate the interplay—how the anti-communist efforts of a federal capitalist state, interwoven with its distinct national pursuits, orchestrated a tapestry of metamorphosis across the urban landscape. In doing so, it delves into the nuanced exploration of the capitalist underpinnings within oil-laden territories, scrutinising their evolutionary trajectories. Moreover, it analyses the theoretical tenets of counterculture in the domains of architecture and urban planning, as embraced by Iranian architects and urban planners. Evident within these pages is an expedition to uncover the latent connection between anti-communist manoeuvres and the intricate urban modulations that ensued. These stratagems, meticulously orchestrated by the federal capitalist regime, entwined seamlessly with broader national objectives, thereby imprinting the cityscape with their profound influence. In parallel, an astute dissection of the capitalist economic landscape is undertaken, particularly within the oil-rich domains—an exploration that traverses the labyrinthine transitions shaping these coveted spaces.

Parallel to these economic intricacies, the chapter embarks on an insightful journey traversing the theories of counterculture within architecture and urban planning, interwoven with the lived experiences of Iranian architects and urban planners. Vividly painted canvas unravels the echoes of their European and American education, resonating with critical global architectural trends. This intercontinental intersection steered the trajectory of architectural innovation, ultimately echoing through the currents of social discontent—an embodiment of the cross-pollination between theory, education, and social praxis. The chapter unfurls a panoramic exploration—an odyssey tracing the reconfiguration of actors, the symphony of anti-communist symposia, the irregular dance of capitalism, and the intersection of architectural theory and societal reality. These threads, woven into a richly textured tapestry, illuminate a multidimensional narrative encapsulating the soul of the cities' evolution.⁵⁷⁰

The chapter stands as a scholarly voyage, meticulously navigating the intricate nexus binding oil capital and architectural domain. Its primary objective resides in illuminating the idiosyncrasies permeating the rapport between these seemingly disparate realms while offering an insightful dissection into the Iranian national state's deft orchestration of this intricate interplay. A poignant architectural analysis is unveiled and refracted through the contextual lens of a group of Iranian architects by engendering a laser-focused exploration through the prism of select case studies. The crux of this endeavour hinges upon the paramount significance of specificity intrinsic to these chosen case studies. Through their lens, the nuanced fabric of the relationship between theoretical tenets and architectural manifestation is deftly interwoven, vividly underscoring the multifaceted ways in which overarching theories unfurl upon the architectural canvas. This empirical engagement highlights the pragmatic dimension, elucidating the manner in which Iranian architects grappled with the quotidian challenges against the backdrop of the global architectural zeitgeist. This foray encompasses the historic recalibration, where the past becomes an adjustable cartography, ingeniously realigning to shed luminosity upon the palpable influence of theories upon the narratives enshrined within urban and architectural trajectories. This temporal cartography, akin to maps meticulously redrawn, unfurls a visual representation of the ideological winds that sculpted the cityscape and architectural tapestry. In sum, this chapter embarks on an intellectual voyage that stitches together the seemingly disparate realms of oil capital and architectural innovation. Through specific case studies, it navigates the theoretical currents shaping architectural endeavours, revealing the responsive strategies

⁵⁷⁰ Stichting, Archis, A. M. O. Office for Metropolitan Architecture, and L. A. B. C. *Counterculture*. [in English] Archis ; 2010, #2. Amsterdam, the Netherlands: Stichting Archis, 2010.

forged by Iranian architects within the intricate interplay of global architectural discourse. Ultimately, this scholarly exploration refracts the past through an adjusted historiographical prism, charting the profound imprint of theories upon urban and architectural narratives.



FIG. 6.5 Document in Iranian National Archive Revealing Contracts among Ministry of Transport, Ministry of Agriculture, and the Oil Company.

Source: The Iranian National Archive
Date: 1970s. Accessed: January 2017



FIG. 6.6 Document in Iranian National Archive Revealing Contracts among Ministry of Transport, Ministry of Agriculture, and the Oil Company.

Source: The Iranian National Archive
Date: 1970s. Accessed: January 2017



FIG. 6.7 Front Page of Iran Oil Journal Showing Shah at the Center of Industrial Development and Prosperity.

Source: Iran Oil Journal. Iranian National Library Archives.

Date: 1972. Accessed: January 2017

6.2 Background

6.2.1 The Political Underpinnings of Topping Plant Facilities in Ahwaz: Fuelling Iran's Prosperity

In the early 1970s, Iran was experiencing significant economic growth and had a powerful military, all under the visionary leadership of the Shah. He envisioned Iran as a beacon of civilization and aimed to make it the world's leading oil producer. However, the Shah harboured regret over the 1954 Consortium Agreement, which limited Iran's control over its oil industry. He embarked on a strategic journey to regain control, placing the National Iranian Oil Company (NIOC) at the forefront.

In 1973, a unique opportunity emerged for Iran due to political tensions in the Middle East, creating an oil shortage globally. Iran, strategically positioned, seized this moment to demand a renegotiation of the Consortium Agreement. The resulting "Sales and Purchase" agreement, known as the St. Maurice Agreement, was signed in June 1973, heralding a new era for Iran's oil industry. This agreement granted Iran complete authority over its oil facilities and reserves, marking a shift from foreign control to national autonomy. Over the next five years, international entities provided substantial capital for development projects. Notably, Iran allocated a share for domestic consumption, recognizing the future rise in local demand.⁵⁷¹

The 1973 agreement allowed Iran to define its oil priorities, focusing on fulfilling NIOC requirements rather than exporting refinery products. Consortium members transitioned from operators to privileged customers, aligning with Iran's aspirations.⁵⁷² This pivotal agreement transformed the relationship between NIOC and oil corporations into one marked by equity and reciprocity.⁵⁷³ It evoked a sense of national pride, celebrated through carnivals and newspapers, and an emblematic committee expressed gratitude to the Shah. For Iranians, this marked the beginning of the "oil reign." Iran's ascendancy continued, as the 1973 agreement led to economic prosperity. Iran's annual income surged from \$1 billion in 1970 to

⁵⁷¹ Villiers, Gérard de, Bernard Touchais, and Annick de Villiers. *The Imperial Shah: An Informal Biography*. [in English] 1st American ed. ed. Boston: Little, Brown, 1976.

⁵⁷² 1961 Arcref 233114: Bases for economic Evaluation of topping plant facilities, Ahwaz

⁵⁷³ Iran Oil Exploration and Production Company and Iran Oil Refining Company were both dissolved and were replaced by a non-profit company called Oil Services Company by the Consortium.

\$20 billion in 1977, driven by a dramatic increase in crude oil prices. This newfound wealth fuelled state-sponsored initiatives, industrial expansion, and environmental progress, solidifying Iran's position as a global oil powerhouse.⁵⁷⁴

6.2.2 Metamorphosis of Role Dynamics among Key Actors

On April 16, 1975, a momentous announcement reverberated, signalling a new era of international collaboration and cross-border ventures. The National Iranian Oil Company (NIOC), in partnership with esteemed counterparts like British Petroleum, Chevron, and Norway's SAGA, secured a global tender for exploration and production operations in the expansive continental shelf of western Greenland. This ambitious endeavour led to concession agreements with the Danish Government's Ministry for Greenland, spanning ten blocks distributed across three designated areas, showcasing the scale of global collaboration in exploration.

To facilitate this partnership, NIOC established a whollyowned subsidiary company registered in Denmark, streamlining operations as per the concession agreement's requirements. NIOC's global engagements also extended to its involvement in refineries in Madras and Sasolburg, showcasing its international footprint. Furthermore, NIOC entered a significant partnership with a distinguished British entity, jointly exploring oil in the North Sea, reflecting the spirit of international cooperation and the quest for untapped resources. This episode in NIOC's history highlighted its role as a global player, adeptly navigating international collaborations with vision and skill.

In April 1975, a pivotal agreement was forged between NIOC and British Petroleum to establish a joint-operated tanker fleet. This groundbreaking accord marked a shared realization of the need for a paradigm shift in the relationship between oil-producing nations and corporations. It signalled the aspiration for a more equitable and mutually beneficial engagement, reflective of changing global energy dynamics. Simultaneously, NIOC ventured into international partnerships, signing a consequential agreement with Shell, underscoring the Company's adeptness in cross-border collaborations. This epoch marked NIOC as an agent of transformation, navigating the evolving currents of the global oil landscape. It was an era where collaborative ventures and pioneering agreements illuminated the path toward a more balanced and interdependent relationship between oil producers and

⁵⁷⁴ <http://www.petromuseum.ir/content/32/Editorial/4674/The-Day-Iranian-Oil-Really-Became-National>

corporations. These agreements depicted a shifting landscape of roles and benefits within the oil industry, with Iran emerging as a transformative force, recalibrating the equilibrium of global energy dynamics. Iran's influence extended beyond borders, materializing in successful overseas oil ventures and the deployment of Iranian experts abroad. These agreements bore witness to Iran's elevation as a significant player on the world's energy stage, leaving an indelible mark on history.

The Iranian oil industry, under the leadership of the Shah and guided by Manuchehr Eghbal, underwent a profound transformation. Eghbal's stewardship epitomized efficiency and efficacy, orchestrating progress in every facet of the oil, gas, and petrochemical sectors. This era witnessed a symphony of advancement, driven by Eghbal's insightful management and aimed at enhancing the quality of life for industry workers. However, the Shah's vision extended beyond oil, recognizing the need for diversified export industries to sustain Iran's prosperity in the long term. He foresaw a future where gas reserves could fuel not only domestic industries but also drive national prosperity through astute exportation. This visionary perspective positioned Iran at the forefront of a global shift away from oil dependency, envisioning a sustainable future where prosperity transcended finite resources. In summary, this period marked a transformative phase for Iran's oil industry and its strategic diversification beyond oil, positioning the nation as a pioneer in envisioning a world beyond oil's dominion and striving for sustainable prosperity.

6.3 Architectural Paradigms: Architecture as a Manifestation of Counterculture

Amidst the resounding crescendo of the 1970s oil boom, a resolute desire coursed through the Shah—a desire to effectuate a transformative modernisation that would drape the capital and other pivotal cities in a new and dynamic image. This ambition coalesced into strategic investments that coursed through the veins of industrial and urban infrastructures, the very sinews that shaped the landscape of progress. Bearing the Shah's steadfast resolve, this transformative endeavour rippled across multiple dimensions. It reverberated through Iran's economic, political, and cultural topography, unfurling a narrative of evolution that pulsed independently from the contours of US-styled governmental control. Within the crucible of this epoch, Iran's trajectory was a tale of self-determination, a trajectory guided by the Shah's discerning preferences. Central to this narrative was the aspiration to cast Iran's destiny beyond the shadow of the capital, a pursuit that unfurled through a strategic decentralisation of welfare. The Shah envisioned a tapestry of development transcending the confines of Tehran, nurturing prosperity and progress, and extending the entire nation's fabric. This juncture was emblematic of an era where the Iranian government assumed a position of profound influence, steering the nation's swiftly evolving economy. This dynamic was imbued with a sincere belief in the tenets of capitalism, drawing inspiration from the American model. It stood firmly juxtaposed against the backdrop of the ideological current coursing through the global sphere—a current that was equally fervent yet bore the imprints of communism, as propagated by the USSR. In this symphony of change, the Iranian government emerged as a catalyst—a conductor that orchestrated the cadence of progress, transforming the national landscape in pursuit of a vision that resonated with the contours of capitalism and the ideals of self-reliance. This epoch, an intersection of ambition and action, propelled Iran into a narrative that was uniquely its own—a narrative where aspirations converged with pragmatism to shape a transformative era of modernisation and development.⁵⁷⁵

Conversely, the 1970s unfolded as an epoch characterised by the ascendancy of Farah Diba—a reign that saw her wield an indomitable influence as the Queen of Iran. Farah Diba emerged as a multifaceted figure possessing a refined cultural sensibility and armed with architectural acumen honed at the prestigious École

⁵⁷⁵ Wright, Ian. *The Social Architecture of Capitalism*. St. Louis: Federal Reserve Bank of St Louis, 2004.

Spéciale d'Architecture in Paris. Her outlook was marked by a humbleness that resonated even amidst her elevated position, coupled with an unwavering commitment to aesthetic ideals. Within the tapestry of Iran's modernisation journey, Farah Diba emerged as a guiding luminary—a beacon whose radiance was marked by her earnest desire to steward the trajectory of modernisation fittingly and reasonably. Her architectural background and education in the hallowed halls of the École Spéciale d'Architecture lent her a unique perspective that seamlessly integrated aesthetics with a profound comprehension of built environments. In her role as Queen, Farah Diba ventured beyond traditional trappings, ushering in an era where her influence was palpable across multiple realms. Her cultural proclivities and architectural sensibilities intersected to craft a narrative that sought to align modernisation with an understated elegance—a vision that resonated with the broader aspirations of an evolving Iran. Within this narrative, Farah Diba's presence was not just ornamental but transformative. Her perspective was a lodestar that steered Iran's modernisation journey, infusing it with a sense of cultural rootedness and aesthetic purpose. Amidst the dynamic currents of change, she stood as a figure who, armed with her cultural grace and architectural expertise, left an indelible imprint on Iran's trajectory of modernity. This impression resonated with humility, cultural mindfulness, and an abiding commitment to the essence of aesthetics.⁵⁷⁶

The divergence in policy between the Shah and the Queen cast a striking juxtaposition, giving rise to a countercultural undercurrent within the realm of architecture. This contrast, emblematic of their differing stances and trajectories, catalysed an alternative approach—an approach that found resonance within the global tapestry of counterculture, a phenomenon instigated by the sweeping Cold War rivalry between the proponents of capitalism and communism. This countercultural movement sought to redefine the intricate nexus between individuals and the built environment, envisioning a realm that transcended conventional boundaries. Peggy Deamer, a discerning voice in architectural discourse, contends that vocational architecture was perceived as an instrument of hegemony—a mechanism that warranted re-evaluation and transformation within this countercultural tapestry.⁵⁷⁷ Iran's architectural landscape observed the tumultuous interplay of these countervailing forces. The 1970s witnessed architectural creations that bore the indelible imprint of this ideological discord—an era marked by an intricate interplay between divergent inspirations and ambitions. This epoch was a canvas where the fissures of political incoherence were woven into the fabric of architectural output—an output that resonated with both ambition and conflict.

⁵⁷⁶ Shirali, Mahnaz, and Bernice Dubois. *The> Mystery of Contemporary Iran*. [in Aus dem Franz.übers.] New Brunswick: Transaction, 2015.

⁵⁷⁷ Deamer, Peggy. *Architecture and Capitalism: 1845 to the Present*. Hoboken: Taylor and Francis, 2013.

On one trajectory, architectural endeavours turned to the wellspring of Iran's rich heritage—a homage to its humble values, seeking to infuse its creations with a sense of rootedness. Concurrently, an aspiration existed to legitimise a modern capitalist state, an endeavour marked by a superior projection of its stature onto the architectural canvas. In other words, in this dialectical interplay, counterculture emerged as an extraordinary avenue—an intermediary that functioned as a unifying force. It deftly orchestrated the harmonious coalescence of modernism, nationalism, and aesthetics—a triadic convergence that was emblematic of Iran's countercultural journey within the architectural realm. Moreover, the infusion of counterculture into architecture held a transformative power. It acted as a bulwark, fortifying architectural traditions against the influx of functional modernism and the encroachment of mechanistic paradigms—an embodiment of the adage that the past is a bridge to the future. In other words, the Iranian architectural landscape of the 1970s was a canvas upon which counterculture painted a narrative of unity and reclamation. This narrative defied convention and nurtured a harmonious interplay between the nation's heritage, modern aspirations, and aesthetic visions.

Under the nurturing support of Farah Diba, the ascendancy of national architects burgeoned a phenomenon that set the stage for a series of pivotal International Congresses of Architects within Iran's borders. The inaugural Congress, held in 1970, unfolded as a grand assembly that welcomed luminaries from the global architectural arena—esteemed architects, urbanists, erudite scholars, and visionary planners. This epochal gathering was aptly themed “The Interaction of Traditional Heritage and Technology”, a theme that encapsulated the intricate interplay between time-honoured Iranian traditions and the sweeping currents of modernity. As Mohammad Gharipour contends, the architects of this era, through a skilful fusion of Iranian heritage and global modernism, embarked on a journey that underscored the imperative of harmonising architecture with the environment and upholding the essence of Iranian culture.⁵⁷⁸ This aspiration, in essence, sought to weave a narrative that resonated with the nation's ethos while simultaneously embracing the universal principles of architectural innovation.

The second Congress, a culmination of Iran's successful oil concession in 1973, bore testimony to the dynamic trajectory that was shaping the nation's architectural discourse. In 1974, this assembly convened under the banner of deliberating the future of Iranian cities—a dialogue that grappled with the intricate interplay of “challenges and opportunities posed by increasing oil revenues.” The outcomes of these discussions were profound, serving as a crucible for the inception of

⁵⁷⁸ Gharipour, Mohammad. *Contemporary Urban Landscapes of the Middle East*. Abingdon, Oxon :: Routledge, 2016.

“Critical Regionalism”.⁵⁷⁹ The notion of Critical Regionalism birthed within this intellectual crucible was a paradigm shift in design thinking. It championed the cause of crafting human settlements that celebrated their unique relationship with the environment, the climate, local materials, and indigenous culture. This principle stood as an inspirational beacon for planners and designers alike, inviting them to weave a narrative that was rooted in place and pulsated with the rhythms of Iran’s distinctive identity. These manifestos galvanised architects and urbanists to weave narratives that resonated with the essence of Iran’s heritage while converging with the aspirations of modernity. This epoch was a masterpiece of ideas—a written convergence of tradition and innovation that yielded an architectural legacy, both visionary and rooted, that continues to inspire the discourse of design to this day.

From a global perspective, counterculture in architecture referred to a movement that emerged in the 1960s and 1970s as a response to mainstream architectural norms and societal values. It was characterised by rejecting conventional design principles and embracing alternative approaches that challenged established aesthetics, spatial arrangements, and urban planning. Countercultural architecture aimed to reflect the values of the counterculture movement as a whole, including anti-establishment sentiments, social equality, environmental consciousness, and a desire for more communal and authentic living spaces. Key features of countercultural architecture included Alternative Materials and Construction Methods, Integration with Nature, Communal Spaces, Adaptive Reuse and Sustainability, Artistic Expression, Rejecting Hierarchical Design, Social and Political Statements, and Connection to Cultural Movements. It’s important to note that counterculture architecture was not a uniform style but rather a diverse collection of ideas and approaches that varied across different regions and contexts. While the countercultural movement waned in the late 1970s, its influence on architecture continued in the emphasis on sustainability, community-oriented design, and the exploration of alternative construction methods that prioritise environmental and social considerations.⁵⁸⁰

⁵⁷⁹ Gharipour, Mohammad, ed. *Architectural Dynamics in Pre-Revolutionary Iran : Dialogic Encounter between Tradition and Modernity*. Bristol: Intellect. 2019.

⁵⁸⁰ *Occupy Wall Street*. 2013. Funambulist Pamphlets, Volume 5. Brooklyn: Punctum Books.

Sadler, Simon. *The Situationist City*. Cambridge Mass.: MIT Press. 1998.

Raynsford, Anthony. “The Limits of Counterculture Urbanism: Utopian Planning and Practical Politics in Berkeley, 1969–73.” *Journal of Planning History* (20230816) 2023. <https://doi.org/10.1177/15385132231193389>.

Stichting Archis, Office for Metropolitan Architecture. AMO, and C-LAB. *Counterculture*. Archis, 2010, #2. Amsterdam, the Netherlands: Stichting Archis, 2010.

Among the Middle Eastern nations of the 1970s, Iran stood as an exceptional case, characterised by an unusually robust and sustained alliance between architects and politicians. This alliance took on a distinctive hue, deeply influenced by the tenets of counterculture, which were seamlessly woven into the architectural fabric. As a result, architects assumed a role akin to active political agents, their designs constituting a tangible expression of a holistic and revolutionary urban growth agenda. Central to this paradigm was the notable collaboration between architects and the political echelons. This partnership, fortified by the infusion of countercultural ideals, extended beyond the confines of mere architectural practice. It metamorphosed into an avenue for architects to assume the mantle of political strategists, actively contributing to formulating a comprehensive blueprint for urban transformation.

Following the resonance of the International Congresses, the Iranian government embarked on a transformative endeavour under the auspices of its formidable ownership of the Oil Company and its ardent appreciation for traditional Iranian architecture. This endeavour found its embodiment in the deliberate engagement of adept Iranian architects and urban planners, who were meticulously chosen to shape both the industrial landscape and the corresponding townscape with equal emphasis. The architects, a dynamic blend of those trained abroad and those educated in the confines of Iranian universities, held the reins of transformation, imprinting their vision onto the evolving urban fabric.⁵⁸¹ Entrusted with the task of reinterpreting traditional paradigms within a contemporary framework, these architects embarked on a journey to weave modernity with heritage. Their canvas spanned from grandeur industry-specific structures to the towns they inhabited.⁵⁸²

An instrumental facet of this collaborative endeavour lay in the penchant for commissioning Iranian architects—a dynamic that spurred the emergence of a vibrant generation of architectural visionaries. Notable figures such as Kamran Diba, Abdol-Aziz Farmanfarmayan, Ali Adibi, and Nader Ardalan, among others, stepped to the forefront, grappling with the task of shaping an Iranian manifestation of modernity. They embarked on a quest to delineate the contours of a modern architectural narrative that resonated with the soul of the nation—a narrative that was profoundly rooted yet capable of embracing global currents of change. These architects, many of whom had traversed the realms of foreign education and governmental corridors, became pivotal conduits in the inception of an

⁵⁸¹ In 1978, there were roughly 2500 college-educated architects in Iran, 1,230 of whom had graduated from the University of Tehran, 500 from the National University, and 770 from foreign universities.

⁵⁸² Arefian, F. F, Iradj Moeini, S. H. "Urban Change in Iran: Stories of Rooted Histories and Ever-accelerating developments. 2016.

authentic Iranian brand of modern architecture. Their dual roles as educators and governmental advisors provided them with an unparalleled vantage point—one that allowed them to shape the trajectory of architectural discourse and practice.

The interplay between architects and politicians in Iran's countercultural milieu of the 1970s forged a symbiotic partnership that yielded a revolutionary architectural narrative in more ways than one. It was a narrative that spoke not only of buildings and structures but also of ideologies, aspirations, and the harmonious fusion of tradition and progress. This epoch marked the ascent of architects as political visionaries, laying the groundwork for an architectural legacy that continues to resonate and inspire. The emergence of a new generation of architects was intricately intertwined with the realm of architectural education, creating a synergistic relationship that left an indelible mark on both spheres. This symbiotic dynamic was particularly pronounced within the context of architecture schools, where a transformative shift was catalysed—a shift that crystallised into what is now known as the traditional Iranian architecture movement. Within the hallowed halls of these institutions, a profound reimagining of architectural education unfolded. The focal point shifted toward embracing the ethos of traditional Iranian architecture, a movement that was not merely a nostalgic homage to the past but a deliberate endeavour to cultivate and propagate the essence of local architectural culture. This recalibration acknowledged that an integral part of architectural education was fostering a deep connection to the indigenous architectural heritage, an awareness that was pivotal in shaping architects' perspectives. This movement spurred a novel way of conceptualising the principles underpinning Iranian vernacular architecture and urban spaces. Architects embarked on a journey to bridge the chasm between modernity and tradition, transcending eras to establish spatial configurations that harmonised with the climate and harnessed local materials. This synthesis served as a testament to the evolution of architectural thought and practice, one that paid homage to heritage while embracing the zeitgeist of progress.

Crucially, architectural education in this era was not confined to transplanting modern architectural theories and styles. Instead, it embarked on a pioneering voyage to marry these contemporary tenets with the resonant essence of Iranian vernacular architecture. This amalgamation was an intellectual endeavour to pre-empt the potential dilution of modernism, ensuring that it did not devolve into a mere instrument subservient to the demands of capitalism. This epoch marked the genesis of an architectural discipline that encapsulated the interplay between past and present, tradition and innovation. The movement within architectural education and practice was an ode to continuity—an homage to the heritage that shaped Iran's architectural identity while concurrently crafting a narrative that resonated with the aspirations of a modern era. This dialogue enriched architectural discourse

and nurtured a breed of architects who were both stewards of tradition and pioneers of progress.

Back to the idea of counterculture in Iran, reinstating societal evaluations, encompassing the realm of political viewpoints, and fostering an enduring public discourse, counterculture emerged as a dynamic force that left an indelible mark on the architectural domain, permeating the fabric of everyday existence. This countercultural tide unfurled as a catalyst, nurturing socio-political consciousness within architecture's purview, thereby shaping the contours of daily life. In the intricate dance of contradictions that characterised architectural discourse, Iranian planners deftly choreographed a transformative journey that traversed the expanse from consumerism to liberal democracy. This journey was underpinned by a concerted effort to interlink social spaces in a web of critical interactions, all predicated on the belief that architecture bore the potential to wield profound influence over social consciousness. The revival of architecture marked a pivotal juncture as it embraced a symbiotic union between modernist universalism and indigenous architectural motifs, heralding the dawn of the postmodern era—an era that permeated design, culture, and the very fabric of societal perception. Within this paradigm shift, the Critical Regionalism notion took root and flourished in Iran, charting a distinctive trajectory that diverged from the contours of international postmodernism and instead found its essence steeped in a nationally imbued modernist aesthetic. At its core, Critical Regionalism embarked on a journey to fathom the very soul of traditional vernacular architecture. This quest was not merely a homage to heritage but a dynamic interplay between the echoes of history and the vistas of modernism. This architectural ethos aimed to bridge the chasm between the universal tenets of modern design and the intrinsic character of local built environments. As Nader Ardalan aptly articulated, Critical Regionalism emerged as a countercultural response—an antidote—to the prevailing sense of placelessness and vacuity that had subtly crept into the tapestry of modern architecture. It was a conscientious effort to infuse architecture with meaning, to rekindle a sense of identity and rootedness that resonated with the ethos of a place.⁵⁸³

Moreover, this countercultural ethos manifested as a transformation that swayed the postmodern pendulum toward a design philosophy that was quintessentially Iranian in its essence. The tenets of Critical Regionalism became a vessel to not only echo the traditions of the past but to reinvigorate modernism itself—a convergence that was as innovative as it was culturally significant. The dawn of Critical Regionalism marked a renaissance—a nuanced amalgamation of modernism and heritage

⁵⁸³ Gharipour, Mohammad, ed. *Architectural Dynamics in Pre-Revolutionary Iran : Dialogic Encounter between Tradition and Modernity*. Bristol: Intellect. 2019.

that reshaped architectural language, culture, and how society perceived its surroundings. This movement was a symphony of identities—a countercultural harmony that sought to infuse architecture with purpose, to transcend the confines of place-lessness, and to sculpt an architectural narrative that was both rooted and resonant. The Iranian state’s recognition of postmodernism was underscored by a countercultural ethos viewed through the lens of geopolitics. Amid this dynamic landscape, governmental mandates held a pivotal role—one that intricately wove together hegemonic and counter-hegemonic forces, culminating in a quest for design strategies that held the potency to navigate these complex currents. Within this narrative, a distinct preference emerged—an inclination to converse in the language of postmodernism while simultaneously embarking on a quest to unearth vernacular forms that resonated deeply. A notable hallmark of this era was the profound support extended by the Iranian government to architects, providing them with a conducive environment to explore alternative aesthetics within the realm of modern architecture. This support was more than a mere gesture; it was a canvas upon which architects could paint their visions, embracing a local identity while pushing the boundaries of modern design.

In other words, amid this confluence of architectural intent, a common aspiration echoed—a collective endeavour to craft an architectural and urban narrative rooted in the process of localising modernisation within the tapestry of Iranian cities. This shared vision was not merely a matter of aesthetics; it was a countercultural anthem that sought to encapsulate the essence of the nation’s heritage, aspirations, and identity within the contours of contemporary architectural discourse. This was a saga of countercultural agency at the intersection of geopolitics and design—an era marked by the alignment of diverse forces, all orchestrated to cultivate a distinctly Iranian architectural renaissance. This movement was an ode to fusion—an intricate dance between the universal tenets of postmodernism and the nuanced hues of Iranian identity painted on the canvas of modern architecture. For instance, against the backdrop of this architectural tableau, the 1960s bore witness to the emergence of modern malls—a tableau that sought to construct a reciprocal loop between capitalism and consumerism. This schema, however, held a paradoxical note, as workers found themselves in the unique predicament of paying for the products of their own labour. This paradox, a quintessential reflection of the era’s socio-economic dynamics, formed a touchstone for countercultural intent.⁵⁸⁴ At this juncture, counterculture assumed the role of a guardian for traditional bazaars—relics of a bygone era—reinventing them as crucibles of social interaction. This strategic reinvigoration aimed to lay the groundwork for organised social

⁵⁸⁴ Sadler, Simon. *The Situationist City*. Cambridge Mass.: MIT Press. 1998.

exchanges, fostering a locus for cultural exchanges, communal connections, and the undercurrents of human interactions. The countercultural movement was a nuanced symphony that orchestrated a dance of ideologies within the architectural realm. It charted a trajectory that harmonised the convoluted contours of consumerism, capitalism, and democracy, producing spaces for interaction that bore witness to the ebb and flow of socio-political consciousness. This movement was more than architectural—it was a cultural force, an impetus that fostered dialogues, sparked connections, and chiselled pathways toward enriching collective awareness.

The landscape of the Oil Company projects presented a suitable stage for architectural creativity to intertwine with the state's ambitions for expansion within the capitalist paradigm. In navigating the subtle currents of architecture that invariably mirrored capitalist inclinations, architects found an avenue to express their ingenuity. These projects emerged as a canvas onto which architectural innovation could be deftly painted while aligning with the government's overarching objectives. In an environment where the currents of capitalism were pervasive, architects ingeniously harnessed individual structures as symbolic embodiments of oil wealth and vanguards of industrial prosperity. These structures emerged as architectural icons that spoke volumes about the nation's economic prowess within the industrial tapestry.⁵⁸⁵

For Iranian architects, this journey was more than an exploration of design—it was a quest to redefine the contours of modern architecture with a distinct vernacular flair. It was an endeavour that sought to harmonise the tenets of Iranian culture with industry difficulties, a fusion that manifested within the built environment. This voyage gave rise to a hybrid architectural approach—a conscious effort to weave Iran's traditional styles and forms into a new architectural fabric enriched by modern theories and techniques. This indigenous vernacular modernism was characteristic of a revival that revitalised the ethos of Iran's architectural heritage, breathing new life into it by seamlessly integrating contemporary perspectives.⁵⁸⁶ Architects, serving as custodians of tradition and agents of transformation, skilfully resurrected quintessential architectural elements such as arches, vaults, and domes—resplendent symbols of traditional Iranian architecture. Yet, their renaissance bore a novel hallmark, as these elements were ingeniously harnessed to serve contemporary functions and tasks. In this nuanced interplay, the architects breathed new life into heritage, infusing it with a modern vitality that echoed the pulse of an

⁵⁸⁵ *Architecture and Capitalism : 1845 to the Present*, edited by Peggy Deamer, Taylor & Francis Group, 2013. *ProQuest eBook Central*, <http://ebookcentral.proquest.com/lib/delft/detail.action?docID=1318977>. Created from delft on 2021-06-19 13:50:51.

⁵⁸⁶ Sadler, Simon. *The Situationist City*. Cambridge Mass.: MIT Press. 1998.

evolving nation. Ultimately, this era stood as a testament to the marriage of tradition and innovation, a period where architects navigated the delicate interstice between the past and the present, tradition and transformation. In their hands, architectural language emerged as a narrative that resonated with the essence of Iran's heritage while simultaneously echoing the aspirations of a rapidly changing world.⁵⁸⁷



FIG. 6.8 The General Office of the National Company at New Site.

Source: Image number: 004688-80-(left) & 004689-80-(right). Iranian Oil Museum Archives.

Date: 1972-79. Accessed: January 2017

⁵⁸⁷ Shirazi, M. Reza. *Contemporary Architecture and Urbanism in Iran: Tradition, Modernity, and the Production of 'Space-in-Between'*. Cham, Switzerland: Springer, 2018. doi:10.1007/978-3-319-72185-9. <https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1671828> <https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=5214706> <https://doi.org/10.1007/978-3-319-72185-9> <https://link.springer.com/book/10.1007%2F978-3-319-72185-9> <http://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9783319721859> <http://VH7QX3XE2P.search.serialssolutions.com/?V=1.0&L=VH7QX3XE2P&S=JCs&C=TC0001945840&T=marc&tab=BOOKS>.

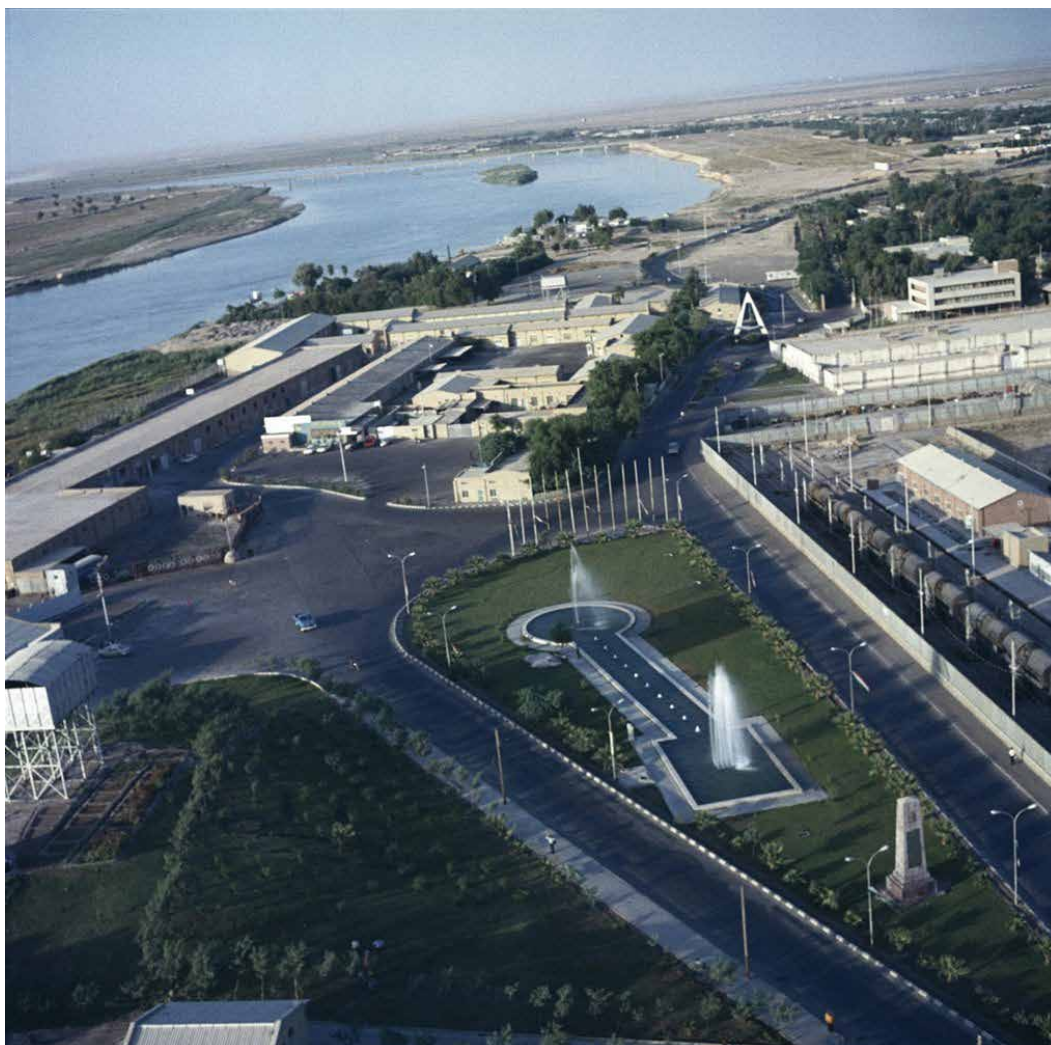


FIG. 6.9 Aerial View of Ahwaz New Site Company Town.

Source: Image number: 009592-79- Iranian Oil Museum Archives.

Date: 1972-79. Accessed: January 2017



FIG. 6.10 Aerial View of Ahwaz Railway Station.

Source: Image number: 009577-79- (left) & 009578-79-(right). Iranian Oil Museum Archives.
Date: 1972-79. Accessed: January 2017

6.3.1 Ahwaz's Countercultural Context:

During the 1960s, Ahwaz had underwent a transformative phase marked by urban expansion. This expansion was orchestrated through a planned development strategy that drew inspiration from American models, a strategy that sought to invigorate commercial growth by expanding shopping malls and casting architecture in a standardised, repetitive mould—an abstraction that bore echoes of the United States architectural ethos. In stark contrast to the welfare-oriented aspirations that permeated Ali Adibi's urban development initiatives, the state encountered challenges in upholding civil rights within the newly emerging suburbs. Regrettably, while encouraging on many fronts, the promise of the White Revolution failed to bridge the racial and societal divides that kept various population segments apart. The result was a disturbing division within the social fabric. In particular, the rural population that had transitioned into the city's new suburban neighbourhoods remained, to a significant degree, disconnected from the bustling urban life and somewhat indifferent to the possibilities of industrial productivity. The discrepancy in the pace of constructing urban plans and the subsequent influx of this population culminated in unstructured living spaces—disjointed pockets of habitation that

were reflective of a haphazard integration process. This tumultuous phase ushered in a wave of resistance among the citizens of Ahwaz, their discontent manifesting in various forms of refusal. The city's landscape bore witness to this palpable rejection, an expression of the dissonance between the vision of planned urban expansion and the lived experiences of those who inhabited this evolving urban tapestry. The 1960s in Ahwaz juxtaposed [who were the actors?] ambitious urban planning endeavours influenced by American models and the stark realities of social disintegration within these newfound spaces. The tension between these contrasting narratives underscored the complexity of urban growth—a reminder that beyond the architectural renderings and urban blueprints, the intricate interplay of human lives ultimately shapes a city's destiny.

Embedded within the transformative landscape of the influential 1970s, a defining epoch that showcased Iran's pivotal role within an oil-centric economic framework, Ahwaz emerged as a canvas onto which the most expansive chapter of its building history was inscribed. This era bore witness to seismic industrial and urban shifts as the city confronted the dual challenge of accommodating remarkable industrial expansions while navigating the intricate web of urban development. In the midst of this dynamic milieu, Iranian architects embarked on a profound reevaluation of the trajectory of modern architecture. Drawing inspiration from the city's social fabric and driven by a resolute aspiration to rectify past shortcomings, they sought to orchestrate a transformation that was not merely confined to physical edifices but resonated deeply with the social tapestry of Ahwaz.

The surge in oil-driven prosperity, a force that not only reshaped the physical urban landscape but also catalysed a profound transformation in the collective spatial consciousness, was instrumental in giving birth to a modern Iranian identity within the city's contours. This era of burgeoning affluence, coupled with the government's robust commitment to far-reaching modernisation endeavours—encompassing ambitious initiatives such as affordable housing programs—instilled a palpable sense of optimism, envisioning the realisation of an Iranian utopia within the tapestry of Ahwaz. The oil boom emerged as a formidable catalyst, reconfiguring the city's tangible physicality and intangible perceptions. Society's well-being was bolstered, and the governmental capacity to marshal expansive modernisation projects imparted a renewed sense of agency—a conviction that the creation of an ideal Iranian urban fabric was an achievable reality within Ahwaz's boundaries.

Amid Ahwaz's industrial growth backdrop, this unique approach, forged at the crossroads of vernacularism and modernism, cultivated a bedrock for countercultural expressions in architecture. This fusion transcended mere aesthetics; it ushered in a paradigm where architecture, a potent language of power wielded by the Company,

was gradually reshaped to underscore solidarity with Iranian culture. The dominance of technical methodologies, inherent to burgeoning industrial complexes, was subdued by the countercultural ethos. This narrative whispered solidarity with Iran's heritage, rejuvenating architectural discourse with a distinctive ethos. The landscape of architectural innovation and countercultural expression was one where capitalism and Iranian culture converged, fostering a transformative milieu that shifted the architectural narrative from a symbol of power to an embodiment of cultural unity and revitalisation.

At the heart of their intellectual pursuits lay a singular ambition: to fortify the city's identity, infusing it with a robust sense of purpose that harmonised seamlessly with its pivotal role within the industrial landscape. This ambition merged into a comprehensive vision characterised by a pro-worker ethos that envisioned urban expansion as a conduit for fundamental change. The emerged aesthetics were a fusion of disparate perspectives, drawing inspiration from a diverse spectrum of scales. Aerial photographs captured from aircraft became a wellspring of inspiration, guiding the evolution of "unitary urbanism." This concept hinged on a meticulous decentralisation of social density, with city revisions echoing the cadence of postmodernisation.

Amidst these architectural and urban endeavours, an overarching objective emerged: to cultivate a sense of unity both within the city's contours and on a national scale. Beyond embodying a unified form within itself, Ahwaz was also envisioned as a vital node within a broader national network—a conduit through which the spirit of modernity and industriousness could flow seamlessly. The 1970s were an era of transformative ambition, as Ahwaz stood at the crossroads of industrial development and urban evolution. Iranian architects, driven by a fusion of social consciousness and aesthetic innovation, navigated the city's trajectory resolutely determined to forge a path of unity, vibrancy, and contemporary progress.

The wave of industrial growth in Ahwaz engendered a significant demographic shift characterised by the emergence of a substantial and cost-effective labour force. This transformation was accompanied by a distinct amalgamation of industrial and residential clusters, a landscape punctuated by modest to moderately-sized dwellings. As the city underwent a rapid metamorphosis, the imperative for expansive metropolitan areas became apparent—a necessity driven by the influx of new inhabitants seeking opportunity within the city's burgeoning industrial landscape. Within this dynamic context, the imperative of accommodating and supporting the influx of workers assumed paramount importance. The Oil Company, cognizant of its integral role, assumed the responsibility of providing sustenance and housing for its workforce—a mandate closely aligned with governmental directives.

Concurrently, the Ministry of Housing and Development assumed a proactive stance, urging both the public and private sectors to partake in the construction of residences. This initiative was mainly geared toward accommodating the burgeoning middle-class strata of society in novel domestic settings. Against this backdrop, the counterculture ethos inherent in urban planning surfaced as a salient strategy. It catalysed the emergence of middle-class living zones, coalescing disparate elements into a harmonious whole—an endeavour that aimed at imbuing the urban landscape with a sense of unity. This countercultural approach wasn't just an architectural blueprint; it symbolised a profound ideological shift. It ushered in an innovative perspective that reframed the urban fabric as an interconnected continuum. This interconnectedness, borne out by the rise of working-middle-class neighbourhoods, encapsulated a socio-cultural ethos that infused a fresh vitality into the urban milieu. The transformative industrial growth within Ahwaz set the stage for a complex interplay of socio-economic dynamics. This pivotal phase not only delineated the contours of the city's physical landscape but also etched a blueprint for a new social fabric—one where counterculture-inspired urban planning manifested as a strategy to harmonise diverse elements and propagate a newfound ideology across the urban vista.

The 1970s in Ahwaz bore witness to the emergence of an architectural paradigm that harmonised climate considerations, vernacular culture, and a fusion of modern and traditional elements. This synthesis, colloquially known as vernacular modernism, manifested prominently in the realm of low-cost housing, particularly in the creation of new towns. A bold experiment unfolded Within these residential enclaves, freeing inhabitants from direct reliance on industrial fervour and establishing zoning norms. This pivotal shift not only reconfigured the physical landscape but also kindled a profound change in societal consciousness facilitated by the experience of modernity within the urban milieu.

In parallel with these transformative initiatives, an undercurrent of liberation coursed through the architectural and urban developments. Pursuing utopian ideals marked this movement, a striving for universal values and an ardent commitment to local architectural innovation. As these aspirations converged, they engendered a unique architectural tapestry that celebrated the heritage of the past and embraced the future prospects. The interplay between climate considerations and vernacular culture resonated deeply within this architectural narrative. A sensitive response to the region's climatic nuances infused these modern habitats with a distinctive regional identity. This identity, in turn, found synergy with the local cultural ethos, creating a seamless dialogue between tradition and modernity.

Central to this architectural discourse were the new towns—a canvas for experimentation that liberated the very essence of urban living. The conventional dependence on industrial agendas and rigid zoning mandates was set aside in favour of an integrative approach. This approach allowed for the convergence of diverse elements, nurturing an environment where the experience of modernity unfurled organically. In this trajectory, the notion of liberation was multidimensional. It was the liberation of architectural forms from traditional constraints, the liberation of inhabitants from the rigidity of industrial norms, and, most crucially, the liberation of consciousness as modernity intertwined with the urban fabric. As the 1970s unfolded, Ahwaz became a crucible of architectural innovation, where the tenets of vernacular modernism were etched onto the urban landscape. Amidst this confluence of utopian aspirations, universal ideals, and local ingenuity, a new architectural vernacular was forged—one that encapsulated the spirit of a transforming era while respecting the rich tapestry of the past.

One poignant illustration of this convergence could be observed in the modern oil headquarters edifices that graced the city of Ahwaz. These architectural marvels stood as a testament to the harmonious marriage of tradition and modernity, where the architects, buoyed by governmental patronage, embarked on a voyage to reinterpret traditional concepts through a contemporary lens. The result was a symphony of architecture resonating with the ethos of progress and heritage. The broader orchestration of this architectural symphony was characterized by multifaceted governmental support, spanning the realms of economy, ideology, society, and spatial articulation. This support fostered a distinctive sense of vernacularism that reverberated across the expanse of Ahwaz's developmental initiatives. A poignant example lies in adopting the traditional buff-coloured brick as the primary building material—a homage to Iranian heritage that encapsulated modern aspirations.

This epoch witnessed the gradual fading of the countercultural undercurrent, a transformation propelled by the instrumental role that architecture assumed. Architecture, adeptly guided by the tenets of counterculture, emerged as a bridge spanning the chasm between capitalism and communism—a bridge that illuminated a path forward from the ideological impasse. As Peggy Deamer astutely posits, architecture, in this context, assumed the role of a counterforce to counterculture itself. It held a pivotal position, not merely as a symbolic representation of the countercultural spirit, but as an active agent that enacted transformative change.⁵⁸⁸ In the intricate dance between architecture and counterculture, a fusion emerged

⁵⁸⁸ Sadler, Simon. *The Situationist City*. Cambridge Mass.: MIT Press. 1998.

that was both dynamic and transformative. It was an interplay that not only spoke to the physicality of structures but also resonated with the deeper ideological currents of society. Ultimately, this union between architectural innovation and countercultural ethos transcended the temporal confines of its era, leaving an indelible imprint on Ahwaz—a testament to the power of architecture to shape, influence, and redefine the course of a city's history.⁵⁸⁹

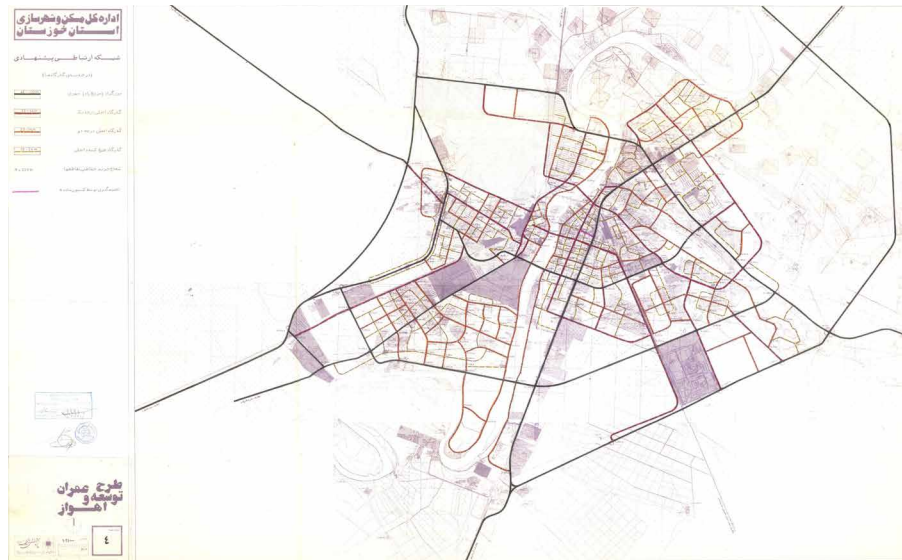


FIG. 6.11 Ahwaz Development and Construction Plan Map.

Source: Pajuhesh Omran Consultant Firm. Iranian National Library Archives.

Date: Unknown. Accessed: January 2017

6.3.2 Diba: Architect to Royalty

Prominent individual commissions embarked on a direct trajectory toward distinguished international architects, none more emblematic than Kamran Diba. An alumnus of Howard University in Washington DC, Diba emerged as a pivotal figure on Iran's architectural canvas during the 1970s, assuming a position of prominence

⁵⁸⁹ Deamer, Peggy. *Architecture and Capitalism : 1845 to the Present*. Hoboken: Taylor and Francis. 2013.

as one of the era's foremost architects.⁵⁹⁰ Intriguingly, Diba's architectural ethos supported the backdrop of Farah Diba's humble perspective. While the two shared a commitment to a transformative architectural vision, Diba's stance diverged from the king's capital-driven political aspirations. This divergence, far from being discordant, birthed a nuanced synergy that melded architectural expertise with an unwavering allegiance to the prevailing spirit of Iranian utopia.

Enriched by his vacations across Europe, Diba's architectural sensibilities were mainly influenced by the grandeur of cities like Paris. This cross-continental odyssey infused his design philosophy with a radical utopian spirit, ultimately merging into a unique Iranian architectural expression. Diba's oeuvre extended beyond the bounds of mere aesthetics, encapsulating a vision that sought to transcend architectural boundaries. What set Diba's work apart was the fusion of his architectural prowess with his profound alignment with the emergent ethos of the Iranian utopian landscape. His creative journey, nurtured by an educational visit in the United States and enriched by his European escapades, culminated in a design approach that encapsulated both small-scale urban projects and monumental architectural endeavours. As the head architect of Iran in the 1970s, Kamran Diba emerged as a torchbearer of architectural transformation. Through the prism of his visionary sensibilities, the architectural tapestry of the era was woven anew, infusing Iran's urban fabric with a distinctive essence that harmonized innovation, utopia, and a respectful connection to its unique cultural heritage.

Beneath the veneer of Diba's postmodernist architectural endeavours lay a distinctly Iranian intellectual ethos that aimed to craft and embrace a methodology rooted in vernacular sensibilities. Within the contours of his designs, two distinctive elements, the "Light-Catchers" (Noorgirs) and the "fourfold" (Chahar-Taq), became emblematic of his architectural signature, offering a profound connection to his Iranian perspective. The "Light-Catchers," a concept embedded within Diba's designs, was a testament to his keen understanding of the Iranian context. Functioning as conduits of natural light, these architectural features illuminated the interiors and symbolized a philosophical symbiosis between architecture and nature. This architectural ingenuity became an avenue through which Diba harnessed the play of light to enhance the spatial experience, transcending the realm of mere aesthetics to evoke a sense of interconnectedness with the environment.

Similarly, Diba's integration of the "fourfold" design element over the Plan of main entrances echoed his distinct Iranian outlook. This concept, grounded in the

⁵⁹⁰ He had his major international collaborations with an English architect, *Tony Major*.

spatial arrangement, imbued his designs with a sense of symmetry and reflected a profound adherence to Iranian cultural values. It was more than an architectural principle; it manifested Diba's attempt to intertwine his contemporary designs with Iran's rich architectural heritage. Diba's postmodernist ventures were infused with an intellectualism rooted in the Iranian ethos. His quest to amalgamate modernist principles with indigenous sensibilities gave rise to architectural elements that bore the imprint of his Iranian perspective. The "Light-Catchers" and the "fourfold" design elements weren't mere architectural features; they were the embodiment of Diba's endeavour to bridge past and present, creating spaces that resonated deeply with the cultural fabric of Iran.

Kamran Diba's architectural vision was a harmonious blend of social democracy and a distinctly Iranian aesthetic sensibility. Central to many of his design concepts was the innovative "human interaction intensification program," which epitomized his commitment to fostering vibrant and people-centric urban spaces. Diba's approach aimed to counteract the prevailing dominance of automobiles in the urban landscape, a phenomenon he observed as detracting from the quality of human life. Diba's perspective was grounded in the belief that an excessive focus was compromising the city's vitality on car-oriented infrastructure, such as streets, boulevards, and highways. He recognized that advanced urban centres around the world were embracing a renewed emphasis on pedestrian-friendly environments, where people's presence and movement within the city were prioritized. Drawing inspiration from the model of cities like Paris, Diba sought to reorient urban management towards "humanizing the environment" rather than perpetuating private transportation dominance.

Taking cues from Paris's approach, which involved reducing car-centric spaces in favour of pedestrian-friendly zones, Diba envisioned a landscape enriched by planted trees, inviting benches, and additional outdoor spaces for cafes and restaurants. This approach aligned with his conviction that cities should be designed with a focus on enhancing human interaction and engagement. By reimagining pathways and thoroughfares, Diba aimed to create environments that maximized human activity and interaction, thereby elevating the overall quality of life within the urban fabric.⁵⁹¹ Diba's architectural philosophy transcended mere aesthetics; it encapsulated a profound commitment to reshaping urban landscapes to serve people better. Through his "human interaction intensification program," he aspired to reinvigorate the essence of the city by curbing car-centric infrastructure in favour of pathways

⁵⁹¹ Shirazi, M. Reza. *Contemporary Architecture and Urbanism in Iran : Tradition, Modernity, and the Production of 'Space-In-Between'*. The Urban Book Series. Cham, Switzerland: Springer. 2018. <https://doi.org/10.1007/978-3-319-72185-9>.

that facilitated dynamic social interactions, ultimately shaping spaces where the human experience took precedence over vehicular transit.

Benefitting from his familial connection as the queen's uncle, Kamran Diba enjoyed steadfast backing from the royal family. In his recollections, Diba candidly recounts instances where he navigated challenges posed by unreasonable government officials overseeing his commissioned projects. While he might have navigated these interactions with a certain degree of diplomacy, Diba's unwavering determination prevailed. In the face of bureaucratic hurdles, he tenaciously pursued his own creative vision, ultimately materializing architectural creations that were aligned with his personal aspirations and design philosophies. Diba's adept understanding of vernacular design principles was eloquently demonstrated in the Shushtar New Town project situated in Khuzestan. This notable endeavour garnered accolades, including the prestigious Aga Khan Award for Architecture, showcasing his keen appreciation for the integration of traditional architectural elements. Additionally, the Mahmoud-Abad Summer Resort's development is another pivotal achievement that propelled Diba's architectural firm to a new echelon of prominence. Orchestrated under the auspices of the National Iranian Oil Company, this venture materialized as a modest summer retreat for company employees along the shores of the Caspian Sea in 1972. The resort, however, evolved beyond its initial intent, transforming into a thriving hub replete with a diverse array of amenities such as a shopping centre, hospital, theatres, cinemas, and sports facilities. This multifaceted development underscored Diba's prowess in creating comprehensive environments that seamlessly amalgamated leisure and functionality.⁵⁹²

An exemplary manifestation of Diba's prowess in vernacular architecture emerged in Ahwaz through his visionary expansion plan for Jondhi-Shapur University in 1968. This architectural endeavour bore testament to Diba's adept fusion of contemporary design principles with a deliberate nod to the rich tapestry of traditional Iranian architecture.⁵⁹³ By artfully integrating elements of the past into a modern context, Diba imbued the university's expansion with a profound sense of cultural

⁵⁹² Diba K. *Kamran Diba, buildings and projects*, Publisher : [Hatje (January 1, 1981). ISBN-10 : [3775701583. ISBN-13 : [978-3775701587. 1981.

The oil fields being in the south of Iran, where the temperature was unbearable during the summer months, the camp was an ideal refuge and resting place (isolated by the Alborz mountain range and delightful with its soft air, ample rainfall and green environment). As the dominant prosperous Company in Iran, NIOC decided to extend its facilities to 6 000 rooms with a view of the sea and forest and provided camp facilities for the children of oil workers. The project went to a competition, and Diba (in partnership with three young engineers: D. Zargam, A. Amir-Rezvani and F. Sadeghi, creating the firm DAZ.) won the commission <https://archnet.org/print/preview/publications=207&views=i>

⁵⁹³ Diba D. & Dehbashi M. *Trends in Modern Iranian Architecture*. 2004 .

resonance, positioning it as both a homage to heritage and a symbol of avant-garde architectural innovation.

6.3.2.1 Case Example: Jondhi-Shapour University, Ahwaz, Iran, 1968-78

Master plan

Situated on expansive and flat terrain along the Karun River, adjacent to a lush botanical garden, the envisaged campus of Jondhi-Shapour University held immense potential for architectural innovation. Tasked with this comprehensive endeavour, Kamran Diba crafted a multi-phased plan that elegantly weaved together academic, recreational, and communal spaces. Dividing the campus into zones for sporting facilities, student amenities, administration buildings, and faculties, Diba deftly orchestrated each structure as a distinct chapter in a narrative of enriched urban life. Central to Diba's vision was prioritising pedestrian experiences, a departure from the dominance of car-centric planning. He envisioned a meticulously planned network of walkways, designed not merely as auxiliary pathways but as vibrant corridors of human interaction. These passages were conceived as dynamic stages hosting a variety of activities, each contributing to an environment rich in cultural significance. Amidst these walkways, small courtyards blossomed with life – lush trees, manicured lawns, blossoming flowerbeds, and the serenity of flowing water. These elements weren't just aesthetic; they served functional purposes, offering shaded respite and even cooling pools to enhance comfort.⁵⁹⁴

Diba's commitment to merging modernity with tradition led him to incorporate shaded arcades, underpasses, and seating areas, all harmoniously coexisting beneath a coherent architectural language. His approach was equally practical as it was poetic, creating spaces for relaxation, contemplation, and social interaction. This organic yet orchestrated interplay was a testament to Diba's architectural prowess, where his designs seamlessly integrated with the natural environment. In response to the university's request for expansion, Diba was tasked with designing a monumental stadium, a challenge that tested his design ingenuity. Placed at the north end of the campus, this addition disrupted the visual coherence of the entrance. Through

⁵⁹⁴ Shirazi, M. Reza. *Contemporary Architecture and Urbanism in Iran : Tradition, Modernity, and the Production of 'Space-In-Between'*. The Urban Book Series. Cham, Switzerland: Springer. 2018. <https://doi.org/10.1007/978-3-319-72185-9>.

this experience, Diba learned a vital lesson – that facades could be internal and preserved even when new structures were added. This realization harkened back to the architectural traditions of Islamic urban design, where internal facades remained untouched by external additions. Diba ingeniously used this insight to guide further expansion, ensuring that the inner essence remained unscathed while external appearances might evolve. Diba's transformation of Jondhi-Shapur University's campus was more than an architectural endeavour; it was an expression of the broader architectural movement shaping Iran at that time. By imbuing his designs with a harmonious blend of contemporary functionality and traditional aesthetics, Diba contributed to the evolution of Iranian architectural identity, anchoring it in a rich cultural legacy while embracing the aspirations of the modern age. ⁵⁹⁵

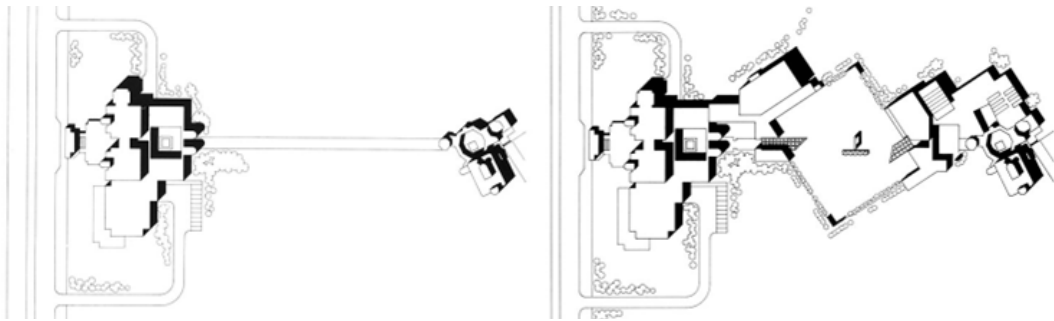


FIG. 6.12 Jondhi-Shapur University, Ahwaz, Iran. Architect: Kamran Diba.

Source: Diba, Kamran. *Kamran Diba - Buildings and Projects*. Stuttgart-Bad Cannstatt: Hatje, 1981. pp. 52, 55

Date: 1968. Accessed: January 2023

The Student Union

Building No. 1, the Student Union embodied a multi-faceted role as a dynamic space within the Jondhi-Shapur University campus. Seamlessly blending functionality with symbolism, this structure served as a cafeteria, reception area, and a hub for smaller gatherings. Positioned strategically to greet visitors at the threshold of the campus, the building was a deliberate embodiment of an entryway, marking the commencement of a pedestrian path leading to the institution's heart. Kamran Diba's architectural prowess was evident in his conscious design of the Student Union.

⁵⁹⁵ <https://archnet.org/sites/129>

Source: Aga Khan Trust for Culture Jondhi-Shapur University, Ahvaz IRAN (1968-1978)

The building was adorned with two towering structures, their scale exaggerated to underscore their significance as guardians of the entrance. These towers stood as iconic markers, guiding one's journey into the heart of the campus while lending a distinct character to the thoroughfare they framed.

Internally, the building's layout was ingeniously divided into two mirror-image halves, providing passage for pedestrians in between. This configuration facilitated seamless movement and offered glimpses into the vibrant life unfolding within its walls. The rear of the building embraced an inviting courtyard adorned with a refreshing pool and an animated fountain. Nestled around this oasis were charming alcoves, housing a teahouse and quaint shops that extended an invitation for leisurely contemplation and social interaction. As visitors strolled past the courtyard, the pathway continued its narrative, leading them towards the campus mosque. This carefully crafted sequence of spaces, both indoor and outdoor, wove together a rich tapestry of experiences – from arrival and rejuvenation to exploration and spirituality. Diba's architectural language encapsulated functionality and the essence of the institution's ethos, inviting individuals to embark on a journey of discovery and enrichment.

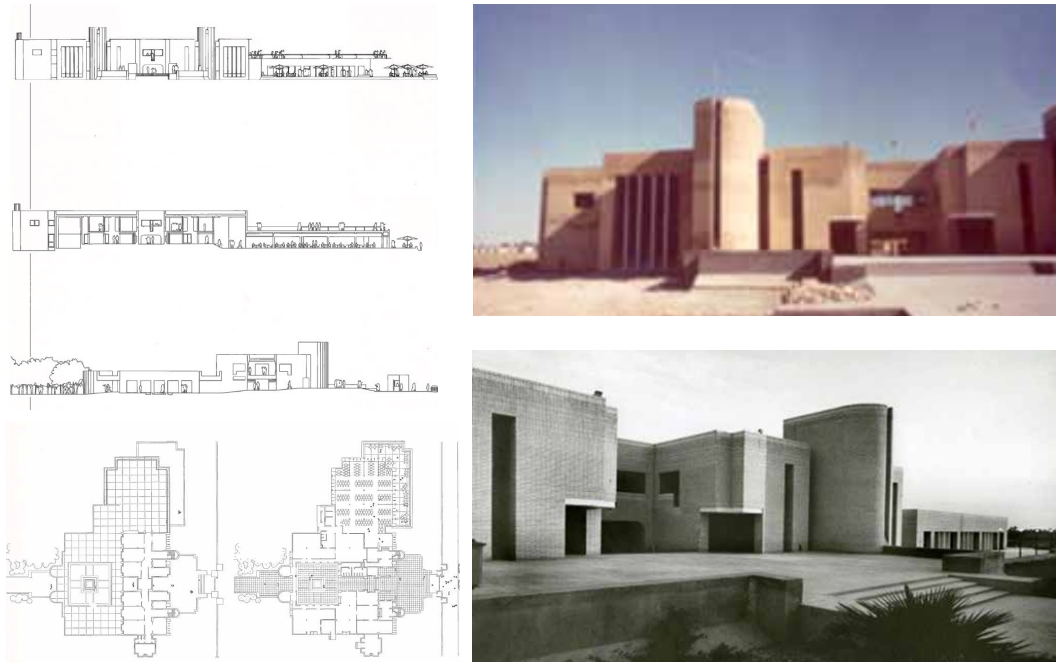


FIG. 6.13 Jondi-Shapour University Ahwaz. Student Club & Cafeteria - Front Elevation - View of the Arched Entry to the Pedestrian Walkway.

Source: Diba, Kamran. *Kamran Diba - Buildings and Projects*. Stuttgart-Bad Cannstatt: Hatje, 1981. p. 62

Date: 1968-1978. Accessed: January 2023

The University Mosque

Continuing the journey beyond the courtyard, Kamran Diba orchestrated an expansive area adorned with a verdant canopy of trees, blossoming flowers, and stretches of lush meadows. A short walk from this idyllic setting, a doorway beckoned visitors to the modest yet spiritually significant university mosque, designated as Building No. 2. This courtyard, enveloped in nature's embrace, held profound symbolism as a conduit for a daily connection to the mosque. In its original conception, Diba envisaged this passage as the sole avenue of approach. However, the evolution of the university's development charted a new course, and the once straightforward green pathway evolved into a complex space with multifaceted roles. As the university's character and needs evolved, so did Diba's design. The simplicity of his initial vision gracefully adapted to the demands of a growing institution. The

resultant space became a testament to the dynamic interplay between design ideals and the evolving requirements of a thriving academic community.

In Iran's historical context, the mosque courtyard connected profoundly to the bustling Grand Bazaar, an intricate network of pedestrian paths that epitomized urban life. This linkage imbued the mosque courtyard with daily social significance, serving as a vibrant meeting point for people and contributing to the fabric of everyday existence. Diba's mosque architecture harked back to this tradition, capturing the essence of a journey that commenced from any point along the pathway, drawing individuals into the courtyard and guiding them out once more. The University Mosque's design echoed this traditional interplay, inviting individuals to engage more actively in their social interactions. To mitigate the courtyard's potential isolation, Diba introduced subtle openings in the walls, offering glimpses of an integrated environment and allowing the rhythms of life to reverberate beyond its confines.

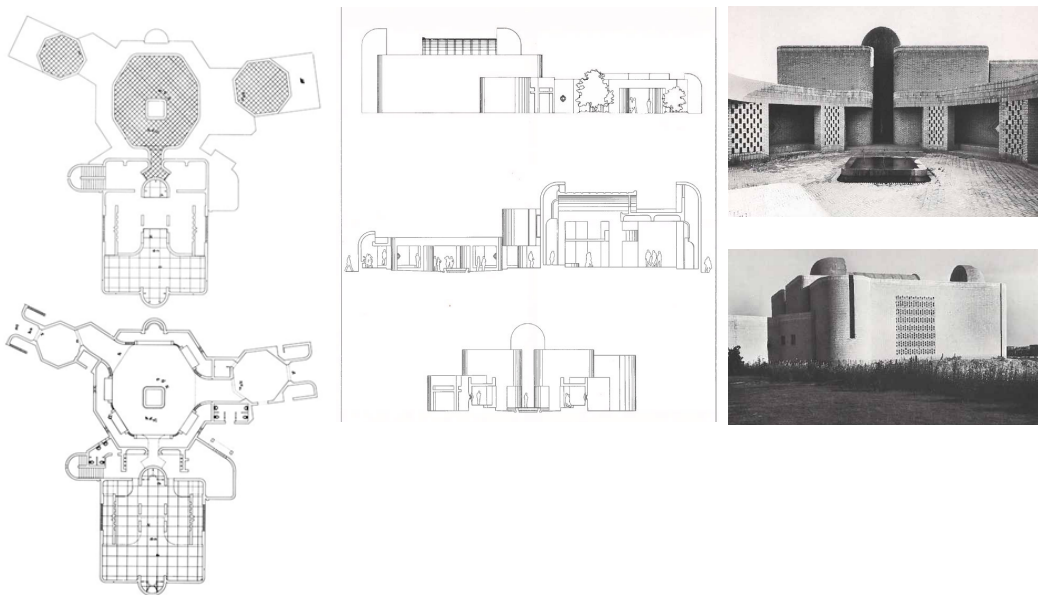


FIG. 6.14 Mosque, Jondi-Shapour University, Ahwaz, Iran. Architect: Kamran Diba.

Source: Diba, Kamran. *Kamran Diba - Buildings and Projects*. Stuttgart-Bad Cannstatt: Hatje, 1981, p. 68
Date: 1968-1978. Accessed: January 2023

Drawing inspiration from the aesthetic allure of Islamic religious edifices, particularly mosques, the choice of tiles in cheerful colours fostered a gentle ambience within the space. The mosque's unique hallmark was its incorporation of curved corners, imparting a sense of grace and softness while minimizing the impact of sharp shadows cast by the sun. This architectural decision conveyed an atmosphere of intimacy, modesty, and tranquillity, setting the tone for a serene sanctuary.⁵⁹⁶ Navigating the courtyard and traversing an unlit passage led to a small circular foyer open to the sky, framing a view of the heavens and encouraging further exploration along the path. This deliberate design element beckoned individuals to continue their journey, inviting them to immerse themselves in the unfolding spatial narrative with an inspired spirit.

Sports Fields

Upon departing from the mosque and progressing along the east-west walkway, Diba orchestrated an imaginative transformation of the environment, unveiling an unexpected setting: an elevated platform designed as a pedestrian promenade. This elevated expanse, situated atop an agricultural water canal, featured an array of elements conducive to relaxation and contemplation. Lined with trees, flowerbeds, lush lawns, inviting benches, and a gentle flow of running water, this elevated walkway fostered a serene atmosphere for individuals to engage with. As individuals strolled along this elevated promenade, three pathways branching off to the south facilitated access for students to the sports fields situated on the southern side of the campus. The elevation of this pathway offered a vantage point that afforded a panoramic view of the sports facilities below, including tennis courts, volleyball courts, basketball courts, and farther afield, the soccer field. This strategic design created an interactive dialogue between passersby and athletes engaged in their sporting pursuits. The visual engagement between those traversing the pathway and the players on the fields beneath enriched the overall experience, contributing to a dynamic and immersive atmosphere. Diba's deliberate manipulation of topography and landscape provided functional connectivity and orchestrated an environment that encouraged social interaction, recreation, and engagement with the surroundings. This interplay between architecture, nature, and human activity was a hallmark of Diba's approach to creating spaces that resonated with both practical utility and aesthetic appeal.

⁵⁹⁶ <https://aoapedia.ir/%D9%85%D8%B3%D8%AC%D8%AF-%D9%85%D8%AC%D9%85%D9%88%D8%B9%D9%87-%D8%AF%D8%A7%D9%86%D8%B4%DA%AF%D8%A7%D9%87%DB%8C-%D8%AC%D9%86%D8%AF%DB%8C-%D8%B4%D8%A7%D9%BE%D9%88%D8%B1%D8%B4%D9%87%DB%8C%D8%AF-%DA%86/>

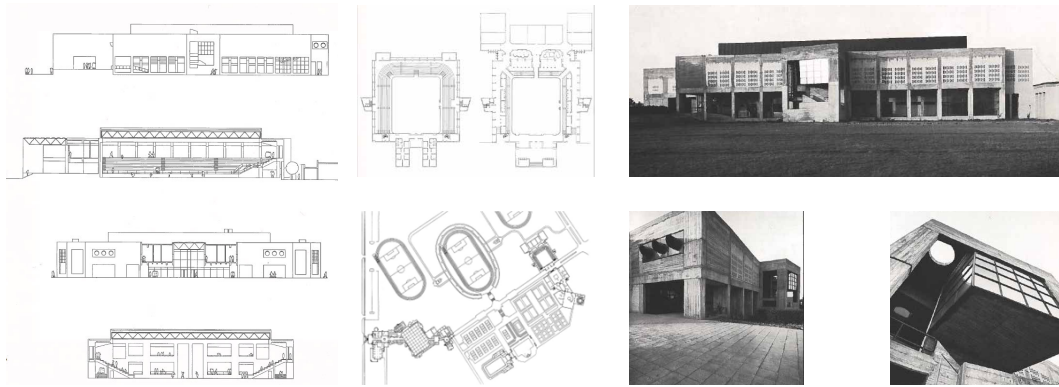


FIG. 6.15 Gymnasium, Jondi-Shapour University, Ahwaz, Iran. Architect: Kamran Diba.

Source: Diba, Kamran. *Kamran Diba – Buildings and Projects*. Stuttgart-Bad Cannstatt: Hatje, 1981, p. 75

Date: 1972–1976. Accessed: January 2023

Administration Building, 1972—1976

Kamran Diba's architectural inspiration from Giorgio de Chirico's dreamlike cityscapes is a fascinating example of how art can influence and shape architectural design. De Chirico's paintings often depicted enigmatic urban scenes characterized by architectural elements defying conventional spatial logic. Diba, captivated by the idea of multi-story houses resembling boxes as inhabited spaces in de Chirico's works, incorporated this concept into his architectural vision. Diba's adaptation of de Chirico's artistic concepts to architecture demonstrates his keen aesthetic sensitivity and ability to translate visual ideas into built forms. By placing four structural boxes on the corners of a walled garden, he created a deliberate juxtaposition between the rigid geometries of the boxes and the organic vegetation of the garden. This interplay between the built environment and nature added an element of contrast and visual interest to the design. In a bid to establish a clear separation between the internal living spaces and the external architectural fabric, Diba employed a two-layered facade strategy. The outer facade, devoid of windows, maintained a pristine and unbroken appearance, emphasizing the purity of the architectural form. This approach not only echoed de Chirico's interpretation of buildings as boxes but also contributed to a sense of privacy and introversion for the interior spaces. Diba's integration of artistic concepts into architectural practice highlights the interdisciplinary nature of creative expression. By melding the worlds of painting and architecture, he achieved a unique synthesis that brought forth a distinct

architectural language characterized by a blend of modernist principles, traditional elements, and artistic inspiration.



FIG. 6.16 Administration Building, Jondi-Shapour University, Ahwaz, Iran. Architect: Kamran Diba.

Source: Google Maps & Open Access Images

Date: 1972-1976. Accessed: January 2023

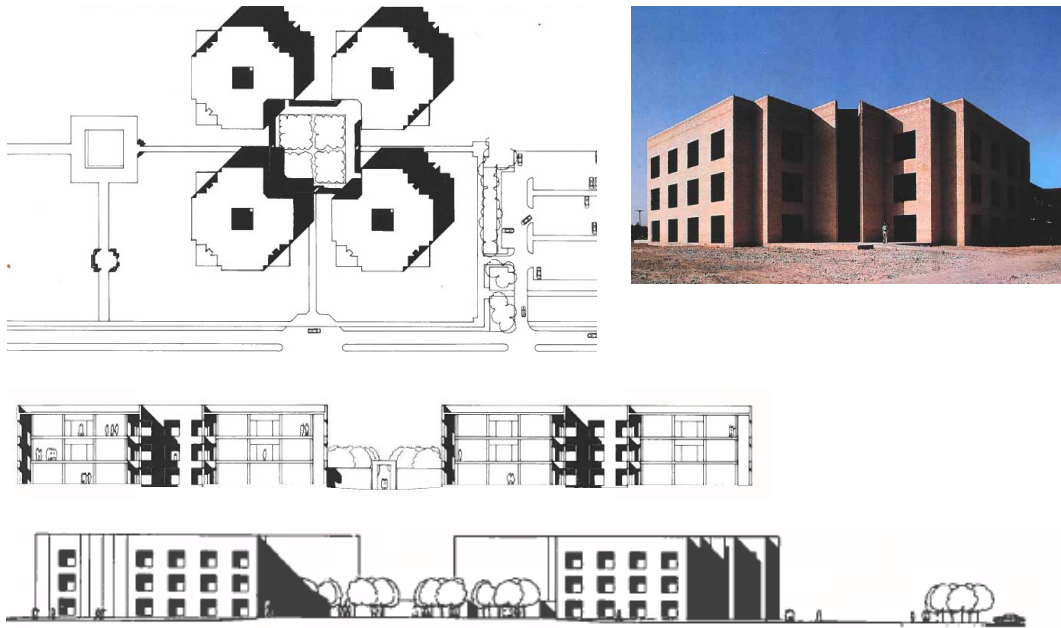


FIG. 6.17 Administration Building, Jondi-Shapour University, Ahwaz, Iran. Architect: Kamran Diba.

Source: Diba, Kamran. *Kamran Diba - Buildings and Projects*. Stuttgart-Bad Cannstatt: Hatje, 1981, p. 82

Date: 1972–1976. Accessed: January 2023

Faculty Housing, 1967—1972

In a nod to the traditional layout of Iranian houses, which often featured a central courtyard surrounded by various living spaces and rooms, Diba's approach to designing the university's student dormitories echoed this concept while incorporating modern architectural nuances. Although the initial university plan did not incorporate student dormitories, Diba astutely reserved land on the north and south ends of the central axis for their potential inclusion in the future, allowing the site plan to evolve and mature over time. Drawing inspiration from the inherent functionality and symbolic significance of the traditional inner garden, which served as a communal space for gathering, living, and dining, Diba reinterpreted this concept within a contemporary context. His design featured two-story apartments arranged around a central garden, thereby creating a modern reinterpretation of the traditional courtyard layout. This spatial arrangement aimed to facilitate social interaction, foster a sense of community, and provide a shared environment where students could engage and connect. While Diba's architectural approach embraced

the core principles of traditional Iranian design, his adaptations and modifications showcased his ability to harmonize heritage with modern needs. By embedding this familiar yet innovative layout into the university's fabric, Diba sought to enhance the student experience, promote interaction, and provide a sense of home within an educational setting.

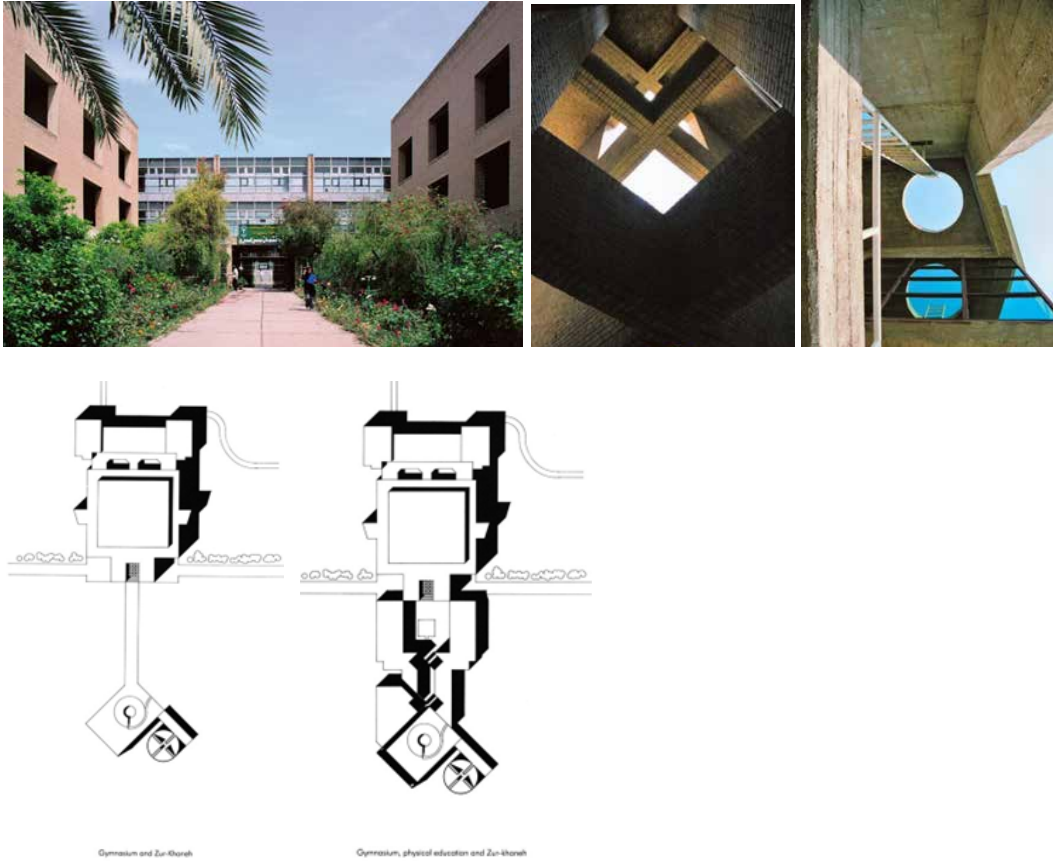


FIG. 6.18 Faculty Housing, Jondi-Shapour University, Ahwaz, Iran. Architect: Kamran Diba.

Source: Diba, Kamran. *Kamran Diba - Buildings and Projects*. Stuttgart-Bad Cannstatt: Hatje, 1981, p. 82

Date: 1972-1976. Accessed: January 2023



FIG. 6.19 Students Dormitory, Ahwaz.

Source: Image numbers: 000124-80- (left), 000725-81- (middle), 000726-81- (right), 000727-81- (middle). Iranian Oil Museum Archives.

Date: 1972-79. Accessed: January 2017

6.3.3 **Nader Ardalan: Bridging Architecture and Philosophy**

Ardalan's extensive experience in the United States, his education at Harvard University, and his work at prestigious architectural firms like SOM (Skidmore, Owings and Merrill) significantly influenced his approach to architecture and urbanism. During his time in the US, Ardalan was exposed to advanced architectural theories and practices, as well as the latest developments in urban planning and design. His background in architecture and urbanism, combined with his practical experience, made him well-equipped to contribute to significant projects in Iran, particularly in the oil industry context. Ardalan's role as a senior research associate at Gulf Encyclopedia Sustainable Urbanism at Harvard University suggests a strong interest in urban sustainability and planning. This experience likely shaped his understanding of how architecture and urban design could impact communities and the environment, which he later brought to his work in Iran.



FIG. 6.20 Central Library.

Source: Google Maps

Date: 2023. Accessed: January 2023

His work as a designer at SOM, especially on a prefabricated tower project, exposed him to innovative construction techniques and cutting-edge architectural solutions. This experience likely broadened his perspective on design possibilities and construction methodologies, which he could then apply to his projects in Iran. When Ardalan returned to Iran, his experience at SOM and his education in the US positioned him as a skilled architect capable of tackling complex and high-profile projects. Working on high-level projects in the Iranian oil fields from 1964 to 1979, during the country's oil boom era, allowed him to put his expertise into practice. His exposure to global architectural trends, combined with his understanding of local contexts and needs, likely contributed to his ability to create innovative and contextually appropriate designs for significant projects.⁵⁹⁷ Overall, Ardalan's journey from his education in the US to his architectural work in Iran reflects his multifaceted expertise, blending international architectural theories with practical experience in the oil industry to create impactful designs that respond to both local and global challenges.

⁵⁹⁷ Aghaei Rad, Hamid . 2016. *A Study of the Architecture of Nader Ardalan in Terms of Tradition and Modernity in the Islamic Context* . Publication.

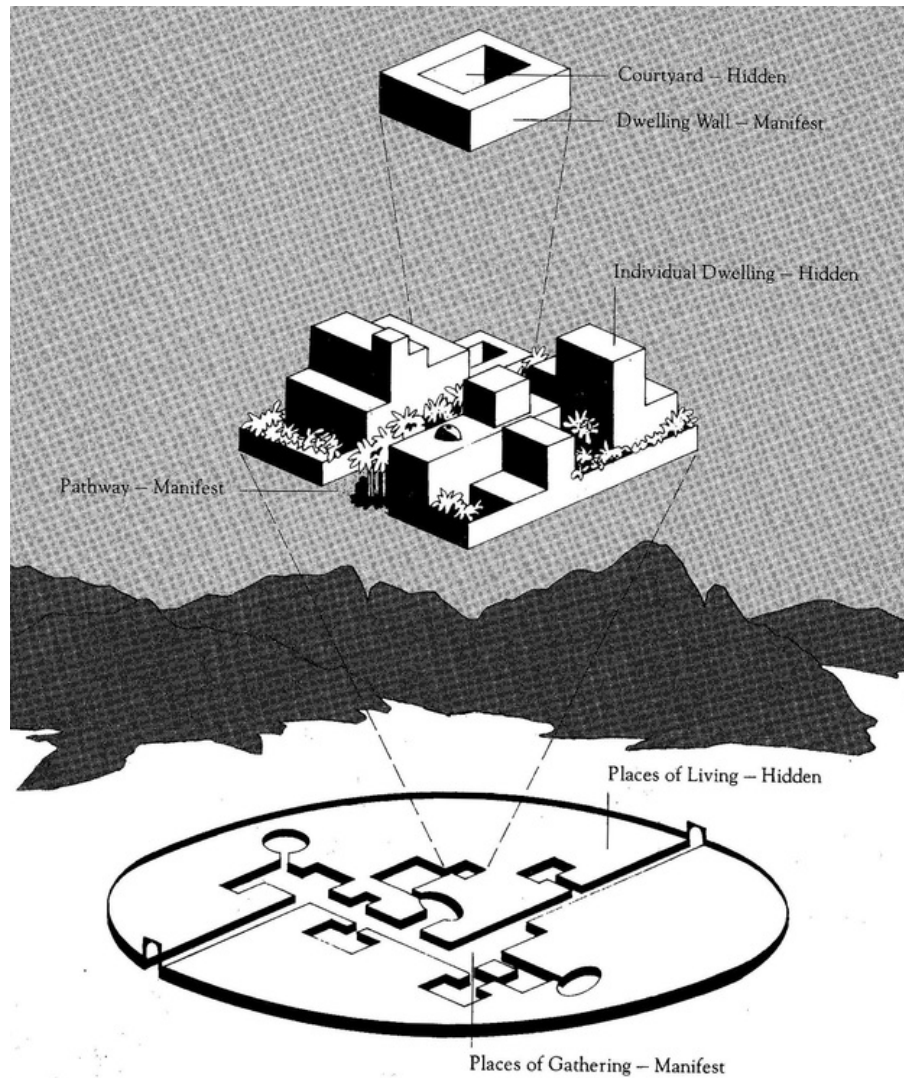


FIG. 6.21 Jondi Shahpur New Community, Ahwaz, Iran. by architect Nader Ardalan and SOM.

Source: <https://www.ardalanassociates.com/jondi-shahpur-new-community.html>

Date: 1974. Accessed: January 2023

Nader Ardalan's involvement in Iran's oil industry and architectural scene during the 1960s and early 1970s highlights his multifaceted role in shaping the country's built environment and architectural discourse. As part of the 'Iranisation' program initiated by the National Iranian Oil Company (NIOC), Ardalan and other US- and

UK-educated Iranians were brought in to take over the responsibilities of the suspended AIOC (Anglo-Iranian Oil Company). As the Fields' Chief Architect for the industrialization and urbanization of the oil concession regions, he was crucial in designing and planning the infrastructure and urban spaces associated with the oil industry. This period allowed him to not only contribute to architectural projects but also to collaborate with various consultants and professionals in the field. During his tenure at NIOC, Ardalan played a role in selecting and approving architectural consultants for various projects. During this time, he encountered the architectural firm WILMAFAR, where he met Aziz Farmanfarmaian. Subsequently, in 1966, Ardalan joined Aziz Farmanfarmaian & Associates, an architectural firm where he held a senior architect position and later became a design partner. This collaboration allowed him to work on significant projects commissioned by clients like the Plan Organization, contributing to transforming Iranian cities' urban fabric with a blend of Western and Iranian design elements. ⁵⁹⁸

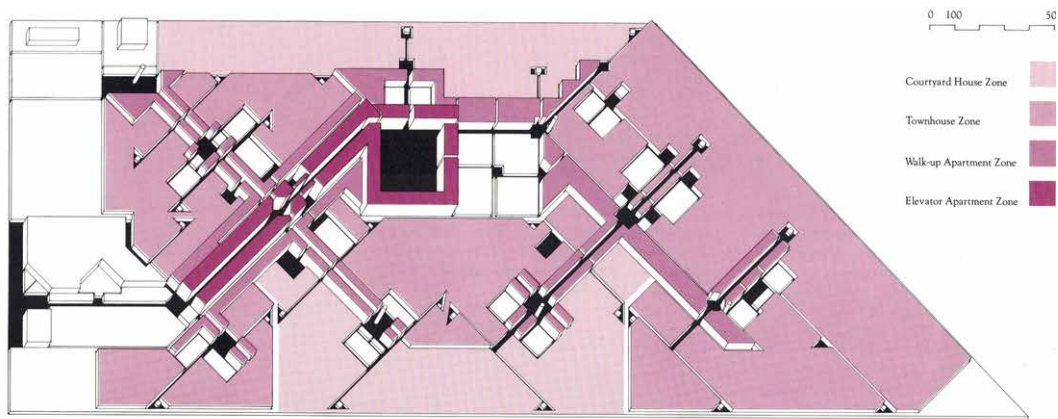


FIG. 6.22 Jondi Shahpur New Community, Ahwaz, Iran. by architect Nader Ardalan and SOM.

Source: <https://www.ardalanassociates.com/jondi-shahpur-new-community.html>

Date: 1974. Accessed: January 2023

Ardalan's diverse expertise extended beyond practice; he was also an accomplished educator. His role as a professor at the Design Faculty of Fine Arts at Tehran University allowed him to pass on his architectural knowledge and experiences

⁵⁹⁸ Over time, this firm grew to include over two hundred people. Shahla Haeri, "Interview with Nader Ardalan" (Boston: Foundation for Iranian Studies Program of Oral History, 1991), 18

to the next generation of architects. This integration of practice and academia likely enriched his perspective on architectural theory and practice, influencing his designs and teaching methods. ⁵⁹⁹ Nader Ardalan's contributions to the oil industry, architectural practice, and architectural education in Iran during the 1960s and 1970s demonstrate his wide-ranging impact on the country's built environment and architectural discourse. His ability to navigate various roles within the architecture profession reflects his dedication to shaping a contemporary architectural identity for Iran while integrating elements of both local and global design principles.

Nader Ardalan's exposure to a wide range of influential figures in the fields of archaeology, architecture, and landscape planning significantly shaped his approach to architecture and design. These interactions with notable professionals and scholars enriched his understanding of space, culture, and environmental considerations. Ardalan's collaboration with Romain Girshman, the prominent French archaeologist, provided him with insights into the spatial organization of historical sites and buildings. Working on plans and drawings for Zoroastrian fire temples and Achaemenid and Sasanian structures likely influenced his approach to spatial arrangement and design composition. His engagement with Ian McHarg, mainly through the project of designing an environmental park in Tehran, nurtured his ecological awareness. McHarg's emphasis on designing in harmony with nature and considering ecological factors aligns with Ardalan's later focus on integrating architecture with the environment. The influence of Louis Kahn, a renowned architect known for his monumental and spiritually-infused designs, further shaped Ardalan's architectural philosophy. Based on his experiences designing in various cultural contexts, Kahn's ideas about moderation and non-moderation resonated with Ardalan's exploration of Iranian culture. This exposure to Kahn's thinking likely influenced Ardalan's approach to balancing tradition and modernity in his designs.

Ardalan's exploration of non-moderation within Iranian culture, including music, literature, poetry, and garden design, demonstrates his commitment to understanding the essence of his own heritage and incorporating it into his architectural work. This integration of cultural influences is evident in his architectural designs, which seek to harmoniously blend contemporary ideas with traditional elements. Nader Ardalan's encounters with figures like Girshman, McHarg, and Kahn, along with his exploration of Iranian culture, contributed to his multidimensional design approach that incorporates historical insights, ecological considerations, and cultural sensitivities into his architectural projects.

⁵⁹⁹ Talinn Grigor. *Building Iran: Modernism, Architecture, and National Heritage under the Pahlavi Monarchs*. Periscope Publishing Ltd. 2009. p 162

Nader Ardalan's architectural and theoretical pursuits centred on the intricate interplay between local and universal elements. This dynamic relationship was evident in his collaborations with American counterparts, which encapsulated the exchange of ideas and influences between different cultural contexts. Ardalan recognized the dual nature of this interaction. On the one hand, his exposure to American culture and advancements encouraged the adoption of international standards and the incorporation contemporary architectural theories. This engagement with Western empirical approaches and scientific progress led to a transformation of indigenous architectural perspectives and built environments in Iran. Ardalan understood the value of embracing modern methodologies while preserving the essence of traditional Iranian architecture. This allowed for the integration of contemporary ideas without compromising the historical roots and identity of the architecture. On the other hand, Ardalan's rich understanding of Iranian architectural traditions transcended geographical boundaries and found application in projects beyond Iran. His environmentally and culturally adaptive planning principles, honed through his experiences, were recognized and utilized by figures like John Kriken, SOM's planning director, in projects such as the New Town of Yanbu in Saudi Arabia. This demonstrates the transferability and universality of his design philosophy, as it found resonance even in different cultural contexts. Ardalan's approach showcased how the exchange between local and universal influences could enrich architectural discourse, enabling the preservation of cultural heritage while embracing contemporary innovations. This nuanced interaction helped bridge the gap between tradition and modernity in architecture and created harmonious and culturally sensitive built environments both within and outside Iran.⁶⁰⁰

During the 1970s, the remarkable success of the oil industry in Iran catalyzed a significant surge in the building industry, particularly in the oil-rich cities. The global oil crisis of that era had contrasting effects on building production in different parts of the world. While the building industry in the West experienced a slowdown, the Middle East, including Iran, witnessed a construction boom due to increased revenues from oil exports. This influx of financial resources and the subsequent development projects attracted architects from various parts of the world to contribute to the region's transformation. Within this context, Nader Ardalan, as the managing director of his architectural firm Mandala Collaborative, played a crucial role in shaping architectural projects in Iran, particularly in Ahwaz. His approach was rooted in using preconceived images of vernacular architecture as a means to address the aspirations and sensibilities of the Iranian people. By drawing from the

⁶⁰⁰ Gharipour, Mohammad, ed. *Architectural Dynamics in Pre-Revolutionary Iran : Dialogic Encounter between Tradition and Modernity*. Bristol: Intellect. 2019.

rich cultural heritage and traditional architectural forms, Ardalan aimed to create designs that resonated with the local context while integrating modern concepts and innovations. Through Mandala Collaborative, Ardalan contributed to essential architectural works that not only fulfilled the functional requirements of the projects but also conveyed a sense of cultural identity and pride. This approach not only reflected his commitment to incorporating the vernacular but also his understanding of the role architecture plays in expressing the values and aspirations of a society. The collaborative nature of his practice further allowed for the fusion of international expertise with local insights, resulting in unique architectural solutions that catered to the evolving needs of Iran's changing urban landscape.

In the context of the architectural landscape of the 1970s, Nader Ardalan grappled with the challenge of designing buildings that were not only functional but also responsive to the unique climatic conditions of Iran, characterized by scorching heat and semi-humid environments. Recognizing the limitations of his American education in addressing these specific environmental demands, Ardalan embarked on a journey to develop architecture that was harmonious with the local climate and culture. Ardalan's approach was deeply influenced by his shared interest with his wife, Laleh Bakhtiar, in exploring the mythic aspects of Iranian architecture. This interest culminated in the publication of "The Sense of Unity" in 1973, a significant work that delved into the geometric order and underlying principles of Iranian architecture. This publication was more than a theoretical exploration; it served as a foundational resource for Ardalan's efforts to merge global modernism with vernacular postmodernism in his architectural projects.

"The Sense of Unity" provided Ardalan with insights into the geometric and symbolic aspects of Iranian architecture, enabling him to develop design methodologies that embraced local traditions while integrating modern concepts. This fusion of influences was evident in his architectural works, which sought to create spaces that responded to Iran's climate, culture, and aspirations. Through his collaborations and architectural projects, Ardalan aimed to realize his vision of an architecture that bridged the gap between the global and the local, ultimately contributing to the development of a distinct Iranian architectural identity.

Nader Ardalan's architectural approach went beyond theoretical exploration and found concrete expression in his projects. He leveraged his experiences and insights to create buildings that embodied his unique perspective, which encompassed sustainable adaptation to the climatic environment, a connection to the evolving vernacular culture, the integration of advanced technology, and the reinforcement of local identity. By designing buildings that harmonized with their surroundings and integrated local architectural traditions, Ardalan aimed to create functional

and culturally resonant spaces. He believed that architecture could serve as a means to strengthen the bond between the state and the nation. Ardalan's regional modernist styles were positioned as expressions of a distinct national identity in the context of Iran's modernisation and the changing socio-political landscape. He recognized architecture's potential as a unifying force, capable of garnering general approval and fostering a sense of cultural continuity and pride among the Iranian population.⁶⁰¹

Ardalan's architectural designs were not merely aesthetic creations but deliberate acts with political and cultural significance. By incorporating elements of local identity and vernacular traditions into his architecture, he aimed to create a sense of belonging and authenticity for the people of Iran. His architectural projects thus became a vehicle for promoting a national narrative that embraced both modernity and tradition while fostering a strong connection between the state's objectives and the aspirations of the Iranian populace.

In Ahwaz, his firm, in a joint venture with SOM, designed master plans for Jondhi Shahpour's new community with 72,000 residences. Ardalan's approach to developing the master plans for Jondhi Shahpour's new community in Ahwaz demonstrated his adeptness at merging diverse architectural concepts. Inspired by both the traditional extroverted residential buildings with garden yards and the introverted houses with interior gardens, Ardalan sought to harmonize these opposing practices. The concept of combining inward and outward looking-ness can reflect his effort to balance tradition with modernity, creating spaces that resonate with the cultural context while embracing contemporary design principles.⁶⁰²

The use of geometrical shapes centred around private courtyards not only provided a retreat from the noise of the street but also allowed for the infusion of natural light into the interior spaces. The concentric square floor plans around a central point exemplified his careful consideration of spatial arrangement and hierarchy.⁶⁰³ Ardalan's incorporation of traditional buff brick patterns as architectural ornaments showcased his dedication to connecting with local aesthetics and building practices. This attention to detail not only added visual interest but also served to evoke a sense of familiarity and continuity with the architectural heritage of Iran.

⁶⁰¹ Sennott, R. Stephen, ed. *Encyclopedia of 20th Century Architecture*. New York: Fitzroy Dearborn. 2004.

⁶⁰² Kassarian and Ardalan, "The Centre for Management Studies, Tehran," 26.

⁶⁰³ Aghaei Rad, Hamid . *A Study of the Architecture of Nader Ardalan in Terms of Tradition and Modernity in the Islamic Context* . Publication. 2016.

Ardalan's master plans for Jondhi Shahpour's community in Ahwaz exemplified his ability to synthesize different architectural traditions, creating a design that felt both rooted in the past and relevant to the present. His approach demonstrated his commitment to enriching the built environment with a sense of place, cultural resonance, and aesthetic innovation.

6.4 Oil Exploration and Operation in Ahwaz: Unearthing Black Gold in the Lands of Ahwaz

The discovery of a significant oilfield near Ahwaz in January 1959 marked a crucial moment in the region's history. This oilfield quickly became one of the considerable reserves in Iran, contributing significantly to the country's oil production. As a result of discussions between January and May 1961, a study was conducted to explore the feasibility of establishing crude tipping facilities in Ahwaz. These facilities aimed to process crude oil into a range of heart cuts, specifically gas oil, to meet the National Iranian Oil Company (NIOC) needs. The study focused on increasing the availability of gas oil, which could be used domestically and for export purposes. The plan involved processing Ahwaz's whole crude to produce gas oil either at a new facility in Ahwaz itself or as part of the feedstock for the Abadan refinery. This would cater to NIOC's gas oil requirements and contribute to fuel production for export.⁶⁰⁴ The report presented by Iranian Oil Participants Limited in June 1961 laid out the economic evaluation of the proposed Topping Plant Facilities in Ahwaz. These facilities were designed to refine crude oil into various products, specifically focusing on gas oil production. The report also outlined the potential benefits and economic viability of this endeavour.⁶⁰⁵

The proposed plan involved connecting the existing facilities of the Masjed Soleiman (MIS) oilfield to Ahwaz. This would allow the continuation of fuel production at

⁶⁰⁴ 1961. Arcref 233114: Bases for economic Evaluation of topping plant facilities, Ahwaz Preliminary divisional study, Confidential, Bases for economic evaluation of Topping Plant Facilities – Ahwaz. June – 1961

⁶⁰⁵ Originally papers on file records as analytic to this report were attached to this report. Arcref: 233114, Bases for economic evaluations of topping plant facilities, Ahwaz Z01596989, 1961

the MIS topping plants, with the finished product transported to Ahwaz's railhead via a pipeline. A substantial crude processing facility was established in Ahwaz to achieve their goals. This facility was designed to meet NIOC's requirements for gas oil, producing heart-cut products and other components needed for NIOC's fuel production. The discovery of the oilfield near Ahwaz triggered efforts to establish crude tipping facilities to process crude oil into various products, specifically focusing on gas oil. These endeavours were part of a broader plan to increase gas oil availability for domestic use and export, contributing to Iran's oil industry and economy. ⁶⁰⁶

⁶⁰⁶ In 1954, an agreement to sell oil and gas to the international Oil Consortium was reached. Effectively October 29th, following the signature of the law by Shah, the agreement was put into effect. The agreement was concluded by and between the government of Iran on the one hand and eight major oil companies (comprising the Iranian Oil Consortium) on the other hand. The two operating companies undertook the oil operations in the agreement area named the "Iranian Exploration and Producing Company" and the "Iranian Oil Refining Company".

In 1955, the shared capital of the Iranian Oil Company was transferred to the National Iranian Oil Company. A change was made in NIOC's articles of association, with NIOC being assigned to perform all the exploration operations. This year the Iranian Oil High Council approved the construction of trans-Iranian Pipelines between Tehran and the oil fields. NIOC and the Oil Consortium reached the agreement to sub-divide one eighth of each American Oil Company's share in the oil Consortium to make room for additional oil companies, collectively called the "IRICON Group".

In 1956, drilling in Ahwaz began again. Experimental well No. 6 in Ahwaz caught fire at 2,364 meters and took 60 days to put out the blaze. In 1957, major new oil legislation was ratified. This legislation gave NIOC the right to negotiate foreign investments and new agreements. The Agip State Oil Company of Italy, for the first time in the Middle East, concluded an agreement with NIOC on a 75/25 basis setting up the joint Company SIRIP. The agreement terms were 25 years, extendable for three additional five year periods, with an agreement area of more than 22,700 kilometres. This year, the Trans-Iranian Pipeline between Tehran and the oil fields was inaugurated by Shah. Since the Oil Consortium Agreement, Persian Gulf refined products had no posted price, and the posted price was announced.

In 1958, an agreement with "IPAC", an agreement with Pan American Oil Co, was concluded on the basis of 75/25 for a period of 25 years. This year the deepest well to that date struck oil at a depth of 4,029 meters in the Ahwaz area. And the Iranian Petroleum Institute was founded. In 1959, "SIRIP" first drilling started in the Persian Gulf. In 1960, in the presence of Her Imperial Majesty Empress Farah, the ground-breaking for the Oil Research Laboratory was performed.

Due to the low price of crude oil in the Middle East, the organisation of Petroleum Exporting Countries (OPEC) was established, its founder members being Iran, Iraq, Venezuela, Saudi Arabia and Kuwait. In 1961, the first Pan American Oil co well struck oil on the Persian Gulf. In 1962, Shah inspected the summer Camp for children of Iranian Oil industry workers located on the Caspian seashores. This year, the second International Oil Symposium convened at the National Iranian Oil company central office auditorium.

In 1963, the principle of royalties payments was accepted by the Consortium. Following the changes made in Article 1 in the Supplement to the Oil Agreement, royalties were accepted by Oil Consortium members. This year the Shah arrived at NIOC central office for the unveiling ceremony of the building's Memorial Plaque.

And the National Iranian Petrochemical Company was established. In 1962: "SIRIP" started exploitation. In 1965 an agreement on the basis of 75/25 was concluded with five different oil companies. The five companies under the name of "LAPCP", "DOPCO", "IROPCO", and "IMINOCO" signed a contract for 25 years extendable for three additional five year periods. This year, for the first time in the Iranian Oil Industry, crude oil production reached two million barrels per day.

Following the need to address the requirements of oil production, significant developments took place in Ahwaz, leading to the establishment of extensive oil facilities.⁶⁰⁷ From 1962, Ahwaz experienced a transformation as it became a central hub for various functions related to the oil industry. The commissioning of Ahwaz Production Unit No.1 marked a significant milestone in this transformation. This unit played a pivotal role in consolidating administrative headquarters and functions that were previously dispersed, particularly at the Masjed Soleiman (MIS) oilfield. The goal was to enhance efficiency and convenience by centralizing these functions in Ahwaz. As part of this process, Ahwaz evolved into the Fields Headquarters, taking on responsibilities for various aspects of the oil industry. This included functions related to transport, engineering, maintenance, and construction. The Iranian Oil Exploration and Producing Company (IOEPC) played a crucial role in expanding its activities in Ahwaz. Many of the activities that were once carried out in remote oil fields were now brought to the forefront in Ahwaz. This consolidation not only increased the scope of activities in Ahwaz but also elevated its importance within the oil industry's operations. Ahwaz became the focal point for multiple functions

In 1965, on the occasion of the 25th anniversary of Shah's Reign, an exhibition on the oil industry was inaugurated by their imperial majesties. Construction of the Tehran refinery started with a capacity of 65,000 barrels per day.

National Petrochemical co. and allied chemical corporation signed an agreement to establish a petrochemical complex in Iran. A contract for the construction of the Madras refinery was concluded with India, and the International Oil Co of US NIOC became a partner in this joint venture. An agreement was signed with USSR for the provision of technical and economic know-how in the construction of the Iran Gas Trunkline.

In 1966, a new oil agreement with "ERAP". An agreement concluded with a French group called "ERAP" to form the SOFIRAN Co. This Company was assigned as a NIOC contractor to perform exploration and drilling. The contract period was 25 years, starting with the date of exploitation. A new oil reserve was founded in Mola Sani. Construction of Ahwaz Pipe Rolling Mill started.

National Iranian Gas Co. was formed and assigned to run the country's gas services as well as export of gas. In 1967, the second Pan American (IPAC) oil field started operation. Construction of the Madras refinery started. Its capacity was based on 50,000 barrels per day with crude supplied from the Dariush field on the Persian Gulf.

No. 2 Supplementary Agreement pertaining to the return of 25% of the Consortium area. For NIOC, direct sales of crude to East European countries was signed.

In 1968, Shah inaugurated the Tehran Refinery. A contract was signed with Dutch Continental Engineering for the renovation and expansion of the Kermanshah refinery.

A new agreement was concluded with a European Consortium comprising OeMW, HISPANOIL, PETROFINA, ENI and ERAP as a contractor. Agreements were signed with a Moroccan economic delegation for the processing of petrochemical products.

In 1969, an agreement was signed between NIOC and American Continental Oil Company.

An agreement was concluded with Algerian National Oil Company, Sonatrach, whereby a group of Iranian Oil industry experts were commissioned to train staff members of the Algerian National Oil Company.

The total volume of crude produced in the Iranian oil industry reached 10 billion barrels. This year, the imperial majesties arrived at NIOC Central Office to inaugurate the "60 years of the Oil Industry" exhibition.

⁶⁰⁷ In computing the economics of this case, it was assumed that agreement in principle to proposal of recycling unwanted crude fractions from Abadan to M.I.S structure would be negotiated between the parties to the Oil Agreement. This principle was entirely feasible from an accounting standpoint. Source : ibid

and served as the central hub for various oil-related activities. This centralization of functions aimed to streamline processes, improve efficiency, and enhance overall coordination within the oil industry in the region.



FIG. 6.23 Ahwaz Oil Industrial Zone - Aerial View.

Source: Image number: 009760-79-(left) & 009758-79-(right). Iranian Oil Museum Archives.

Date: 1972-79. Accessed: January 2017



FIG. 6.24 Ahwaz Oil Industrial Zone - Aerial View.

Source: Image number: 009760-79-(left), 009596-79-(middle), & 009758-79-(right). Iranian Oil Museum Archives.

Date: 1972-79. Accessed: January 2017



FIG. 6.25 Ahwaz General Production Unit.

Source: Iran Petroleum Journal. No. 124. Iranian National Library Archives.

Date: 1973. Accessed: January 2017

6.4.1 **The Unpredictable Swell: Chaotic Countercultural Urban Expansion**

During the 1970s, Iran experienced a period of economic prosperity fuelled by its growing oil trade and tourism industry. This economic boom directly impacted the city of Ahwaz, which had long been a significant centre of the oil industry within the oil-rich Iranian province. The newfound oil discoveries in the region further elevated Ahwaz's importance in Iran's oil landscape. Ahwaz underwent a transformation as it emerged as a modern capital within the oil-rich province. Its strategic location and role in the oil trade positioned it as a crucial hub for mediating and dealing with developed countries. The city's significance within the global oil industry was enhanced, and it played a pivotal role in facilitating Iran's oil exports and interactions with international partners. This period of prosperity led to increased constructional activity in Ahwaz. The city's development and infrastructure projects expanded, reflecting the newfound economic growth and the city's role in the oil trade. The

increased economic activity had a cascading effect on various sectors, including urban development, real estate, and public infrastructure, contributing to the transformation and modernization of Ahwaz during the 1970s.

The shift of the leading oil exporting port from Abadan to Mahshahr and Shahpur had significant implications for Ahwaz. With their larger capacities to accommodate larger ships, these new ports marked a change in Iran's oil export infrastructure dynamics. This shift was driven by the need to enhance the efficiency and capacity of oil exports, especially in light of the growing production and trade volumes. As a result, Ahwaz assumed a new role as a key representative of the oil industry's achievements. With its prominence within the oil-rich province and its strategic location, Ahwaz became a focal point for various aspects of the oil industry. It not only played a crucial role in the production and processing of oil but also became a central hub for managing and facilitating the trade and export of oil to international markets. This transformation further solidified Ahwaz's position as a significant player in the global oil landscape and underscored its importance as a hub for both domestic and international oil-related activities. The city's connection to the oil industry's achievements showcased its role in Iran's economic prosperity and global interactions during this period.

The development of the built environment in Ahwaz was closely intertwined with its industrial expansion during this period. The establishment of new industrial installations, ranging from light to heavy industries, played a pivotal role in shaping the city's economic landscape. The creation of the New Site was a response to the need for additional facilities to support the growing industrial activities in the Khorram Kushk and Karoun areas. The industrialization drive in Ahwaz contributed to the city's economic diversification, positioning it as a potential hub for various industries. The range of industries established in the region aimed to create a balanced economic ecosystem, encompassing different production and manufacturing sectors.

As industries expanded, there was a surge in labour demand, which attracted new residents to the city. This rapid influx of people led to a significant increase in the urban population of Ahwaz. As more individuals moved to the city for employment opportunities, the need for housing, infrastructure, and urban services intensified.

This urban growth had profound implications for the city's built environment. The influx of people and the growing economy led to new neighbourhoods, commercial areas, and infrastructure development. The increased circulation of people, coupled with the rise of consumer products like cars and aeroplanes, transformed the city's physical landscape. Overall, Ahwaz's expansion as an industrial and economic centre

during this period directly impacted its built environment, leading to the creation of new urban spaces, industries, and infrastructure to accommodate the growing demands of the city and its residents.

The dynamics you've described reflect the complex interplay between various factors shaping the development of Ahwaz during this period. The National Iranian Oil Company (NIOC) played a central role in the city's growth due to its significant presence and responsibilities in the oil fields. This responsibility included meeting the growing population's internal demands and supporting the workforce and labourers associated with the oil industry. Additionally, the anticipation of possible conflicts, as exemplified by the Shah's prediction of a potential war, led to the allocation of oil capital for military and infrastructural projects. This resource diversion had immediate and long-term consequences for the city's development, including investments in projects such as airports and a new freeway system.

However, the absence of a comprehensive urban plan and the rapid pace of development resulted in a somewhat disjointed urban expansion in Ahwaz. Different sectors and industries expanded in various directions without a cohesive citywide plan, leading to fragmented zones each dominated by a specific industry or organization. The lack of coordination between these zones contributed to a lack of urban harmony and a disconnected urban fabric. Despite the intentions and desires of architects and urban planners to create a harmonious and culturally resonant city, the pressures of rapid urbanization often led to developments that followed contemporary planning models and techniques. These developments were functional but sometimes devoid of reference to Iranian cultural identity, resulting in environments that lacked the vernacular spirit of the place. This period marked a tension between the pragmatic necessities of urban growth, economic development, and infrastructure expansion and the desire for architectural and urban aesthetics that reflect a strong sense of place and cultural identity. The result was a city that, while expanding and modernizing, also faced challenges in achieving a harmonious and culturally rooted urban environment.

The Ahwaz Water and Electricity Company Town sounds like a well-designed example of a company town that integrated natural elements with a geometric layout. The central green park, surrounded by green plots and detached residential structures, demonstrates an approach that sought to create a balanced and harmonious living environment. Incorporating a central green park serves as a communal space that can foster social interactions, recreation, and a sense of community among the residents. This central open space likely contributes to the town's aesthetics and provides a much-needed relaxation and leisure area.

The use of a geometric pattern in the urban plan suggests a deliberate effort to bring order and organization to the town's layout. Geometric layouts can help optimize land use, enhance navigability, and create a visually appealing environment. The arrangement of detached residential structures on individual properties provides residents with private living spaces while still maintaining a sense of community through the shared park and common areas. Overall, the design you've described indicates an intentional approach to creating a functional and visually pleasing company town that takes into account the needs of the residents and the organization. The integration of nature, geometric patterns, and a communal central space likely contributed to a more holistic and balanced living experience for the town's inhabitants.

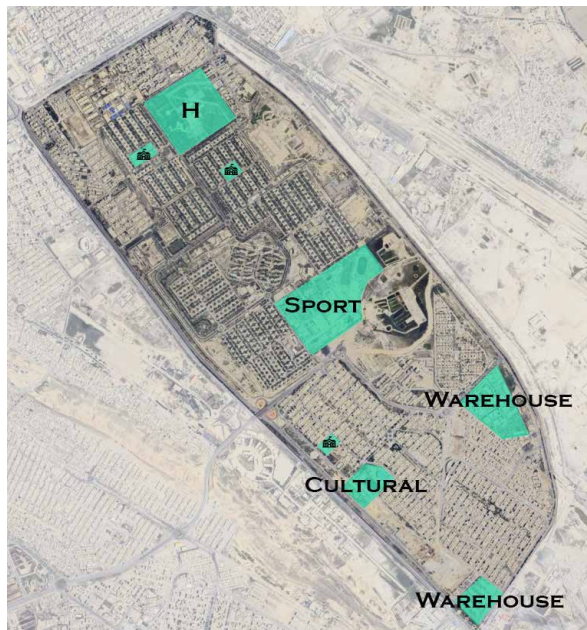


FIG. 6.26 The Oil Company Town of Ahwaz.

Source: Google Maps, edited by the Author

Date: 2023. Accessed: January 2023

6.4.2 Adibi's Grand Design: The Second Comprehensive Plan for Ahwaz

Initiating a new urban and regional Master Plan by the Plan Organization in response to the challenges posed by new constructions reflects a proactive approach to urban development. Preparing a comprehensive plan was crucial in guiding a city's growth and ensuring that various aspects of urban life, such as infrastructure, public spaces, and services, are well-integrated and planned. The funding from Ahwaz's newfound oil revenues provided the resources necessary to support the city's development. The fact that the oil revenues were directed towards urban planning and public policy initiatives indicates a recognition of the importance of strategic urban development in accommodating the city's growth and needs.

The involvement of Eghbal and the support of the Oil Company in Adibi's planning efforts further emphasize the collaboration between different entities to ensure effective urban planning. Having critical figures from both governmental and corporate sectors contributing to the planning process helps align the interests of various stakeholders. It can lead to more comprehensive and balanced development strategies. The announcement of new towns and the hiring of Skidmore, Owings & Merrill (SOM), a renowned architectural and planning firm, showcases the intent to bring expertise from international sources to aid the city's development. Hiring such a firm indicates a commitment to achieving high-quality planning and design aligned with modern urban planning practices.⁶⁰⁸ The combination of funding, collaboration among stakeholders, and engagement of expert firms underscores a dedicated effort to address the challenges posed by urban growth and transform Ahwaz into a well-planned and sustainable city.

The developments of the 1970s in Ahwaz represent a significant shift from the earlier unplanned growth, indicating a renewed effort to shape the city's urban landscape more intentionally and systematically. While conceptually promising, the previous city plan proposed by Adibi faced challenges in its implementation, resulting in limited execution of his ideas. However, the 1970s presented an opportunity for Ahwaz to make strides in urban design and architecture that could rival the historical achievements of Iranian architecture and urban planning. The recognition of the need to respect and draw inspiration from Iran's rich architectural and urban heritage was an essential aspect of the 1970s developments. This shift in focus reflects an awareness of the cultural significance of architectural history and the desire to integrate historical elements into the city's modernization efforts.

⁶⁰⁸ Engineering-New Record, 24 April, PP.13-17; House and Home, 1975, 48, October, 1975. p.9

The combination of energetic administration and the oil industry's activities played a crucial role in shaping Ahwaz's potential for growth. These factors provided both the resources and the impetus to undertake ambitious urban projects and the construction of new buildings. The intention to create historically shaped arcaded avenues and a horizontal skyline of postmodern new buildings suggests an aspiration to create a distinct and harmonious urban environment that blends modernity with cultural heritage. The developments in Ahwaz during the 1970s signify a departure from past challenges and a commitment to transforming the city into a more organized, culturally resonant, and visually appealing urban centre. The decade was a pivotal moment to harness the city's potential and establish a new urban identity that honours its historical heritage while embracing modernity.

Adibi's second Comprehensive Plan for Ahwaz was marked by a focus on infrastructure development and public housing projects, driven by the need to accommodate the influx of rural labourers seeking better job opportunities in the city. This mass migration was transforming Ahwaz from an agricultural community into an urbanized and suburbanized society. The implementation of Adibi's plan aimed to establish a sense of stability within this shifting urban landscape. One of the key aspects of Adibi's plan was the introduction of public housing projects, which were intended to provide affordable housing options for the growing urban population. These housing initiatives were crucial in addressing the housing needs of the low-income workers who were migrating to the city in search of employment opportunities. By offering accessible and well-designed housing options, the plan contributed to creating a more stable and sustainable urban environment.

Adibi's plan also encompassed the development of essential urban facilities that aimed to enhance the city's social welfare. These included educational and medical facilities, well-stocked shops, and quality hotels. The intention was to promote the existing urban centres and provide residents with improved access to essential services, thereby contributing to an enhanced quality of life for the city's residents. Furthermore, the expansion of free education at the university level was a strategic move to cultivate a technocratic cadre capable of leading the oil industry. The employment opportunities generated by both the oil and construction industries, coupled with Adibi's focus on social welfare, raised living standards within the city. This economic growth and improved quality of life contributed to the emergence of a middle class in Ahwaz. Adibi's master plan, with its emphasis on infrastructure, housing, and social welfare, laid the foundation for Ahwaz's transformation into a more urbanized and prosperous city, accommodating both the needs of the workforce and the aspirations of a growing middle class.

The evolution of Ahwaz's urban form was significantly influenced by the decentralization strategy implemented in response to the expansion of the oil industry and the need to separate industrial areas from residential spaces. This approach led to the development of various projects in the city's suburbs, with new factories being established away from residential zones. This spatial arrangement aimed to improve living conditions by minimizing the negative impacts of industrial activities on residential areas. Afforestation efforts were also undertaken to create a buffer between industrial and residential zones. Adibi's urban planning approach introduced a departure from the traditional grid pattern often associated with industrial complexes. Instead, the city's urban zones took on a more organic and interconnected pattern, where different zones flowed into each other in a more fluid arrangement. This approach sought to create a more harmonious and integrated urban fabric.

The role of urban planning in Ahwaz shifted from focusing solely on private gardens and individual landowner decisions to a more public-oriented perspective. With the strengthening of the national state's influence, collaborations between landowners and government entities became more prevalent. The aim was to achieve a more cohesive and coordinated city design aligned with broader urban development goals. This collaboration between the government and local authorities led to improvements in the city's aesthetics and functionality. Landscape projects, such as parks and gardens, were introduced, enhancing the city's overall appearance. The revitalization of the riverfront also contributed to the city's modernization and livability.⁶⁰⁹ Adibi's urban planning efforts, coupled with collaborations between different stakeholders, played a pivotal role in shaping Ahwaz's urban form into a more modern, organized, and desirable living environment. The focus on spatial integration, green spaces, and improved urban infrastructure contributed to the city's socio-cultural development and enhanced quality of life for its residents.

⁶⁰⁹ Ahwaz, printed book by Iranian Oil Exploration and Producing Company, Source : BP Archive. Archref:Arc65354. 1973.

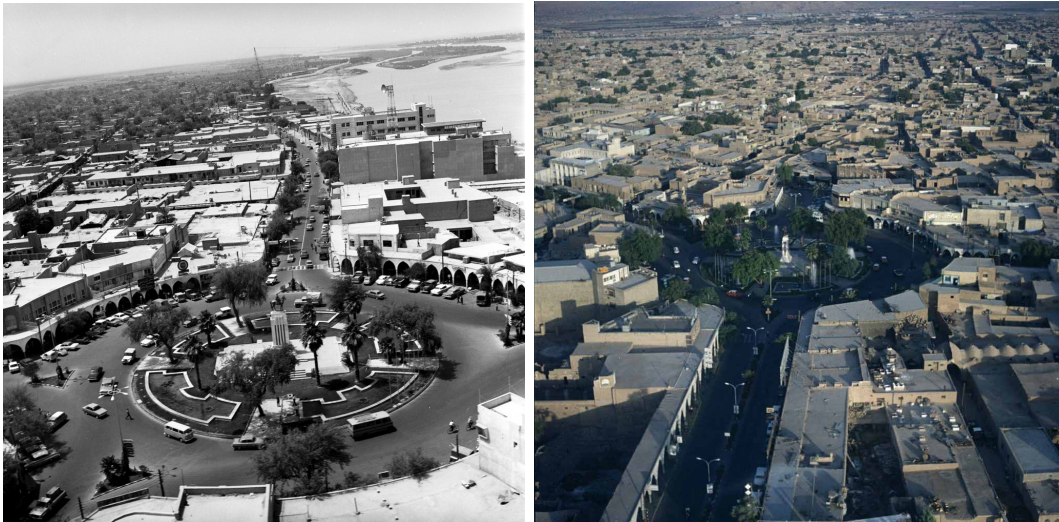


FIG. 6.27 Ahwaz Urban Square - Aerial View.

Source: Image number: 008266-80- (left) & 009581-79- (right). Iranian Oil Museum Archives.
Date: 1972-79. Accessed: January 2017



FIG. 6.28 Comprehensive Plan of Ahwaz.

Source: National Cartographic Center of Iran
Date: 1985-1995. Accessed: January 2017

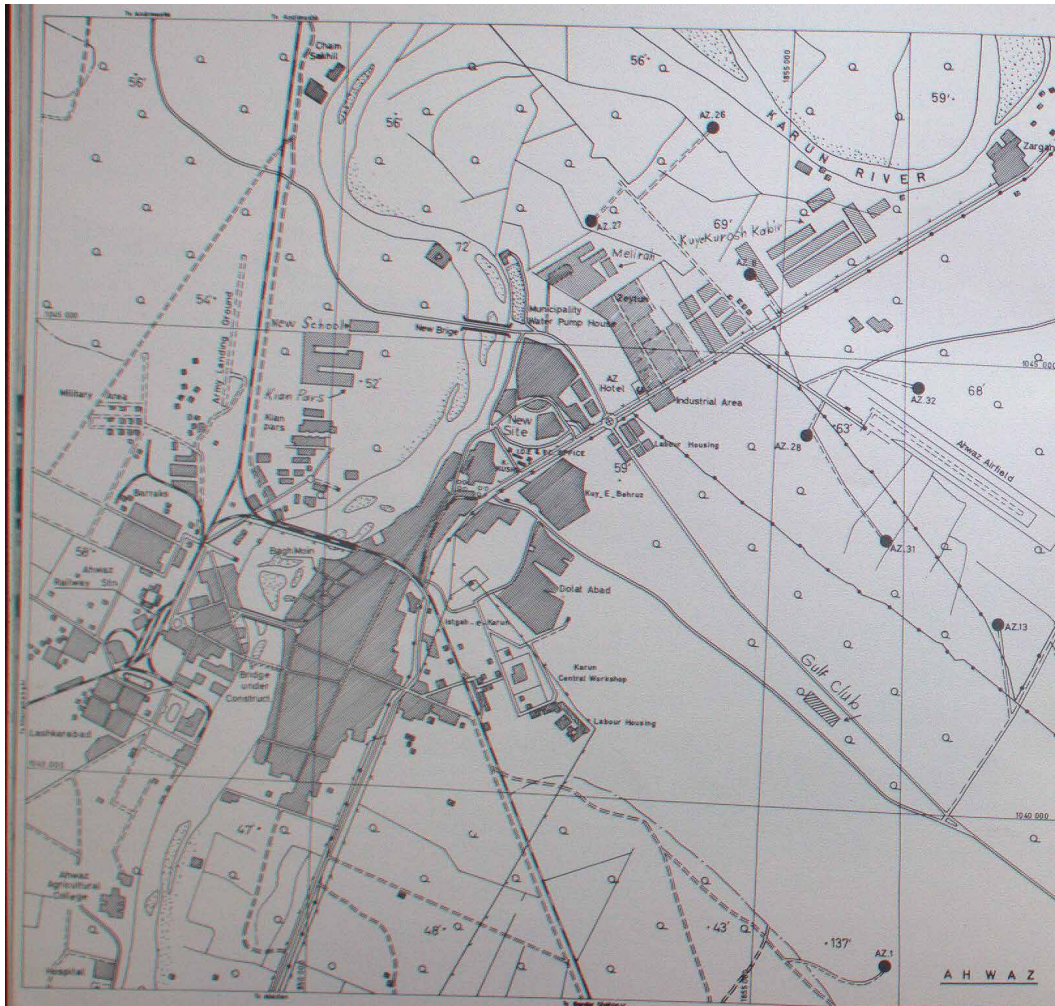


FIG. 6.29 Ahwaz Map.

Source: Ahwaz Book. Published by the Iranian Oil Exploration and Producing Company. BP Trading Limited. ArcRef: 65354.

Barcode: 61111. BP Archives.

Date: 1973. Accessed: February 2017

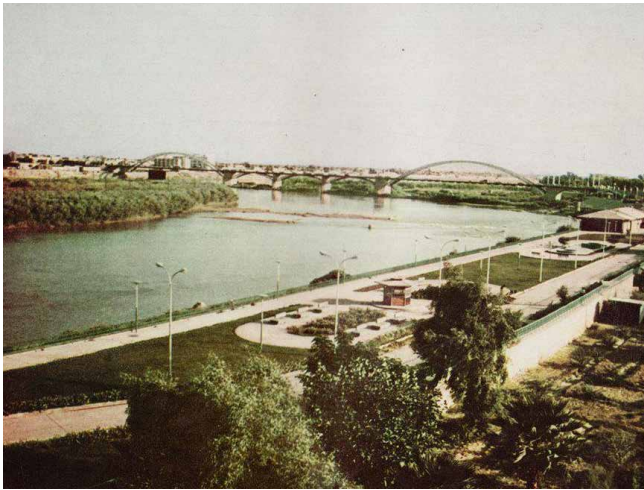


FIG. 6.30 Park near Karun River.

Source: left & down: <https://www.facebook.com/ahwazghadim1/photos/pb.100064566795056.-2207520000./407574429347248/?type=3>

right: Book "Ahwaz" by Iranian Oil Operating Company & BP Trading Limited. ArcRef: 247650. Barcode: Z01621880. BP Archives.

Date: 1970s. Accessed: February 2017.



FIG. 6.31 Ahwaz Areal View.

Source: Image number: 009579-79- (left) & 009591-79- (right). Iranian Oil Museum Archives.
Date: 1972-79. Accessed: January 2017



FIG. 6.32 Ahwaz Bridges Areal View.

Source: Image number: 009597-79- (left), 009598-79- (middle), & 009599-79- (right). Iranian Oil Museum Archives.
Date: 1972-79. Accessed: January 2017

The development of high-quality housing for managers and staff was a significant aspect of Ahwaz's urban expansion in the 1970s. One of the notable projects was the construction of a residential complex on lands owned by the National Iranian Oil Company (NIOC). This complex, located northeast of Ahwaz-Bandar Shahpur Highway, aimed to provide modern and well-equipped housing for employees and

their families. The residential complex was designed to accommodate a large number of residents, featuring 1,170 different types of traditional and prefabricated staff houses. It covered a vast area of 300 hectares and included various amenities and facilities to support the residents' needs. A vital aspect of the project was the integration of essential services and infrastructure to ensure a high quality of life for the residents.

The construction process involved multiple stages, starting with the establishment of crucial infrastructure such as water supply systems, electrical power substations, communication networks, sewage systems, and more. The goal was to create a well-functioning and well-connected residential area that provided all necessary utilities and services to its inhabitants. In addition to the housing units, the project encompassed other essential components such as a 350-bed hospital, staff stores, and town facilities. These facilities were strategically located within the complex to ensure easy access for residents. Noise and traffic management were also taken into consideration. Measures such as landscaped earth sound buffers and overpasses were implemented to mitigate traffic noise and enhance road safety for the residents. The project timeline aimed to complete the residential area within 20 months, with all flats and houses ready for occupancy before the end of 1978. The comprehensive planning and integration of services demonstrated a commitment to creating a modern and self-sufficient community for the residents.

Moreover, the project's focus on welfare facilities, central heating systems, and air conditioning highlighted the intention to provide a comfortable and pleasant living environment, further contributing to the well-being of the inhabitants. Overall, the construction of this residential complex represented a significant step towards enhancing the city's infrastructure, improving living conditions, and accommodating the growing workforce in Ahwaz's expanding urban landscape.



FIG. 6.33 Company Employees Mass Housing Projects in Ahwaz - Aerial View.

Up: Image number: 009575-79-(left), 009574-79-(Middle), 008910-80-(right), 008925-80.

Down: Image number: 009571-79-(left), 009572-79-(Middle), 008925-80-(right).

Iranian Oil Museum Archives.

Date: 1972-79. Accessed: January 2017



FIG. 6.34 Company Housing in Ahwaz - Aerial View.

Source: Image number: 062236 (left), 062243 (Middle), 009594-79 (right). Iranian Oil Museum Archives.

Date: 1972-79. Accessed: January 2017



FIG. 6.35 Company Employees Housing in Ahwaz - Aerial View.

Source: Image number: 008929-80- (left) & 004601(right). Iranian Oil Museum Archives

Date: 1972-79. Accessed: January 2017



FIG. 6.36 Company Employees Housing in Ahwaz - Aerial View.

Source: Up: Image number: 008926-80- (left) & 008927-80- (right)

Down: Image number: 008928-80- (left) & 009562-79- (right)

Iranian Oil Museum Archives

Date: 1972-79. Accessed: January 2017

6.5 Intersectoral Collaboration: The Oil Company's Partnership with National Ministries Infrastructure

The development of the new Ahwaz airport was a collaborative effort involving various ministries, including the Ministry of Transport, the Ministry of Agriculture, and the Oil Company. The project aimed to create a modern and functional airport facility that could accommodate the increasing air traffic and serve as a gateway to the city. The selection of suitable land for the airport was a critical step in the planning process. Initially, lands were allocated from an area known as “Baghat-Kuy-Shah” or “the majesty’s lands,” covering 1,000 hectares. However, disagreements and conflicts arose among farmers and workers regarding the chosen location, prompting a change in plans. The decision was made to relocate the development approximately one kilometre to the west of the originally proposed site.

The shift in location aimed to address the concerns of local residents and minimize disruptions to the existing agricultural activities in the area. It was essential to strike a balance between the need for airport infrastructure and the community's interests. Additionally, the project considered the potential repurposing of the old airport's lands. Approximately 15 hectares of land from the old airport site were planned to be transformed into housing for the airport staff. This approach repurposed the existing infrastructure and provided convenient accommodations for the personnel working at the airport. The collaborative effort among different ministries and organizations reflected the comprehensive approach to urban development and infrastructure improvement. Establishing a new, well-designed airport would not only enhance transportation options for the city but also contribute to Ahwaz's overall economic growth and connectivity.

The construction of a first-class road connecting Ahwaz and MIS (the Ministry of Industries and Mines), with plans to extend it further to Isfahan through the Zagros mountains, marked a significant development in the region's transportation infrastructure. This road was not only intended to improve connectivity between these cities but also had the potential to become one of the most picturesque and scenic highways in Iran once it was completed. The road's route passing through the historic city of Shushtar added to its cultural and historical significance. Shushtar is known for its ancient water management system and historical sites, making the road journey even more interesting and informative for travellers.

Furthermore, the plan to extend the road to Isfahan, a major city in Iran, indicated the intention to create a robust and efficient transportation network that connected key cities and regions. The route passing through the Zagros mountains would likely offer breathtaking views and highlight the landscape's natural beauty. Ahwaz's strategic location on both sides of the Karoun River, which is Iran's only navigable river to the open sea, contributed to its importance as a transportation hub. The city's access to road, rail, and air connections further enhanced its position as a pivotal transportation centre in southwest Iran. This advantageous location and transportation network made Ahwaz a natural choice for a depot and distribution centre, facilitating the movement of goods and people within the region and beyond.

In addition to road and transportation infrastructure, Ahwaz saw the development of other essential facilities to support its growing industries and urbanization. One notable project was the construction of the Mohammad Reza Shah Pahlavi Dam on the Dez River by the Khuzestan Water and Power Authority. This massive hydroelectric dam was strategically located not far from Ahwaz and played a crucial role in the Khuzestan region's modern water and power development. The Mohammad Reza Shah Pahlavi Dam had a significant impact on the area. It created a vast artificial lake in the Dez Valley, spanning more than 60 kilometres in length. This reservoir not only served as a water storage source but also played a role in generating hydroelectric power for the region. The dam's construction and operation contributed to the region's energy needs, as well as its agricultural and industrial requirements.

The development of such hydroelectric infrastructure was in line with the broader efforts to harness Iran's natural resources for economic growth and development. The creation of artificial lakes and reservoirs, like the one formed by the Mohammad Reza Shah Pahlavi Dam, had implications for water supply, irrigation, electricity generation, and even tourism. Furthermore, the mention of additional dams being planned to the north and east of Ahwaz suggests a comprehensive approach to water management, power generation, and economic development in the region. These dams likely aimed to optimize the utilization of water resources, support further industrialization, and enhance the overall quality of life for the local population.

The development efforts in Ahwaz included a significant transformation of the agricultural sector as well. The region's arid soils were cultivated to shift from subsistence agriculture to modern, well-irrigated, and mechanized farming practices. This transition aimed to enhance agricultural productivity and diversify the range of crops grown, including cash crops such as sugar cane. The introduction of modern irrigation techniques and agricultural machinery played a crucial role in improving crop yields and ensuring a more reliable and efficient food production system. The

shift towards cash crops like sugar cane not only contributed to local economies but also provided raw materials for various industries, such as the production of sugar and other related products.

Moreover, the urban and rural electrification program was another important aspect of the development plans. The extension of overhead power transmission lines aimed to bring electricity to both urban areas like Ahwaz and rural regions. Access to electricity had a transformative impact on various sectors, including agriculture, industry, and daily life. It facilitated the adoption of modern technologies, improved living conditions, and supported the growth of industries requiring electricity. Overall, the efforts to modernize agriculture, expand irrigation, and extend electrification were integral parts of the broader development strategy for Ahwaz and the Khuzestan region. These initiatives aimed to enhance economic prosperity, infrastructure, and the quality of life for the local population, contributing to the region's overall growth and progress.

The construction of the bridge by NIOC in Ahwaz, spanning the Karun River, demonstrated the integration of engineering and environmental considerations in the region's development. This bridge was designed to carry two pipelines from Ahwaz Production Unit No.3 to another location, AZPU2, and it held the potential to accommodate four additional large-diameter pipelines in the future. The bridge's length of 468 meters allowed the pipelines to cross the Karun River, a critical natural feature in the region. The height of 5 meters above the river ensured that the pipelines could traverse the waterway without obstructing its flow. The design of the bridge considered both the practical transportation of the pipelines and the preservation of the river's natural dynamics.

Construction involved pile driving, a process that consists of driving piles (long columns) into the riverbed to provide a stable foundation. This technique is commonly used in building structures on or in water bodies. To accommodate temperature-related expansion and contraction of the pipelines, roller supports were installed. These supports allowed the pipes to move freely, preventing stress and damage caused by temperature fluctuations. To protect both the bridge and the river, safety measures were implemented. Protective piles were installed to shield the bridge from floating objects, and automatic safety valves were placed on the pipelines at both ends of the bridge. These valves were designed to activate in case of a rupture, preventing pollution of the river and minimizing environmental impact. This project illustrated the complex interplay between engineering, ecological considerations, and safety measures in the development of critical infrastructure like bridges and pipelines. The focus on preserving the natural ecosystem while

facilitating necessary industrial operations reflected a balanced regional growth and sustainability approach.



FIG. 6.37 Ahwaz Airport.

Source: Image number: 008939-80-(left), 008941-80-(Middle), & 008938-80-(right). Iranian Oil Museum Archives.
Date: 1972-79. Accessed: January 2017

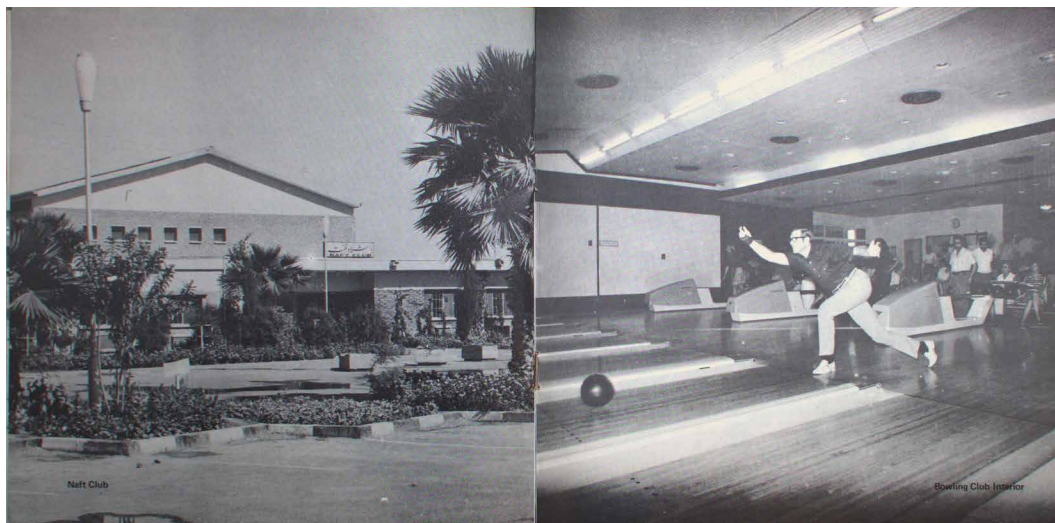


FIG. 6.38 Ahwaz Club.

Source: Ahwaz Book. Published by the Iranian Oil Exploration and Producing Company. BP Trading Limited. ArcRef: 65354.
Barcode: 61111. BP Archives.
Date: 1973. Accessed: February 2017

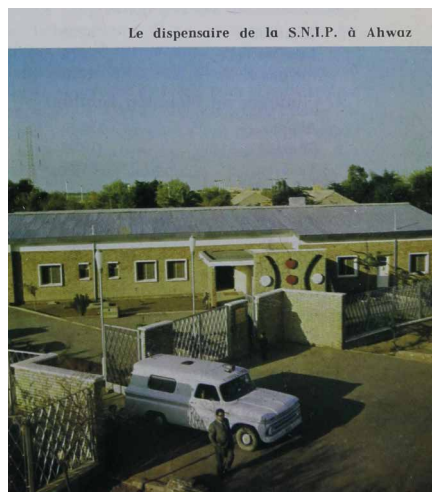
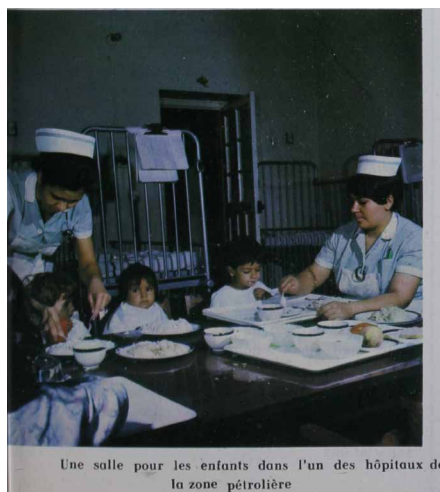


FIG. 6.39 Ahwaz Extension of Khoram-Kushk Clinic, Ahwaz.

Source: *Iran Petroleum Journal*. No. 124. Iranian National Library Archives.
Date: 1973. Accessed: January 2016



FIG. 6.40 Ahwaz Shop.

Source: *Ahwaz Book*. Published by the Iranian Oil Exploration and Producing Company. BP Trading Limited. ArcRef: 65354. Barcode: 61111. BP Archives.
Date: 1973. Accessed: February 2017

6.5.2.1 Education

The National Iranian Oil Company (NIOC) played a significant role not only in the development of the oil industry but also in the advancement of education and infrastructure in the country. Recognizing the importance of education for the overall growth and development of the nation, NIOC took steps to support educational initiatives, particularly in the province of Khuzestan. One of the challenges that arose from the rapid growth of NIOC's staff was the need for educational facilities, including schools, to accommodate the employees' families. NIOC's commitment to education led to collaborations with the Ministry of Education to address this issue. In 1970, with financial support from NIOC, the Oil Company employees initiated the construction of a school and a kindergarten on the company's properties. This approach aimed to provide educational facilities managed by the employees themselves, allowing for a sense of ownership and a direct role in their children's education. This self-reliant approach also aimed to reduce the burden on the national education system by accommodating a significant number of students from other schools. By taking these steps, NIOC demonstrated its dedication to the oil industry and the overall welfare and development of the communities in which it operated. The collaborative efforts to build educational facilities reflected a broader commitment to improving the quality of life for employees and their families and contributing to the educational advancement of the region.

The collaboration between the National Iranian Oil Company (NIOC) and various government ministries extended beyond just educational facilities. In this case, a collaboration between NIOC, the Ministry of Culture, and the Ministry of Education resulted in the establishment of an artisan high school. This initiative aimed to provide specialized vocational education and training to students who were interested in pursuing careers in craftsmanship and technical fields. The construction of the artisan high school building itself was considered a cultural responsibility, and the Ministry of Culture likely took the lead in this aspect. However, NIOC played a role by providing the necessary machinery and equipment for the school's vocational training programs. The involvement of a specialist from UNESCO in the design study further underscores the commitment to creating a high-quality educational institution. The artisan high school offered a comprehensive four-year course of study, which aimed to prepare students with the skills and knowledge needed for various trades and crafts. The school's curriculum likely included a focus on practical training, hands-on experience, and technical skills development, all geared towards preparing students for employment in industries like the oil sector. In addition to the artisan high school, NIOC's collaborative efforts also extended to the establishment of a Technical Vocational High School. This institution provided education at a higher level and was divided into two major divisions: industrial and commercial.

The industrial division likely focused on training students for technical roles, while the commercial division aimed to prepare students for office and administrative positions. Overall, these collaborations between NIOC and different ministries exemplify a holistic approach to education and skill development, with the goal of equipping students with practical skills that were directly relevant to the needs of various industries, including the oil sector.

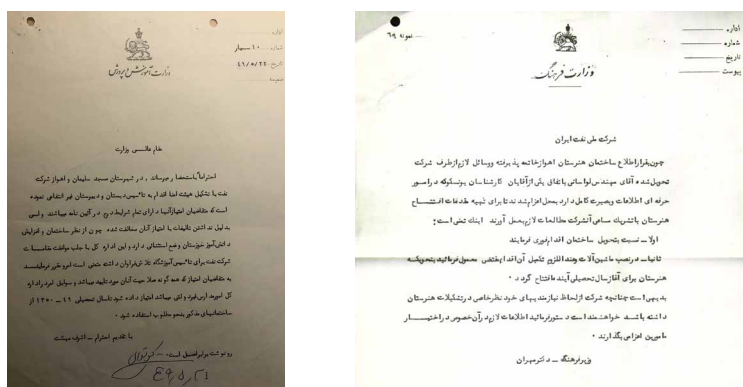


FIG. 6.41 Documents revealing the collaboration of the Oil Company with the Ministry of Culture and the Ministry of Education.

Source: Iranian National Library Archives

Date: 1970s. Accessed: January 2016

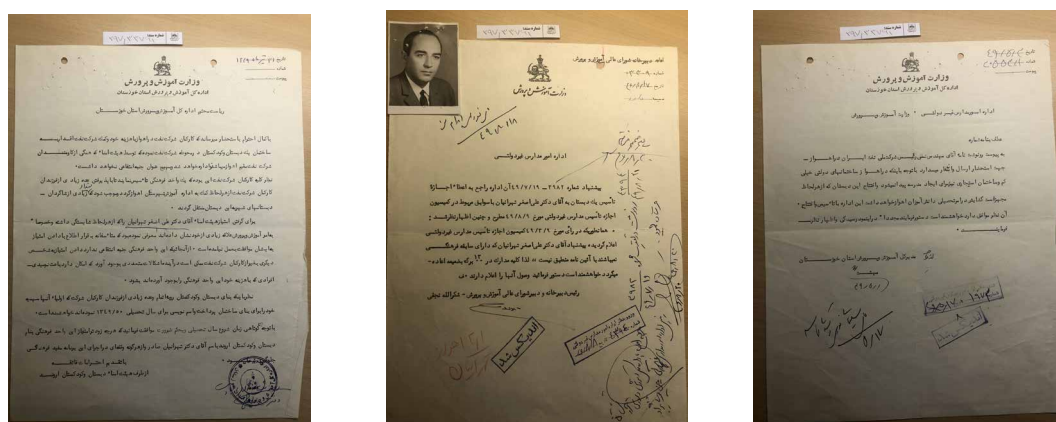


FIG. 6.42 Documents revealing the collaboration between the Oil Company and the Ministry of Culture and the Ministry of Education.

Source: Iranian National Library Archives

Date: 1970s. Accessed: January 2016

The National Iranian Oil Company (NIOC) recognized the importance of nurturing its employees' intellectual and cultural growth. NIOC undertook various initiatives to enhance its workforce's general knowledge and cultural standards to achieve this goal. One of these initiatives involved the establishment of numerous libraries in both Tehran and the oil-producing regions. By setting up libraries, NIOC aimed to provide its employees with access to a wide range of educational resources, including books, periodicals, journals, and reference materials. These libraries likely covered diverse subjects, catering to the interests and needs of employees from various professional backgrounds. Through access to these resources, employees could expand their knowledge, improve their skills, and engage in continuous learning. These libraries also served as places for employees to engage in intellectual and cultural pursuits beyond their work responsibilities. Reading, research, and discussions in these library spaces could contribute to individuals' personal growth and enrichment, fostering a culture of learning within the organization. The establishment of libraries by NIOC reflected its commitment to promoting education, knowledge, and cultural development among its employees, further enhancing their skills and contributions to the company's operations and objectives.



FIG. 6.43 Trainees at the Artisan School and the Technical Vocational High School in Ahwaz.

Source: Iran Oil Journal. Iranian National Library Archives.

Date: 1972. Accessed: January 2016

6.5.2.2 Petrochemical Industry

During the 1970s, the development of the petrochemical industry was a significant focus of Iran's oil policy. The global energy landscape was undergoing changes, with concerns arising about energy shortages and their potential impact. In this context, Iran's approach to utilizing its abundant raw materials, including oil, for value-added petrochemical production aligned with its strategy to diversify its revenue sources and decrease reliance on oil as a primary energy source. The Shah's vision of utilizing oil as a raw material for manufacturing valuable products instead of merely burning it as fuel was forward-thinking. This approach aimed to maximize the economic benefits of Iran's oil resources by extracting more value from them through petrochemical production. Petrochemicals are essential components in a wide range of products, from plastics and synthetic materials to pharmaceuticals and textiles.

By investing in the petrochemical industry, Iran could tap into a broader array of markets and industries, generating additional revenue streams while also creating more job opportunities and fostering industrial growth. This strategy aligned with the Shah's more expansive vision of modernizing and industrializing the country and reducing its dependence on traditional oil exports. Furthermore, the development of the petrochemical industry also had environmental implications. Shifting away from using oil as a primary energy source for fuel could help address concerns about pollution, energy consumption, and sustainability. This approach aimed to optimize the use of oil resources for economic development while also considering the long-term well-being of the environment. Iran's emphasis on the petrochemical industry to diversify its economy, generate more revenue, and reduce reliance on oil for energy reflected a strategic vision encompassing economic, industrial, and environmental considerations.



FIG. 6.44 Ahvaz Industrial Development: The Ahvaz Pipe Mills.

Source: Iran Petroleum Journal. No. 124. Iranian National Library Archives.

Date: 1973. Accessed: January 2016



FIG. 6.45 Ahvaz Industrial Development: The Ahvaz Pipe Mills.

Source: Middle East Oil Development. Khak-e-Naftranian National Library Archives.

Date: 1973. Accessed: January 2016

6.5.2.3 Case Example of industrial petroleumscape: Karun Industrial Area

The development of the Karoun industrial area in Ahwaz marked a significant expansion of industrial facilities in the city aimed at meeting the growing demands of Iran's oil and gas infrastructure. This industrial town was strategically planned to accommodate a range of functions, including housing, workshops, recreational facilities, and educational institutions. One of the key components of the Karoun industrial area was the central workshop for the Khuzestan oilfields. This workshop played a vital role in supporting the operations of the oilfields by providing maintenance, repairs, and other necessary services for the equipment and machinery used in oil extraction and processing.

The Ahwaz Pipe Mills were another crucial element of the industrial installations in the Karoun area. These pipe mills were designed to produce pipes that were essential for the country's oil and gas infrastructure, particularly for projects like the Iran Gas Truck Line (IGAT Line). The IGAT Line involved the transportation of natural gas across the country, and the need for pipes to construct and maintain the pipeline was a driving factor behind the establishment of the pipe mills. In addition to the industrial facilities, the Karoun industrial area also included amenities for the workers and their families. Housing, stores, and recreational facilities were built to create a complete community that supported the needs of the workforce. The presence of an Artisan School and a Labour clinic further underscored the emphasis on education, skill development, and healthcare for the workforce. The development of the Karoun industrial area represented a comprehensive approach to industrial growth, encompassing production facilities, workforce support, and community infrastructure. This expansion was closely aligned with the demands of Iran's oil and gas industry and its goal of ensuring a robust and efficient energy infrastructure.

The Ahwaz Pipe Mills were a crucial component of Iran's efforts to develop its industrial infrastructure, particularly in the context of its growing oil and gas industry. These mills consisted of two distinct factories, referred to as large and small factories, and were equipped with advanced technology and facilities to produce high-quality pipes needed for various applications, including oil and gas transportation. ⁶¹⁰ One of the notable features of the Ahwaz Pipe Mills was their advanced quality control methods. The factories employed X-ray and ultrasonic testing, as well as television units, to meticulously inspect the welded seams of

⁶¹⁰ Pipes of 6 to 16 inches in diameter are rolled from coils weighing 6 to 16 inches in diameter are rolled from coils weighing 6 to 16 tons and 400 to 900 feet in length.

the pipes.⁶¹¹ This stringent quality control ensured that the pipes produced were of high integrity and met the required standards for use in critical applications. The electricity required for the operations of the Ahwaz Pipe Mills, as well as other industrial facilities in the region, was supplied by the Mohammad Reza Shah Pahlavi Dam.⁶¹² This dam played a significant role in providing the necessary power to support industrial growth and development in Khuzestan.⁶¹³

The Central Workshop associated with the Ahwaz Pipe Mills was a highly sophisticated and well-equipped industrial unit. Occupying a covered area of 250,000 square feet, it covered a substantial area and housed facilities for major equipment overhauls, repairs, and maintenance. The Material Base Store within the workshop served as a hub for storing and managing equipment and materials needed for the oil industry. The efficient materials handling systems were designed to ensure smooth flow and quick access to essential components.⁶¹⁴ The visit of the Shah to the Ahwaz Pipe Mills in 1978 showcased the significance of these industrial facilities. The presence of high-ranking officials, including the chairman and general managing director of NIOC, underscored the importance of the mills in supporting Iran's energy sector. The usage of pipes for projects like the second gas trunkline demonstrated the practical application of the products manufactured by the mills. The Ahwaz Pipe Mills were emblematic of Iran's commitment to technological advancement, quality production, and industrial self-sufficiency in the realm of energy infrastructure.

⁶¹¹ The capacity of the large factory was an average of 20,000 tons of pipe per month, while the capacity of the smaller factory was 10,000 tons a month on the basis of two shifts and 25 working days per month.

⁶¹² 3,600,000 kilowatts of electricity per month

⁶¹³ 3,600,000 kilowatts of electricity per month

⁶¹⁴ with its stock of some 90,000 parts



FIG. 6.46 Karun Industrial Area, Ahwaz.

Source: Google Maps, edited by the author.

Date: 2023. Accessed: January 2023

6.6 Representations of the Petroleumscape

6.6.1 Political Articulation of the Oil Industry

The 1970s marked a period of showcasing and celebrating the oil industry's contributions to developments and accomplishments. The oil sector had not only transformed the economy and infrastructure but had also brought about significant changes in various aspects of society. As a result, there was a growing recognition of oil's impact on people's lives, even beyond the immediate oil fields. During this era, there was a concerted effort to communicate the benefits of the oil industry to the broader population, including those living far away from the oil fields. This involved highlighting the various projects, advancements, and improvements that had been made possible due to the revenues generated from oil exports. These efforts aimed to foster a sense of pride and appreciation among the public for the nation's achievements, driven by the oil sector's success. Infrastructure projects, urban development, educational institutions, healthcare facilities, and various other aspects of modernization were made possible through the funding provided by the oil industry. The idea was to show that the country's oil resources were being harnessed for the betterment of the nation as a whole. This narrative was not only about economic development but also about improving the quality of life for the citizens of Iran. The oil industry's impact was not limited to the economic sphere; it had implications for society, culture, and even national identity. As Iran was increasingly recognized on the global stage due to its oil exports, a sense of national pride was associated with the industry's achievements. Overall, the 1970s represented a period of highlighting and celebrating the tangible outcomes of the oil industry's success, both in terms of the physical infrastructure and the broader societal changes it enabled. It was a time when the nation was encouraged to reflect on the progress that had been made and to appreciate the role that oil played in shaping the country's modernization and development.

The first international Energy and Petrochemical Exhibition held in Tehran in 1972 marked a significant milestone in showcasing the advancements and innovations in the energy and petrochemical sectors to both domestic and international audiences. The exhibition served as a platform for participating countries to display their latest technologies, equipment, and machinery related to energy production and petrochemical processing. The exhibition's primary objective was to inform and educate the public about the substantial contributions of the

oil industry to technological progress and economic development. By showcasing modern equipment and machinery, the exhibition aimed to highlight the creative and innovative role that the oil industry played in driving forward advancements in energy production and petrochemical processes. The importance of the oil industry to Iran's economy and development, this exhibition also served as an opportunity for the nation to demonstrate its capabilities and achievements on the global stage. It allowed Iran to showcase its advancements in the energy and petrochemical sectors and foster collaboration and exchange of ideas with other countries in these fields. In addition to promoting technological progress, the exhibition likely contributed to building a sense of national pride and identity. It emphasized Iran's position as a major player in the global energy and petrochemical industries and highlighted its achievements in harnessing its oil resources for technological advancement. The International Energy and Petrochemical Exhibition of 1972 was a platform for showcasing the innovative contributions of the oil industry, informing the public, and establishing Iran's presence in the international energy and petrochemical sectors.

The focus delivered by the head of the Secretarial and Public Relations of the Oil Industry during the first international Energy and Petrochemical Exhibition highlighted the critical role of the oil industry in Iran's economic landscape. The statement likely emphasized the significance of the National Iranian Oil Company (NIOC) as a key driver of the nation's economy and development. The mention of Shah's aspiration for NIOC to become "the biggest and most powerful Oil Company in the world" reflected the ambitious vision set for the Iranian oil industry under his leadership. The Commerce Minister's statement about the purpose of the exhibition reinforced the idea that it aimed to inform and educate the Iranian population about various aspects of petrochemical products and alternative energy sources. This objective aligned with the broader goal of expanding trade and investment opportunities in the energy and petrochemical sectors.⁶¹⁵ By showcasing the latest advancements in these fields, the exhibition likely sought to attract both domestic and international attention, encouraging further exploration, innovation, and collaboration.

The exhibition served multiple purposes: enhancing public awareness of petrochemical products and energy sources, fostering economic growth through trade and investment, and positioning Iran as a significant player in the global energy and petrochemical industries. Shah's vision and commitment to making NIOC a dominant force in the global oil landscape underscored the country's determination to leverage its oil resources for maximum economic and technological benefit.

⁶¹⁵ The development of the petrochemical industry in Iran remained one of the foremost objectives of the country's oil policy

The participation of various Iranian companies in the international Energy and Petrochemical Exhibition showcased the diversity and range of industries and technologies within Iran's energy and petrochemical sectors. These companies represented different aspects of the industry and demonstrated their products to the public and potential investors. Some of the notable companies that took part in the exhibition included the National Iranian Oil Company (NIOC)⁶¹⁶, Solar Energy Company⁶¹⁷, Iran A.A.F. Company⁶¹⁸, Tehran Dynam Company⁶¹⁹, Near East Essocom⁶²⁰, Pipe and Machine Tools Company⁶²¹, Iran Drisher Company⁶²², Nejco⁶²³, Daghayegh Hydraulic Company⁶²⁴. These are just a few examples of the Iranian companies that participated in the exhibition. Each company's presence highlighted their contributions to the energy and petrochemical sectors, emphasizing the breadth of expertise and innovation within Iran's domestic industries. The exhibition served as a platform for these companies to showcase their products and technologies, fostering collaboration, trade, and investment within the energy and petrochemical fields.⁶²⁵

⁶¹⁶ As the central entity responsible for Iran's oil exploration, production, and distribution, NIOC's participation likely highlighted the country's significant oil reserves and the role of NIOC in managing this crucial resource.

⁶¹⁷ This company's presence at the exhibition suggests a focus on renewable energy sources, particularly solar power, reflecting a growing interest in alternative and sustainable energy solutions.

⁶¹⁸ The specifics of this company's involvement would depend on its field of expertise. It might have been involved in various aspects of the energy and petrochemical industry, from equipment manufacturing to services.

⁶¹⁹ This company's participation could have involved the presentation of dynamometer systems and technology used to measure mechanical forces and properties in oil wells.

⁶²⁰ The exact nature of this company's products or services isn't clear from the provided information, but its involvement indicates a role within the energy and petrochemical sector.

⁶²¹ Given the focus on pipes and tools, this company likely showcased products related to the manufacturing and maintaining equipment used in the energy and petrochemical industry.

⁶²² The company might have exhibited drilling-related equipment or services used in oil exploration and extraction.

⁶²³ The specific area of expertise of this company is unclear, but its participation could have encompassed various aspects of the energy sector.

⁶²⁴ This company might have showcased hydraulic systems and equipment used in various applications within the energy and petrochemical industry.

⁶²⁵ Arcref: 246750 , 1/1/1963-31/12/1964, The British Petroleum Company Limited, BP Trading Limited Undated PR booklet produced by the Iranian Oil Operating Companies about its operations at Ahwaz, noted as being the modern capital of the oil-rich Iranian province of Khuzestan. Main contents: background; production units; installations; new site, Khoram Kushk; Karoun Industrial unites (Ahwaz pipe mills; Ahwaz Pipe Mills and Central Workshop); Artisan schools; Home ownership scheme; Exclusions. From the archive of C P Williamson



FIG. 6.47 Article in the Newspapers: "The National Iranian Oil Company Achieved the First Position in the Whole World".

Source: Khak-e-Naft Magazine. No. 6 & 18. Iranian National Library Archives.

Date: 1971. Accessed: January 2016

6.6.2

Social Confluence of Oil: The 1972 Abadan Permanent Exhibition

Although this exhibition was not in Ahwaz, it is worth mentioning in Representative Petroleumscape. The inauguration of the permanent exhibition at the oil industry's public relations centre in Abadan in 1972 was a significant event that aimed to showcase the achievements, efforts, and contributions of the oil industry to Iran's economy and development. The exhibition highlighted various aspects of the oil industry's operations, both domestically and internationally, and it used different media to convey its messages to the public and stakeholders. Here are some key features and highlights of the exhibition:

Film Presentation ("Abadan"): The exhibition included a film titled "Abadan," which depicted the dedicated work of oil industry workers in the city of Abadan. This film likely provided an insight into the daily lives, challenges, and achievements of the workers who played a crucial role in the industry's operations. Speeches on Importance: The exhibition featured speeches by various individuals, including

officials and leaders, who emphasized the paramount importance of the oil industry in Iran's economic landscape. The lectures also echoed Shah's vision of elevating the National Iranian Oil Company to become the foremost and most powerful oil company globally.

Management Progress: The exhibition offered insights into the management progress achieved by the oil, gas, and petrochemical branches of the National Iranian Oil Company. This highlighted the strides made in optimizing the industry's operations and efficiency. **International Ventures:** The exhibition showcased the company's international ventures and partnerships. This included its participation in refineries in locations like Madras and Sasolburg, demonstrating its global reach and collaboration. **Oil Exploration Abroad:** Visitors learned about the company's exploration efforts in oil-rich regions such as the North Sea and London. These ventures underscored the company's commitment to expanding its presence and contributions beyond Iran's borders.

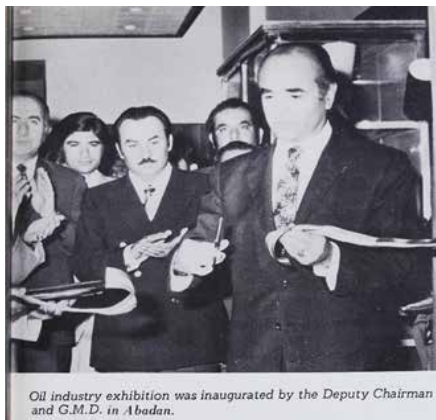
The exhibition's purpose was not only to inform the public about the oil industry's achievements but also to foster a sense of pride and awareness among the Iranian population. By presenting the industry's successes and endeavours, the exhibition aimed to highlight the crucial role of the oil sector in driving economic growth, technological advancement, and national development. It provided a platform for showcasing Iran's capabilities in the global energy market and demonstrated the country's commitment to excellence in the oil industry. This permanent exhibition organized by the oil industry had a multifaceted purpose, and one of its significant roles was to highlight and inform the public about the creative and valuable contributions of the oil industry to various aspects of the country's development. Among these contributions, the oil industry's efforts to improve general science and learning in Iran stood out as a key achievement. The exhibition aimed to shed light on the educational, industrial, and developmental initiatives led by the oil industry, particularly within the oil-rich province. Here are some key points related to this role of the exhibition: Educational Initiatives⁶²⁶, Industrial and Development Programs⁶²⁷,

⁶²⁶ The oil industry played an active role in supporting educational programs and initiatives in Iran. This could include funding educational institutions, establishing schools, vocational training centres, and technical schools, and promoting educational opportunities for the local population, especially in areas closely related to the oil industry's operations.

⁶²⁷ The oil industry's influence extended beyond its direct operations, as it contributed to the broader industrial and developmental progress of the country. This could involve supporting infrastructure development, urban planning, technology transfer, and other projects aimed at enhancing the overall quality of life and economic growth.

Oil Province Focus⁶²⁸, Public Awareness and Engagement⁶²⁹, and Demonstrating Corporate Responsibility⁶³⁰.

Overall, the exhibition served as a means to communicate the oil industry's broader contributions to society, particularly in the areas of education, industrialization, and development. By showcasing these achievements, the exhibition aimed to create a sense of pride and awareness among the public about the industry's multifaceted positive impact on the nation's progress and growth.



Head of Public Relations making a speech at the oil industry exhibition in Abadan.

FIG. 6.48 Oil Industry Permanent Exhibition Inauguration in Abadan.

Source: Iran Oil Journal. Iranian National Library Archives.

Date: 1972. Accessed: January 2016

⁶²⁸ The exhibition likely emphasized the oil industry's role in the province where its operations were centred. In the case of the oil-rich province, showcasing the industry's contributions to education, industrialization, and development would have been particularly relevant due to the province's significant role in the oil sector.

⁶²⁹ By showcasing its achievements in educational, industrial, and development initiatives, the oil industry aimed to increase public awareness and engagement. The exhibition was a platform for informing people about the industry's positive impacts beyond its immediate economic benefits.

⁶³⁰ The oil industry's involvement in educational and developmental programs reflected its commitment to corporate responsibility and its recognition of its role as a major economic player in the country. The exhibition likely highlighted this aspect of the industry's activities.



FIG. 6.49 Energy & Petrochemical Exhibition in Tehran.

Source: Iran Oil Journal. Iranian National Library Archives.

Date: 1972. Accessed: January 2016



FIG. 6.50 First International Energy & Petrochemical Exhibition, Tehran.

Source: Iran Oil Journal. Iranian National Library Archives.

Date: 1972. Accessed: January 2016



FIG. 6.51 Their Imperial Majesties Inspecting Sample Construction of Second Tehran Refinery.

Source: Iran Oil Journal. Iranian National Library Archives.

Date: 1972. Accessed: January 2016

6.6.3 Oil as a Symbol of National Pride: A Representation of Iranian Identity

The Iran International Exhibition and Fairs Corporation organized a significant event on August 24, 1976, which took place in the northern part of Tehran. This exhibition covered an extensive area of 1.3 million square meters and aimed to showcase Iran's progress across various fields over the past five decades. Both public and private sectors participated in the event, presenting their achievements and contributions to the nation's development. The National Iranian Oil Company (NIOC) played an active role in this exhibition by setting up its own pavilion. The NIOC pavilion was dedicated to displaying the accomplishments of the Iranian oil industry during the Pahlavi era. This was achieved through various visual materials and historical documents highlighting the industry's evolution and contributions. Some key points about the NIOC's participation in this exhibition included Display of Achievements⁶³¹, Visual Documentation⁶³², Historical Significance⁶³³, Data and Statistics⁶³⁴, and Promotion of National Pride⁶³⁵. Overall, the NIOC pavilion at the Iran International Exhibition and Fairs Corporation's event served as a platform to showcase and celebrate the achievements of the Iranian oil industry during the Pahlavi era. It allowed visitors to learn about the industry's growth, historical significance, and role in shaping the nation's economic landscape.

⁶³¹ The NIOC pavilion aimed to showcase the achievements and milestones of the Iranian oil industry under the rule of the Pahlavi dynasty. These achievements could include advancements in exploration, production, refining, export, and other aspects of the oil sector.

⁶³² The use of photographs, color slides, and historical documents was a way to visually document and narrate the story of the Iranian oil industry's progress. These visual aids could help visitors understand the industry's growth over the decades.

⁶³³ Historical documents, such as the cancellation of the D'Arcy Agreement and the records of the Nationalization of the Iranian oil industry, hold immense significance in the context of Iran's oil history. Displaying these documents underscored the country's journey towards gaining control over its oil resources.

⁶³⁴ The inclusion of oil production and export statistics would have provided visitors with concrete data and figures to understand the industry's quantitative impact on the economy and the nation's overall development.

⁶³⁵ The NIOC's participation in this exhibition was likely intended to instill a sense of national pride and awareness among the public regarding the achievements and contributions of the oil industry to the country's progress.

6.6.4 Oil's Cultural Portrayal: Expressions in Art, Literature, Cinema, and Publications

The 1970s marked a transformative period in Iran's cultural landscape, where the burgeoning oil industry played a pivotal role in shaping representations across various mediums. As the primary source of wealth and a symbol of national pride, the oil industry found vivid expression in the artistic, literary, cinematic, and publishing realms. The wealth generated by Iran's oil industry became a dominant theme in cultural representations of the era. Paintings celebrated the opulence derived from oil revenues, depicting scenes of prosperity, modernization, and affluence. Artists, inspired by the transformative economic effects of oil, used vibrant colors and dynamic compositions to convey the nation's newfound prosperity.

The pervasive influence of oil extended to various publications, including newspapers, magazines, and postage stamps. News articles and editorials chronicled the achievements and challenges of the oil industry, shaping public discourse. Stamps became a canvas for visual representation, featuring iconic oil-related imagery that symbolized national pride and progress.

Across these diverse mediums, a cohesive narrative emerged, depicting oil as a transformative force that had reshaped Iran's cultural identity. The cultural representations of the 1970s, collectively, painted a complex portrait of a society grappling with the consequences of newfound wealth, where the oil industry stood as both a beacon of progress and a source of societal introspection.



FIG. 6.52 Representations on Postage Stamps.

Source: *Iran Petroleum Journal*. No. 124. Iranian National Library Archives.

Date: 1973. Accessed: January 2016

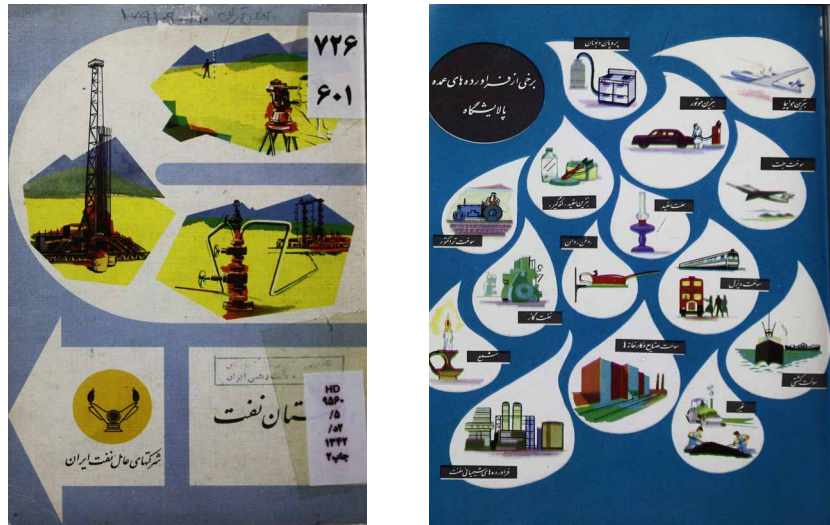


FIG. 6.53 Representations of the Oil Industry.

Source: *Dastan-e-Naft: The Story of Oil*, a book by NIOC. Iranian National Library Archives.

Date: Unknown. Accessed: January 2016



FIG. 6.54 Artistic Representations of Iranian Oil and its Strong Government.

Source: *Iran Petroleum Journal*, No. 124. Iranian National Library Archives.

Date: 1973. Accessed: January 2016

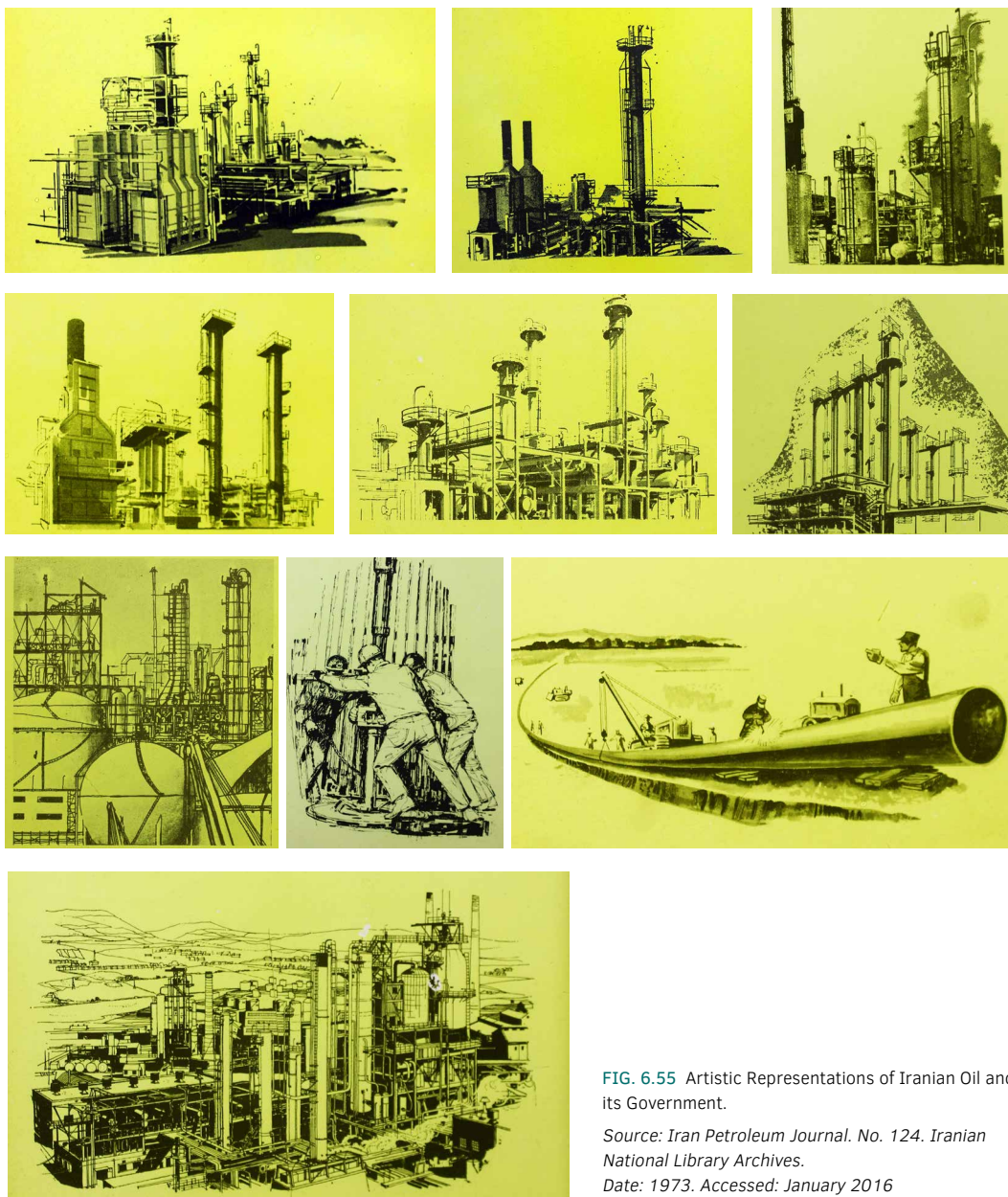


FIG. 6.55 Artistic Representations of Iranian Oil and its Government.

Source: *Iran Petroleum Journal*. No. 124. Iranian National Library Archives.

Date: 1973. Accessed: January 2016

6.6.5 Oil's Impact on Tourism: Exploring Industrial Landscapes

Leveraging tourism as a means of showcasing oil facilities was an effective way to offer people a firsthand experience and understanding of the oil industry's operations. By allowing both national and international tourists to visit these facilities in person, they could gain a more comprehensive and tangible perspective on the significance and scale of the oil industry. This approach had several benefits:

Educational Experience⁶³⁶, Interactive Learning⁶³⁷, Public Awareness⁶³⁸, Promotion of National Resources⁶³⁹, Tourism Revenue⁶⁴⁰, Cultural Exchange⁶⁴¹, and Enhanced Image⁶⁴². Opening oil facilities to tourists served as a strategic initiative with multifaceted benefits. This approach provided visitors, both national and international, a firsthand educational experience, offering insight into the intricacies of the oil industry's operations, from extraction to refining. The interactive learning environment, allowing hands-on exploration of exhibits and technologies, enhanced comprehension and made the learning process engaging. Moreover, the public gained awareness as the industry's operations were demystified, fostering a more accurate understanding of its role in the economy and society. By showcasing the nation's oil resources, the initiative instilled a sense of national pride and identity. Economically, tourism generated revenue through ticket sales and associated services, contributing to the sustainability of the showcased facilities. Beyond financial gains, tourism facilitated cultural exchange, bringing together visitors from diverse backgrounds and the local community. Lastly, by presenting the industry as transparent and accessible, the initiative contributed to shaping a positive public perception, countering negative stereotypes and highlighting the industry's importance in national development.

⁶³⁶ Tourists who visited oil facilities could learn about the various stages of oil exploration, extraction, refining, and distribution. Witnessing the processes in person could provide a deeper understanding of the industry's complexity and its role in the country's economy.

⁶³⁷ Site visits allow for interactive learning experiences, where visitors can ask questions, engage with experts, and observe equipment and operations up close. This level of engagement can foster a more profound connection and appreciation for the industry.

⁶³⁸ Allowing the public to visit oil facilities could help demystify the industry and dispel any misconceptions. It also increased public awareness about the contributions of the oil sector to the country's development.

⁶³⁹ By showcasing oil facilities to tourists, the country could highlight its valuable natural resources and emphasize their responsible management for sustainable development.

⁶⁴⁰ Implementing guided tours and visitor programs within oil facilities could generate additional revenue for the industry and the local economy through tourism-related activities.

⁶⁴¹ International tourists visiting oil facilities could also learn about Iran's history, culture, and economic activities, promoting cultural exchange and understanding.

⁶⁴² Hosting tours of modern and efficient oil facilities could improve the industry's public image, emphasizing technological advancements and environmental considerations.

However, specific considerations needed to be taken into account when incorporating tourism into oil facilities, such as safety regulations, environmental impacts, and the potential disruption of regular operations. Nevertheless, using tourism as a means of showcasing oil facilities could be a powerful way to bridge the gap between abstract knowledge and tangible experience, fostering a deeper appreciation for the industry's importance and contributions.

Ahwaz's unique geographical position, encompassing both modern developments and ancient historical sites, made it a fascinating destination for those interested in exploring the contrasts between different eras of human civilization. The juxtaposition of modern infrastructures with historical landmarks – Susa (Shush)⁶⁴³, Haft Tapeh Sugar Cane Plantation⁶⁴⁴, Ancient Irrigation Canals⁶⁴⁵, Archaeological Excavations⁶⁴⁶, and Tchogha Zambil Ziggurat⁶⁴⁷ – allowed visitors to experience the coexistence of ancient and contemporary worlds. In other words, the coexistence of such diverse historical sites alongside modern infrastructure in Ahwaz created a unique opportunity for visitors to explore the rich tapestry of human history, from ancient civilizations to contemporary developments. It allowed for a deeper appreciation of the cultural heritage, technological progress, and the enduring connection between the past and the present.

⁶⁴³ Susa, also known as Shush, is one of the oldest continuously inhabited cities in the world. Its historical significance dates back to ancient times, with archaeological findings and ruins revealing the presence of various civilizations, including Elamite, Babylonian, Persian, and others. Visitors to Ahwaz could easily access Susa, where they could explore the remains of ancient palaces, temples, and artifacts that provide insights into the cultural and architectural achievements of these civilizations.

⁶⁴⁴ The sugar cane plantation at Haft Tapeh showcases modern agricultural advancements alongside ancient irrigation techniques. The successful restoration of soil fertility and the high sugar cane production per hectare reflect the intersection of modern scientific methods and traditional agricultural practices.

⁶⁴⁵ The traces of ancient irrigation canals near the sugar cane plantation underscore the longstanding history of agricultural practices in the region. These canals are a testament to the ingenuity of past civilizations in managing water resources for farming.

⁶⁴⁶ The mounds near the Haft Tapeh plantation, containing ancient Elamite royal tombs and temples, provide a window into the religious and funerary practices of ancient cultures. These excavations contribute to our understanding of the social and cultural aspects of past societies.

⁶⁴⁷ The ancient Ziggurat at Tchogha Zambil, resembling the Tower of Babel from biblical accounts, is another remarkable historical site. Ziggurats were monumental stepped structures often associated with religious and administrative functions in ancient Mesopotamia.



FIG. 6.56 Mohammad Reza Shah Pahlavi Overlooking the Dez Dam Reservoir.

Source: *Kayhan London. The National Library of Iran.*
Date: 1963. Accessed: January 2016

6.7 Conclusion

During the 1970s, the Shah exhibited a keen awareness of the vulnerabilities associated with overreliance on a single critical oil asset, compelling him to pursue a policy of economic diversification.⁶⁴⁸ Against the backdrop of a rapidly expanding economy, wherein the development of the built environment played a pivotal role, Ahwaz emerged as a promising epicentre of modernization. Within Ahwaz, the Shah embarked on an ambitious endeavour to diversify industries, some of which were intricately linked with the oil production sector, all in pursuit of an optimal financial landscape. This transformative decade was characterized by exceptional economic growth catalysed by a surge in oil prices. The resultant economic boom gave rise to the emergence of new industries, a substantial increase in employment opportunities, a boost in the purchasing power of residents, the promotion of consumerism, and an overall enhancement in the standard of living, particularly benefitting the burgeoning middle-class strata of society.

⁶⁴⁸ Iran had begun automobile production in the 1950s and by the early 1970s was exporting motor vehicles to Egypt and Yugoslavia. The government exploited the country's copper reserves, and in 1972

Concurrently, leveraging her architectural background from the distinguished Ecole des Beaux-Arts, Iran's queen assumed a pivotal role in conceiving and realising socio-urban spaces. This encompassed the establishment of parks, museums, libraries, and more, with a distinct emphasis on endorsing Iranian architects in the pursuit of vernacular projects. This collective endeavour in urban planning and architectural design dovetailed seamlessly with broader social and cultural reforms unfolding within the city. These transformations were orchestrated in tandem with the rapid evolution of urbanization and communication networks, reflecting the advent of a sophisticated and cosmopolitan middle class. The resulting landscape bore testimony to an era where architectural innovation harmonized with societal progress, yielding a cityscape poised at the intersection of tradition and modernity.

The collaborative synergy between Iranian architects and their European and American counterparts, particularly in the 1970s, engendered a distinctive cohort of innovative designers. Their mission was to seamlessly meld Iranian architectural traditions with contemporary theories, materials, and construction techniques. In the eloquent words of Ardalan, this era bore witness to the emergence of “ambitious projects” that received both public and private sector commissions, all under the stewardship of Iranian architects collaborating with an international cadre of professionals.⁶⁴⁹ However, within this realm of architectural ambition, a subset of projects, as Ardalan characterizes them, remained as “Unbuilt Dreams”⁶⁵⁰—designs meticulously crafted but regrettably never translated into tangible reality. These noteworthy unrealized design ventures, as Ardalan contends, represented “fertile seeds of potent new directions in the future of design.” They stand as poignant reminders of the creative potential that resided within this era, encapsulating the unfulfilled promises and latent possibilities that continue to inspire and inform the trajectory of architectural innovation.

The limited scope of urban regeneration efforts, driven by constraints on time and resources, primarily manifested as initial, albeit fragmented, steps toward modernization. This superficial layer of modernization, superimposed upon deep-seated urban complexities, fell short of satisfying the discerning expectations of an educated populace well-acquainted with the principles of a meticulously designed urban environment and a harmonious society. The prevailing challenges were manifold. They encompassed issues such as excessive price escalations, a

Iran's first steel mill began producing structural steel. Iran also invested heavily overseas and continued to press for barter agreements for the marketing of its petroleum and natural gas.

⁶⁴⁹ Roloff Beny, *Iran, Elements of Destiny*, (Toronto, McClelland and Stewart, 1978).

⁶⁵⁰ “A Personal Reflection : On the Traditional, the Modern, and the Perennials in Iranian Architecture”, by Nader Ardalan

consequence of emotional consumerism's insatiable appetite, and the inability of the industrial sector to adequately supply the burgeoning demands of the expanding middle-class society. Concurrently, the years following the land reform initiative witnessed a continuing decline in the agricultural sector's productivity—a decline exacerbated by inadequate management practices.⁶⁵¹ Furthermore, during the 1970s, a growing contingent of unemployed Iranians, predominantly comprised of newly arrived rural-to-urban migrants, coupled with a substantial downturn in the construction industry around 1977, collectively underscored the government's shortcomings and ineffectiveness in addressing these multifaceted challenges. This confluence of factors painted a sobering picture of the socio-economic landscape, indicative of the need for comprehensive reforms and strategic interventions.⁶⁵²

The fervent desire for a utopian ideal among segments of society dissatisfied with the existing regime was, within the context of rapid modernization, an aspiration steeped in impracticality. Ahwaz underwent a profound transformation, evolving from its roots as a traditional, conservative, rural community into a bustling, modern, and industrialized town. This metamorphic process of modernization ran parallel to the broader currents of rationalization and the emergence of secular ideologies in an increasingly industrialized society. However, the pace of this transformation outstripped the comfort zones of certain religiously inclined minds within Iran. While numerous Iranian architects endeavoured to infuse modern developments with a revival of traditional national values, many social critics of the time contended that a Western-oriented mindset was the dominant driver of social and urban progress. Westernization emerged as the predominant theme of this era, overshadowing other cultural influences. This period bore witness to a rich tapestry of worldviews, ranging from secular and materialistic to traditional and religious, which found expression in the architectural discourse, pitting international modernism against regional vernacularism. The multifaceted nature of these worldviews reflected the profound divide in society, exemplified by the contrasting architectural approaches. Some highly educated and deeply religious individuals expressed dissatisfaction with what they perceived as the cultural vacuity of modern urban Iran. This discontent contributed to the emergence of a nonconformist undercurrent within society, highlighting the complexities of navigating the confluence of tradition and modernity in a rapidly changing landscape.

The transformative shifts occurring in Iran during this period brought to the fore profound challenges, both within the nation's borders and on the global stage.

⁶⁵¹ <https://www.britannica.com>

⁶⁵² HASAN-UDDIN KHAN. Sennott R.S. Encyclopedia of twentieth century architecture, Vol.2. Fitzroy Dearborn., 2005.

Internally, there was a growing perception that the rapid penetration of Western industrialization was exerting an unsettling influence on people's lives. This sentiment found expression in the form of demonstrations against the existing regime in 1978, marking the initial stirrings of a broader social movement that would ultimately culminate in the Islamic Revolution of 1979. Simultaneously, from a global perspective, the world grappled with financial instability linked to Western oil consumption. In its pursuit of ambitious high-cost development projects and substantial military expenditures, Iran expended substantial financial resources. While the Shah sought to project Iran's image as a prominent player on the international stage, Western powers were increasingly apprehensive about Iran's burgeoning global influence. Iran's emergence as a significant global political and financial actor led Western powers to reconsider their stance; what was once an ally had transformed into a potential threat. In response to Iran's newfound prominence, Western powers began to consider measures to curtail its influence. These measures included indirectly supporting internal demonstrations and, subsequently, the 1979 revolution. Furthermore, Western powers tacitly backed Iraq's invasion of Iranian oil fields as a means of diminishing Iran's sudden strength in the Middle East. Consequently, from 1980 onwards, the city of Ahwaz, like many other oil-centric cities, endured devastating destruction during the eight-year war with Iraq, marking a tragic chapter in its history.⁶⁵³

⁶⁵³ Farmānfarmā'iyyān Manūchihr, and Roxane Farmanfarmaian. 1997. *Blood and Oil : Memoirs of a Persian Prince*. 1st ed. New York: Random House.

Fakhimi, Ghobad. *30 Years of Iranian Oil, from the Nationalisation of Oil to the Islamic Revolution*, Tehran: Mehrandish. 2008.

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IP Information Service: Oil, in the Middle East. ArcRef: 134844O. BarCode: Z01622290. BP Archives. Date: 1971.

Publication by and about Anglo-Persian Oil Company, Anglo-Iranian Oil Company and the British Petroleum Company. . ArcRef: 134844. Barcode: 115492. BP Archives. Date 1938-1971

Source: Ahwaz Book. published by the Iranian Oil Exploration and Producing Company. BP trading Limited. ArcRef: 65354. Barcode: 61111. BP Archives. Date: 1973

Newsletter NO 68, March 1964. ArcRef: 134844G. Barcode: Z01622279. BP Archives. Date: 1964.

Petroleum Information Bureau: Memorandum: Oil in the Middle East. ArcRef: 134844H. BarCode: Z01622280. BP Archives. Date: 1964.

The World Today, June 1964. ArcRef: 134844I. BarCode: Z01622282. BP Archives. Date: 1964.

Petroleum Information Bureau: Oil, in the Middle East. . ArcRef: 134844j. BarCode: Z01622284. BP Archives. Date: 1964.

7 Conclusion

“Ahwaz is the modern capital of the oil-rich Iranian province of Khuzestan. Located in an area containing some of mankind’s earliest urban settlement, it looks forward to its future rather than to the past, a future which glows with bright prospects.”

“Oil, water, modern science and hard work are paying off in a remarkable transformation of this inherently rich area that once was and is again becoming the pride of Iran.” ⁶⁵⁴

7.1 A short review of the thesis

After the introduction chapter, this thesis made a journey through Ahwaz’s history and identity to lay the foundation for understanding the following seismic shifts. It was essential to set the stage with an understanding of its historical and characteristic background, which defined Chapter II. The city’s pre-oil era was marked by a distinct character and culture, which soon was swept up in the tides of change. The exploration of Ahwaz’s identity provided a crucial context for comprehending the following seismic shifts. Moreover, the second chapter clarified why Ahwaz was chosen to exemplify the captivating petroleumscape concept worldwide. The choice of Ahwaz’s petroleumscape served as a gateway to a broader exploration of the concept’s universal relevance. It invited readers to consider the parallels between Ahwaz and other oil-centric cities, fostering a more comprehensive understanding of the intricate relationships between modern planning, environmental changes, and social developments within the context of the global “macro-politics” of oil.

⁶⁵⁴ Arcref: 246750 , 1/1/1963-31/12/1964, The British Petroleum Company Limited, BP Trading Limited Undated PR booklet produced by the Iranian Oil Operating Companies about its operations at Ahwaz, noted as being the modern capital of the oil-rich Iranian province of Khuzestan. Main contents: background; production units; installations; new site, Khoram Kushk; Karoun Industrial units (Ahwaz pipe mills; Ahwaz Pipe Mills and Central Workshop); Artisan schools; Home ownership scheme; Exclusions. From the archive of C P Williamson

Chapter III marked the inception of our journey, where we delved into Ahwaz's colonial history, providing a vivid portrayal of the early British presence and the city's budding architectural and urban development. This period was pivotal as Ahwaz's architectural identity began taking form amidst the geopolitical manoeuvres of the British Empire. The colonial era witnessed a significant infusion of British influences, not only in architectural aesthetics but also in broader urban planning and governance structures. The urban landscape of Ahwaz bore witness to British-designed buildings and streetscapes that mirrored the empire's aspirations and reflected the power dynamics of the late 19th and early 20th centuries. As we stepped into the early 20th century, we witnessed Ahwaz's transformation spurred by oil exploration, ushering in a series of profound changes. Land ownership and control over oil territories assumed central importance, initiating developments that would reshape the city's environment. British oil investors played a pivotal role, instigating informal colonial spatial transformations that laid the groundwork for future shifts in architecture, urban planning, and infrastructure. Landownership emerged as a driving force, leading to alterations in the landscape of ownership, management, and land use, all in pursuit of securing access to oil resources. This struggle for control over oil territories became the catalyst for the subsequent environmental transformation. Our journey unfolded within the shadows of informal colonialism, with Ahwaz positioned at the nexus of the British Empire's quest for supremacy and resource exploitation. The city's nascent architectural identity, marked by the imposition of colonial aesthetics and urban planning, encapsulates the power dynamics of the era. Ahwaz's colonial canvas, painted with the hues of British influence, served as the backdrop for a city forever bearing the marks of Imperialism.

In Chapter IV, spanning the years from 1926 to 1952, Ahwaz experienced a notable emergence of hybridity across its urban, financial, cultural, and social landscapes. The struggle for control over the territories surrounding the oil industry became a focal point of contention among various stakeholders, giving rise to a complex web of interests and power dynamics. This era was characterised by "post-colonial ambivalence," a reflection of the challenges faced by national and local autonomy in the shadow of British domination and hegemony. During this period, the Iranian national state, under the leadership of Reza Shah Pahlavi, rose to prominence, challenging the dominance of Britain and Russia in the region. The gradual weakening of British informal colonialism within the Anglo-Persian Oil Company (APOC) paved the way for the emergence of a new Iranian nationalism. Chapter IV immersed us in the post-colonial era, marked by Iran's oil nationalisation, with Ahwaz taking centre stage in this unfolding drama. The city became a microcosm, showcasing the intricate interplay between global oil interests, Iranian nationalism, and the aspirations of its local communities. This chapter emphasised Ahwaz's pivotal role in the broader narrative of Iran's struggle for control over its oil

resources and sovereignty. The presence of the AIOC in Ahwaz, controlling oil production facilities, laid the foundation for decades of economic exploitation and social disparities. The Iranian oil nationalisation movement, led by figures like Mohammad Mossadegh, became a rallying cry for the Iranian people, and Ahwaz became a crucible where the flames of resistance burned bright.

This chapter invited us to traverse Ahwaz's architectural tapestry, a complex mosaic that bore witness to the city's rich history of diversity and differences. Unlike other oil-centric towns in Iran, such as Masjed-Soleyman and Abadan, which owed their existence primarily to the oil industry, Ahwaz diversified its industries, fostering dynamic and diverse urban growth. The city's unique blend of cultures and identities manifested in its built environment reflected a convergence of architectural trends, urban planning practices, and design philosophies from around the world. Global influences, from imported architectural styles to modern construction techniques, left an indelible mark on Ahwaz's cityscape. However, Ahwaz's development extended beyond its economic narrative; it held multifaceted significance beyond the realm of oil. It was meticulously crafted to serve as a symbol of national pride, representing the aspirations and achievements of the entire nation. This emphasis on national pride was evident in the intentional planning and infrastructural endeavours undertaken in the city. Positioned strategically and boasting diversified industries and industrial prowess, the national government of Iran turned Ahwaz as a symbol of national progress transcending the confines of the oil industry. It stood as a testament to a nation's accomplishments that extended beyond resource extraction, spotlighting the intricate power dynamics shaping urban landscapes.

In Chapter V, set against the post-World War II era backdrop, a new geopolitical landscape emerged as the United States and the Soviet Union ascended as global superpowers. Iran found itself navigating this transformative period, experiencing seismic shifts in its geopolitical dynamics. The relationship between Britain and the United States within the Iranian oil fields underwent significant evolution, while Iranian nationalists sought to assert their influence within the government. This period bore witness to a complex interplay of interests and power dynamics that would leave an enduring imprint on Ahwaz's architecture and urban development. Ahwaz's architecture and urban planning became a canvas for the geopolitical rivalries of the Cold War era, with the United States countering communist influences in Iran. American ideals, encompassing socialism, consumerism, and anti-communism, assumed a prominent role in shaping urban planning and architectural endeavours. Chapter V transported us to the post-World War II era, where the transition from British to American influence in Iran was palpable. The pursuit of oil resources took centre stage in the global Cold War geopolitical landscape, and Ahwaz, an oil-rich nexus, occupied a pivotal position in global power struggles.

This chapter delved into the intricate interplay of political, economic, and strategic agendas that charted the city's course. Ahwaz emerged as a focal point where British and American interests converged in the quest for oil and geopolitical advantage, magnifying the strategic significance of its oil fields in the context of the global Cold War rivalry.⁶⁵⁵

Chapter VI unfolded against the backdrop of the 1970s, a decade that ushered in transformative changes in Ahwaz's petroleumscape development. This era, characterised by the oil boom, witnessed Iran's ascension as a global player, with the Iranian government assuming complete control over the oil industry and reaping substantial revenues. This windfall triggered a period of rapid development, where Iranian architects and urban planners played pivotal roles in shaping the city's modernism. The synergy between infrastructural development and prestigious projects underscored the government's dominance and the influential contributions of local professionals. During this phase, capitalism and countercultural activities gained ground within the Iranian national state, which had a profound impact on Ahwaz's urban and architectural landscape. The era that commenced with a single drop of oil in 1908 had created ripples that absorbed various global flows, culminating in a unique globalised ambience within Ahwaz. The city evolved into a testament to how the scent of oil intermingled with the scents of wealth and power, attracting global actors who transformed urban spaces and profoundly impacted the lives of its citizens.

In this period, Ahwaz became a symbol of progress and modernisation, driven by the Shah's ambitious efforts to diversify industries and modernise the nation. Economic growth surged, and the city's skyline transformed, mirroring the aspirations of a burgeoning middle class. Queen Farah's architectural contributions and the collaborative efforts between Iranian and international architects marked an era where innovation harmonised with societal progress, bridging the past and the future. However, this transformative journey was not without its complexities. Beneath the veneer of modernisation lay deep-rooted challenges, including economic disparities, societal divisions, and the clash between traditional values and Western-oriented mindsets. Furthermore, Queen Farah, with her architectural background from the distinguished Ecole des Beaux-Arts, played a pivotal role in shaping socio-urban spaces within Ahwaz. Her initiatives, including the establishment of parks, museums, libraries, and more, emphasised the endorsement of Iranian architects in the pursuit of vernacular projects, aligning with broader social and cultural reforms within the city. The result was a cityscape that bore witness to an era where

⁶⁵⁵ Stretton, Hugh. *Capitalism, Socialism and the Environment*. [in English] Cambridge: Cambridge University Press, 1976.

architectural innovation converged with societal progress, creating a unique urban landscape poised at the intersection of tradition and modernity.

The collaborative synergy between Iranian architects and their European and American counterparts, particularly in the 1970s, engendered a distinctive cohort of innovative designers. Their mission was to seamlessly meld Iranian architectural traditions with contemporary theories, materials, and construction techniques. While the passage primarily focuses on architectural and socio-cultural developments in Iran, it also highlights how these changes were influenced by and, in turn, influenced the broader socio-economic and political landscape, which was deeply connected to the oil industry. The oil industry, being a major economic driver in Iran, played a role in shaping economic disparities during the period discussed. The revenue generated from oil exports impacted the country's economic landscape, and these disparities are referenced as underlying challenges. The distribution of wealth and resources, often tied to oil, contributed to societal imbalances.

Ardalan aptly characterised this period as witnessing the emergence of “ambitious projects,” both realised and unrealised, which represented fertile seeds of potent new directions in the future of design. While the era was marked by modernisation and progress, it also brought to light underlying challenges, including economic disparities, rising prices, and a growing discontent that contributed to the 1979 Islamic Revolution. These challenges, coupled with global factors and shifting international relationships, led to the tragic Iran-Iraq War, leaving Ahwaz, like other oil-centric cities, with devastating destruction and marking a tragic chapter in its history. The Iran-Iraq War, with its catastrophic consequences for Ahwaz and other oil-centric cities, underscored the geopolitical importance of these regions due to their oil resources.

7.2 To conclude

Ahwaz's petroleumscape stands as an epitome of the profound transformations that the 20th century witnessed, all ignited by the discovery and exploitation of oil. This narrative unravels the intricate dance between global dynamics and local distinctiveness, a delicate interplay that meticulously crafted urban landscapes and lifestyles. Ahwaz's journey, from the shadows of obscurity to the radiant prominence it enjoyed before the Iran-Iraq 1980 war, mirrors the far-reaching impact of oil on urban development and modernity. It's a testament to how the city's unique oil-based identity was created amidst the tumultuous tides of globalisation and modernisation. In other words, Ahwaz's architectural and urban journey stands as a poignant testament to the transformative power of petroleum in shaping the destiny of a petroleumscape in Iran.

The overarching argument on the role of petroleum in the built environment was woven into the very fabric of Ahwaz's narrative. The city's trajectory, from its informal colonial roots to the zenith of modernity, mirrored the profound impact of oil on urban development. Oil, often referred to as the elixir of prosperity, not only brought wealth but also ushered in a torrent of global flows—people, ideas, and cultures—that reshaped Ahwaz's landscape. The petroleumscape of Ahwaz emerges as an epitome of the broader historical and socio-political transformations that characterized the 20th century, encapsulating the complexities, challenges, and enduring legacies associated with oil-centric urban environments.

Undoubtedly, oil was the catalyst propelling Ahwaz towards urban development, modernity, and global interactions. Had the black gold not flowed beneath its surface, Ahwaz's history would have been inscribed on a radically different canvas. Ahwaz's post-oil history is an enigma impossible to fathom without the transformative force of this invaluable resource. While globalisation unfurled its modern tapestry across cities worldwide, Ahwaz's distinct identity and vernacular values remained in the fabric of its streets, social interactions, and private lives. This research, an odyssey through time and space, casts a spotlight on the intricate interplay between global forces and local characteristics. While the oil companies reaped their riches, the other actors, rather than oil, harvested the fruits of infrastructural development tailored meticulously to cater to the oil industry's voracious appetite. What began with a solitary drop of oil in 1908 set forth ripples that absorbed diverse global currents, fostering a unique globalised ambience for their exchanges. It reveals how the scent of oil intertwined harmoniously with the

fragrances of wealth and power, beckoning global actors to transform urban spaces that left an indelible mark on the lives of the city's citizens.

This narrative has sculpted urban spaces and lifestyles throughout the 20th century. Ahwaz, a city borne from a tapestry of historical complexities, emerged as a vibrant testament to the dynamic interplay of culture, geopolitics, and urban development. It shed light on the multifaceted challenges and aspirations that forged its destiny. As we journey through Ahwaz's architectural and urban pilgrimage, we unearth myriad narratives that interweave to craft a profound and enlightening tale. It's an architectural peregrination that paints Ahwaz as a resilient tapestry of history, culture, and urban development—a city that encapsulates the complexities of a nation's identity, where tradition and modernity engage in a nuanced and intricate duet. Ahwaz's architectural and urban journey encapsulates the broader historical and socio-political transformations that have shaped Iran. Ahwaz stands as a testament to the resilience of a society navigating the complexities of tradition and modernity. Ahwaz's story mirrors Iran's journey through the tumultuous 20th century, casting a spotlight on its quest for sovereignty, identity, and progress. Moreover, this thesis not only unveils Ahwaz's architectural and urban evolution but also sheds light on the larger forces that have moulded Iran's trajectory on the global stage.

The research's voyage into Ahwaz's narrative revealed a city defying simplistic categorisations. Ahwaz diversified its industries, unlike its oil-centric counterparts, fostering a unique blend of cultures and identities in its various aspects of a petroleumscape. The architectural mosaic that emerged celebrated a rich diversity, reflecting the convergence of global influences on the city's urban fabric. Ahwaz stands as a testament to the power of diversity in shaping architectural narratives, serving as a vivid example of how a city can evolve and thrive amidst a tapestry of traditions, innovations, and aspirations. From its pastoral origins to its modernisation endeavours, the city's growth and development mirror the intricate interplay of local culture, global influences, and national aspirations, all responding to the oil necessities. Ahwaz's journey serves as a compelling case study, offering invaluable lessons and insights for future research within the interdisciplinary field of oil studies, all while illuminating the intricate tapestry of global oil modernity woven throughout the city's history.

As the research explored the petroleumscape of Ahwaz, a profound understanding of how global forces meticulously crafted the city's trajectory towards progress and modernity came to light. This research serves as an invitation to scholars to embark on deeper explorations of oil-driven development in various global contexts.

This thesis has undertaken a profound odyssey through Ahwaz's architectural and urban history annals. In the span of five chapters, it meticulously dissected Ahwaz's transformation from a rural outpost to a modern industrial epicentre. The study traced its architectural and urban evolution within the broader context of historical, political, and societal changes. The lens of petroleumscape, which examined oil's intricate relationship with urban expansion, cities, and living spaces, unveils the profound significance of uncovering the delicate interplay between globalisation and vernacularism that dictated distinct 20th-century spaces and lifestyles.

As it draws the curtain on this exploration, Ahwaz remains a living testament to the enduring legacy of the past while embracing the boundless potential of an ever-evolving future. The built environment of Ahwaz, intricately intertwined with the narrative of petroleum, serves as a mirror reflecting the society's aspirations, values, and the intricate interplay of history, culture, and power. The city's trajectory stands as a testament to the enduring interplay of architecture, culture, and power, reminding us that the built environment is not stagnant but a living testament to the ever-evolving spirit of a place and its people. The city's journey echoes Iran's tumultuous path through the 20th century, grappling with questions of identity, modernity, and global influence. Ahwaz's story transcends bricks and mortar; it encapsulates a society's aspirations, challenges, and resilience in navigating the complex currents of history. Ahwaz beckons as an urban canvas where history continues to be inscribed, culture thrives amidst transformation, and the future holds the promise of new narratives yet to unfold. It is a timeless reminder that a city's destiny is eternally bound to the legacy of a nation, and in Ahwaz, the past informs the present, inspiring the future—an enduring testament to the powerful role of architecture and urban development in shaping the destiny of a city and its nation, fueled by the transformative force of petroleum.

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Curriculum Vitae

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Professional Work

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An aerial photograph of a city, likely Ahwaz, showing a river, a large building complex, and surrounding urban areas. The image is in black and white, with a teal overlay on the right side containing text.

24#05

Navigating a Petroleumscape

Shaping transnational oil modernity at the crossroads
of global flows and local territories

Rezvan (Rose) Sarkhosh

The thesis explores Ahwaz's transformation throughout the 20th century, emphasizing the profound impact of the oil industry on the city's architectural and urban development. From its emergence in obscurity to its prominence before the Iran-Iraq war, Ahwaz's journey mirrors the far-reaching influence of oil on urban modernity. The narrative weaves a complex tapestry of global dynamics and local distinctiveness, detailing how oil shaped not only the city's landscape but also its identity. The research underscores the intricate interplay between global forces and local characteristics, showcasing Ahwaz as a resilient blend of history, culture, and urban development. It highlights the city's defiance of simplistic categorizations, celebrating its diverse industries and the convergence of global influences. The study concludes by positioning Ahwaz as a living testament to the enduring legacy of the past, an ever-evolving urban canvas that reflects the complex interplay of architecture, culture, and power, perpetuated by the transformative force of petroleum.

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