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Reza Mortaheb
New Jersey Institute of Technology

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ABSTRACT

BUILDING THE PETRO-POLIS OIL CAPITALISM, IMPERIALISM, AND THE MAKING OF ABADAN, 1908-1933

**by
Reza Mortaheb**

Abadan is the most prominent of all the oil company towns the British Petroleum Company built in Southwest Iran. Located at the border of Iran and present-day Iraq, by the mid twentieth century Abadan not only accommodated the world's largest refinery, it had also become Iran's most populous industrial city. This dissertation focuses on the process of urban development on Abadan Island between 1908 and 1933. Drawing on primary archival documents and secondary sources, this dissertation discusses how Abadan's establishment and its changing urban form and spatial organization were the product of broader historical processes. Imperial intelligence and practical requirements of the oil industry helped determine the location of the refinery in 1908. Abadan was initially designed in 1909 as a fenced-in oil camp, its urban form representing the vernacular expression of industrial needs. The rapid growth of the refinery, particularly after WWI, turned the company town into a sprawling industrial landscape, with three separate residential quarters, where British employees resided in spacious residences on one end, international migrant laborers overcrowded barrack-type shacks in the middle, and local workmen lived in indigenous compounds on the other end. Driven by economic rationality, industrial order, and colonial ideology, the spatial structure of the Abadan refinery was engineered to accomplish the Company's larger economic, social, and political goals. This pattern continued until 1924 when the Company management adopted a comprehensive

plan and incorporated some elements of model company towns into Abadan's spatial-physical structure to ameliorate the difficulties and inequalities created by rapid industrialization. The dissertation shows how urban reformation as well as town planning and design practices implemented between 1924 and 1933 aimed to boost industrial efficiency and prevent labor militancy by increasing the Company's control over space and populations, while also addressing pressing urban issues, such as housing and public health.

**BUILDING THE PETRO-POLIS
OIL CAPITALISM, IMPERIALISM, AND THE MAKING OF ABADAN,
1908-1933**

by
Reza Mortaheb

**A Dissertation
Submitted to the Faculty of
New Jersey Institute of Technology, and
Rutgers, The State University of New Jersey – Newark
in Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy in Urban Systems**

Hillier College of Architecture and Design

May 2020

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APPROVAL PAGE

**BUILDING THE PETRO-POLIS
OIL CAPITALISM, IMPERIALISM, AND THE MAKING OF ABADAN,
1908-1933**

Reza Mortaheb

Dr. Zeynep Çelik, Dissertation Advisor
Distinguished Professor of Architecture
New Jersey Institute of Technology

Date

Dr. Rosemary Wakeman, Committee Member
Professor of History, Fordham University

Date

Dr. Toby C. Jones, Committee Member
Associate Professor of History, Rutgers University- New Brunswick

Date

Dr. Nükhet Varlik, Committee Member
Associate Professor of History, Rutgers University- Newark

Date

Dr. Karen Franck, Committee Member
Professor of Architecture
New Jersey Institute of Technology

Date

BIOGRAPHICAL SKETCH

Author: Reza Mortaheb
Degree: Doctor of Philosophy
Date: May 2020

Undergraduate and Graduate Education:

- Doctor of Philosophy in Urban Systems
New Jersey Institute of Technology and Rutgers University, Newark, 2020
- Master of Science in Urban and Regional Planning
KTH, Royal Institute of Technology, Stockholm, Sweden, 2011
- Master of Architecture
Azad University, Isfahan, Iran, 2005

Major: Urban Systems

For my parents, Mohamad and Ferdous.
For Farzaneh, Farinaz, and Farnaz.

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CHAPTER 1

INTRODUCTION

This study explores the process of urban development on Abadan Island in Southwest Iran from 1908 through 1933. Urban growth in Abadan was largely the outcome of the discovery of oilfields and the subsequent introduction of the oil industry into the region, which triggered a series of economic, societal, political, and cultural transformations at the local and national levels. The capitalist exploitation of the “black gold,” in the hands of the Anglo-Persian Oil Company (A.P.O.C), gave rise to the emergence of a number of industrial company towns in Khuzestan Province, the most prominent of which was Abadan. Thanks to the construction of a refinery, Abadan became the country's major industrial city, and by mid-century turned into the largest oil city in the world.¹ As a pioneer oil city in the region, Abadan acted as a role model for oil company towns and labor camps that proliferated in the neighboring countries in the 1930s and 1940s. Populated by local and international laborers, contractors, and petroleum technicians and engineers, Abadan also functioned as a major port city and a regional hub for commercial transportation of oil and various petroleum products to global markets. Backed by the imperial power of Britain, the A.P.O.C² succeeded in turning an oil concession into one of the major global petroleum enterprises, and Abadan into a gateway through which the concepts of modern urban life and capitalist industrial culture found their way to Iran.

¹ James H. Bamberg, *The History of the British Petroleum Company, Volume 2, The Anglo-Iranian Years, 1928–1954* (Cambridge: Cambridge University Press, 1994), p. 384.

² The enterprise was renamed the Anglo-Iranian Oil Company in 1935 and the British Petroleum in 1954.

1.1 Research Objectives

This dissertation analyzes the urban development of Abadan through the examination of its master plans, design of city quarters for different social sectors (and the boundaries between them), infrastructure, public spaces and institutions, and architecture. The time bracket of this study extends from 1908 — when a systematic search began to locate a suitable site for the oil establishment in Southern Iran— through 1933 — when a new Oil Concession was signed between the Iranian Government and the oil company.

This research applies three levels of analysis. At the macro-level, the study aims to put oil at the center of social and cultural formations in Iran in the first decades of the twentieth century. In so doing, it defies the history of invisibility and hyper-materiality of oil, recognizes its material agency and, grants it “the visibility it deserves.”³ In this sense, this dissertation contributes to the emerging trends in the cultural history of oil, which strive to analyze, interpret, and explicate oil's presence in various historical processes. Conceptualizing oil not only as an extractive commodity but also as a substance with much broader sphere of action, this study seeks to resituate petroleum into the center of social and cultural restructuring of Iranian society in the early twentieth century— part of a process which may be referred to as *oil modernization*.

At the intermediate level, this work examines Abadan’s built form and spatial structure from a critical perspective and unravels the nexus of historical currents, forces, and players that triggered Abadan’s urban development. The major actors consisted of the British oil company, the local chieftain, the Iranian Government, oil workmen, and local inhabitants of Abadan. Employing the concept of company town as a theoretical

³ Allan Stoekl, “Forward,” in R. Barrett and D. Worden (eds.), *Oil Culture* (Minneapolis: University of Minnesota Press, 2014), p.xii

framework, this study traces the urban evolution of Abadan from an “oil enclave” to an “industrial landscape” to an agglomeration of “model towns” and shows how Abadan’s built environment was the product of the interplay of such determinants as racial divisions, colonial practices, technical requirements, capitalist logic, vernacular construction techniques, climatic conditions, political circumstances, and public health. In other words, the study situates Abadan’s physical-spatial form within broader contexts where factors such as industrial restructuring, immigration, ethnic divisions, imperialism, labor processes, and class struggles are as significant as architectural design, economic pragmatism, reform, and aesthetics.

At the micro-level, this research sheds light on the ways in which *oil modernity* unfolded in Abadan. This research conceives of oil modernity as a set of day-to-day practices of urban experience framed by the interactions between the apparatus of oil capitalism and the economic, cultural, social, and intellectual systems of the locality. Exploring oil modernity is crucial because, as historian Nelida Fuccaro argues, the aspects of “macro-politics” of oil development—represented by planning, architecture, paternalism, and infrastructural development— cannot be fully understood without contextualizing them within a system of “relational processes” that caused “new social and cultural realities for oil on the ground.”⁴ To unravel these “realities,” this dissertation explores the adjacent, yet “immiscible,” life-worlds in Abadan by delving into the manner in which various socio-occupational and ethnic groups experienced the atmosphere of oil and played an active role in determining their living and working conditions. The dissertation examines not only the intermediary role of the built environment in framing

⁴ Nelida Fuccaro, “Introduction: Histories of Oil and Urban Modernity in the Middle East,” *Comparative Studies of South Asia, Africa and the Middle East*, 33, no. 1 (2013), p.5

social relations and power structures, but also the spatial experience of inhabitants within the dynamic of capitalist oil development—the process that created, altered, destroyed, and rebuilt different parts of Abadan.

1.2 Significance of the Study

While major cities in the Iranian plateau— such as Isfahan, Tehran, and Shiraz— have been extensively researched, provincial cities on the Persian Gulf, such as Abadan, have received little attention from urban and architectural scholars. Moreover, most textual accounts on Abadan focus primarily on the discovery of oil and the city's early development. Such narratives were largely constructed by British subjects whose relationship to the topic was either distorted by orientalist/imperialist tropes or mediated by the British Petroleum. This dissertation challenges the rhetoric that underlay the grand narratives of Abadan and offers equally significant vantage points from which the city was viewed and lived. In other words, this research aims to revisit the history of oil development in Abadan by “listening” to and empowering marginal voices. In an attempt to offer historically specific experiences of Abadan, the study aims to complicate the conventional urban image of the city as simply represented by a duality, characterized by two contrasting socio-spatial worlds. Although Abadan lacked a unitary character and represented certain qualities of a colonial city, this study shows that it was a tripartite city and its social structure consisted of a mosaic of socio-occupational and ethnic groups rather than a simplified dyad of the European quarter versus the native town.

This dissertation consists of four main chapters. The remainder of Chapter 1 describes the methodology employed and the archival sources consulted to collect

“evidence” for this study. At the end, it provides a brief overview of the existing oil literature and discusses where this research would land. Studies of the history of urban spaces, societies, and culture under the shadow of oil in the oil-region of the Middle East are scarce. The existing oil literature, imbued with the paradigm of the rentier state and the notion of petro-modernity, tends to focus on the macro-economic and political aspects of oil modernization at the expense of the micro-level indigenous socio-political forces and the historical process of modernity. This study contributes to the growing body of scholarly work that regards urban milieus not only as a historical, spatial, social, cultural, and political context of oil, but also as the pivotal nodes of the architecture of early oil life. This scholarship will be discussed at length in the Literature Review section.

Chapter 2 depicts the political, social, economic, and ecological conditions of southwestern Iran on the eve of oil development and discusses how the combination of imperial intelligence and practical requirements of the oil industry determined the future location of the oil refinery on Abadan Island. Chapter 3 gives an account of early stages of oil urbanism in Abadan and traces its evolution from an oil enclave to a *petro-scape*. Chapter 3 also illustrates the manner in which the class-based, three-tiered labor hierarchy crafted by the Company formed the socio-spatial structure of Abadan as well as its public spaces and institutions and demonstrates how oil workers defied the Company’s control and spatial coercion through spaces of resistance and confrontation. Finally, Chapter 4 details the transformation of Abadan into a polycentric settlement with fractured urban space and unravels the historical forces that pushed the Company to reorganize Abadan’s spatial-physical structure through urban reforms and model villages. Chapter 4 also shows

how various factors including the agency of oil workmen forced the Company to revise its social welfare policy.

1.3 Methodology

1.3.1 Interdisciplinarity

The topic of this study calls for an interdisciplinary methodology which will examine urban change in Abadan from the standpoint of urban and architectural history in reference to social and cultural history, literature, oil studies, economics, planning history, urban geography, labor studies, public health, and anthropology. This approach to urban research deserves further elaboration. Architectural historians have shown that, for instance, the analysis of “social use” in architectural history — that is the role played by specific groups of people in the shaping and use of space — will broaden the scope of inquiry in this field.⁵ The following questions epitomize how social history could serve as a “context” for “settings and rituals”— to borrow Spiro Kostof’s words⁶— in the context of the Iranianization of the workforce in the late 1920s, which gave rise to the emergence of an Iranian industrial proletariat in Abadan: How did the Iranian working class affect the structure of public realm and the use of public spaces? What were the spatial and architectural characteristics of working-class quarters? Were oil workers’ needs incorporated into the design of “planned” housing projects? How did “designed” spaces change the cultural norms and lifestyle of this social class? Did this community modify the environment to satisfy their values and interests? What were the working-class leisure activities? Where were the corresponding spaces of entertainment? How did this social

⁵ Diane Harris, “Social History: Identity, Performance, Politics, and Architectural Histories,” *Journal of Society of Architectural Historians*, 64, no. 4 (Dec. 2005), p. 421

⁶ Spiro Kostof, *A History of Architecture: Settings and Rituals* (New York, 1985).

group experience oil modernity in Abadan? This study hence conceptualizes Abadan as a complex web of spatial, material, political, economic, social, environmental, and cultural terrains encompassing the lives of different social groups. First, it investigates how the interplay between extraneous forces and Abadan's multi-layered urban system shaped the physical structure and spatial organization of the city at every stage of its development; and secondly, it sheds light on the ways in which the resulting built space mediated the interaction between the built forms and diverse aspects of human life, such as selfhood and social/ideological/power relations.

Interdisciplinary approach to urban history originates in the conceptual and methodological breakthroughs of the 1960s in the field itself as well as in the neighboring discipline of social history. Social issues expanded the subject matter of urban history in the same way as did the disciplines of geography and anthropology in social sciences. As a result of the process of interdisciplinary cross-fertilization, the scope of urban history transcended the study of architecture and physical configuration of cities, taking account of social, cultural, political, and economic dimensions of urban life.⁷ Intellectual developments in the humanistic sciences in the last decades of the twentieth century also made intriguing contributions to the field. For instance, post-orientalism discourse led to the emergence of a new sub-field of “non-Western” cities in urban history. Moreover, researchers began to tap into new archival sources that hitherto were neglected, including government and municipal documents, property deeds, travelers' accounts, and poems and

⁷ In their survey of various methodological approaches to urban history in the 1980s, Celik and Favro showed that urban history has become a “multifaceted” and “broad” field accommodating not only art and architectural historians, but also scholars from social history, urban planning, economics, and English Literature. To read more on this see: Zeynep Celik and Diane Favro, “Methods of Urban History,” *Journal of Architectural Education*, 41, no. 3 (Spring 1988), p. 4

songs.⁸ To Gwendolyn Wright, urban history, as a “complex and ongoing enterprise,” is not just a synthesis of “priorities and disciplinary techniques,” but also a combination of “experiences and visions.” In Wright's view, urban history entails the integration of formal and social analyses as well as the exploration of “intricate webs of power and meaning.”⁹ Interdisciplinarity, hence, will broaden the scope of inquiry in this research. However, I am also aware of the challenges it simultaneously poses. As urban scholars have noted, interdisciplinary approach entails “methodological pluralism” which may weaken the field's theoretical concentration and obscure its evaluation standards.¹⁰ Furthermore, as a result of the blurring of disciplinary boundaries, urban history has become a truly contested terrain whose definition depends on the perspective from which it is viewed.¹¹

Cross-disciplinary reciprocity also altered the dynamics of the discipline of architectural history. Similar to the rise of the importance of space in social sciences in the 1970s and 1980s, in the field of architectural history, there has been a growing recognition of the “instrumentality” of built space (buildings, cities, landscape) in such diverse aspects of human life as recognition, subjectivity, social and ideological relations, economy, politics, and power.¹² While architectural historians have taken inspiration from other disciplines' conceptual frameworks and methodological techniques, the main task of the field has remained unchanged: to analyze the material world—as spatially conceived—by

⁸ Zeynep Celik, “New Approaches to the 'Non-Western' City,” *JSAH*, 58, no. 3 (Sep.1999), p. 374

⁹ Gwendolyn Wright, “Urban Spaces and Cultural Settings,” *Journal of Architectural Education*, 41, no. 3 (Spring 1988), p. 10

¹⁰ Z. Celik and D. Favro, “Methods of Urban History,” *Journal of Architectural Education*, 41, no. 3 (Spring 1988), p. 9

¹¹ Z. Celik, “New Approaches to the 'Non-Western' City,” *JSAH*, 58, no. 3 (Sep.1999), p. 375

¹² John Archer, “Social Theory of Space: Architecture and the Production of Self, Culture, and Society,” *JSAH*, 64, no. 4 (Dec.2005), p.430

engaging the historical narratives with social, economic, and political world,¹³ and to examine the manner in which the built environment interacts with other systems of meaning and social discourses.¹⁴ Therefore, urban and architectural history is more concerned with buildings' embeddedness in a larger urban fabric, including mundane traces of social attitudes and ideology, than mere accounts of monuments and prominent buildings as self-contained facts.¹⁵ Following this system of thought, this research makes connections between urban and architectural history of Abadan and the economic, political, social, and cultural contexts which circumscribed the process of urban development of the city in the first decades of the twentieth century.

Working on the margins of urban and architectural history, this dissertation employs different strategies—suggested by scholars in the field—to harness the “remarkable field of energy”¹⁶ generated by interdisciplinarity. For instance, Diane Harris, argues for situating the broadly defined notion of identity, performance, and their spatio-political ramifications at the center of a social history of the built environment.¹⁷ Gwendolyn Wright urges architectural historians to learn from cultural historians the knowledge and techniques of unearthing the meanings embedded in public places. Wright also advocates for the application of more forceful linguistic expressions – for instance, to use such terms as reinforce, mediate, and articulate rather than document or reflect- when

¹³ D. Harris, “Social History: Identity, Performance, Politics, and Architectural Histories,” *Journal of Society of Architectural Historians*, 64, no. 4 (Dec. 2005), p. 421

¹⁴ Nancy Stieber, “Microhistory and the Modern City: Urban Space, Its Use and Representation,” *JSAH*, 58 (Sept. 1999), p.385

¹⁵ Swati Chattopadhyay, *Representing Calcutta: Modernity, Nationalism, and the Colonial Uncanny* (New York, 2006), p.11

¹⁶ I have borrowed this phrase from Dorothy Metzger Habel's *When All of Rome was Under Construction: The Building Process in Baroque Rome* (Pennsylvania: The Pennsylvania State University Press, 2013), p.2

¹⁷ D. Harris, “Social History: Identity, Performance, Politics, and Architectural Histories,” *Journal of Society of Architectural Historians*, 64, no. 4 (Dec. 2005), p 423

describing the influence of the built environment on culture and society.¹⁸ John Archer calls for scrutinizing the capacity of built space in sustaining cultural beliefs, in the articulation or negation of human difference, and in the furtherance of economy, power, and community.¹⁹ Underscoring the importance of integrating social and economic history into architectural history, Ballantyne argues that the politics behind the production of buildings should be regarded as significant as the aesthetic characteristics. Ballantyne stipulates that buildings are shaped in an “ethical milieu,” where many forces operate including those determining the distribution of resources. In other words, buildings are good manifestations of “value systems” in a society, as they are a form of “cultural capital” intertwined with “physical capital.”²⁰ Jane Rendell observes that architectural history, as a spatialized practice, is constructed by the changing position of the researcher, who should not remain a disinterested observer. In Rendell's view, multidisciplinary research is different from interdisciplinary study in that in the former academics are locked within the disciplinary boundaries of their field, while in the latter researchers operate at the edge of, and between, disciplines and in so doing question the conventional methodologies of their own field. In other words, interdisciplinary research is predicated upon a desire to develop political critique, challenging the “ideological apparatus” that constructs the terms and methods of specific “disciplinary practices.”²¹

¹⁸ Gwendolyn Wright, “Cultural History: Europeans, Americans, and the Meanings of Space,” *JSAH*, 64, no. 4 (Dec. 2005), pp. 436-440

¹⁹ John Archer, “Social Theory of Space: Architecture and the Production of Self, Culture, and Society,” *JSAH*, 64, no. 4 (Dec. 2005), p.433

²⁰ Andrew Ballantyne, “Architecture as Evidence,” in D. Arnold, E. A. Ergut and B. T. Özkaya (Eds.), *Rethinking Architectural Historiography* (London: Routledge, 2006), p.37

²¹ Jane Rendell, “From architectural history to spatial writing,” in D. Arnold, E. A. Ergut and B. T. Özkaya (Eds.), *Rethinking Architectural Historiography* (London: Routledge, 2006), p.135

1.3.2 Evidence

As the cross-disciplinary approach to urban research would entail, the methods employed in this study build on extensive archival work. It also draws on both tangible and intangible bodies of evidence including official documents, urban plans, maps and images, pictorial and textual representations of Iranian oil and Abadan, British and Iranian magazines and daily newspapers, as well as oral histories, memoirs and diaries of oilmen, workers, residents, and visitors to the city. All pieces of evidence were contextualized within the larger economic, political, cultural, and social settings within which they were produced. Moreover, two analytic strategies were employed when dealing with historical documents. First, the author carefully analyzed the social standings and political orientations of the individual writers, journalists, and administrators to see how individual narratives incorporated both subjective dispositions as well as larger ideological, political and cultural currents. Secondly, the narrative itself was also scrutinized to decode the rhetorical devices used to communicate cultural attributes and socio-political distinctions. For instance, the rhetoric of “oil pioneer” and the rhetoric of “oil exploiter” underlay two contrasting accounts of oil development in Abadan from the perspectives of British and Iranian subjects, respectively.

The primary research started at the Iranian National Archives and the National Library in Tehran in summer 2015. The National Archives and the Library hold a wealth of historical documents, including newspapers, correspondence among Iranian Ministries, government officials, and Company representatives, as well as letters and petitions from Iranian workmen and inhabitants of Abadan during the period under study. In summer 2016, the author visited the archives of the Anglo-Persian Oil Company (the present-day

British Petroleum), housed at the University of Warwick in Coventry in the U.K. The BP Archives contain an abundance of data, including official, demi-officials, and informal correspondence, memos, and letters exchanged among Company officials, British diplomats, and Iranian officials, as well as maps, master plans, and photographic representation of Abadan during this period. The archives also include the full collection of *The Naft*, the internal magazine of the A.P.O.C, which was published for the staff and employees between 1924 and 1951. This journal provides invaluable information on the architecture and the urban development of Abadan. The BP Archives also holds a very rare and valuable source: Lindsey Smith's *JM: the story of an architect* (1976). This privately published book documents the career of James Mollison Wilson (1887-1965), the A.P.O.C.'s architect, who designed numerous buildings and residential quarters in Abadan. BP-sponsored petro-movies, featuring the oil industry in Iran, also provided important cinematographic, pictorial, and textual data for this research. BP Video Library holds a number of oil-films exemplifying the company's promotional practices designed primarily for western audiences, including *Persian Oil Industry* (1925), *In the Land of the Shah* (1926), *Dawn of Iran* (1938), *AIOC's Operations in South-West Iran* (1921) & (1938), *Oil from Khuzestan* (1948), and *Persian Story* (1952).

After archival work in Warwick was completed, the author spent several weeks at the British Library and the British National Archives in London. The British Library's rich sources on the topic consist of detailed official documents and correspondence of Political Resident in the Persian Gulf and British Consul-Generals— representatives of the Government of British India in Southwest Iran— regarding the political conditions and various issues circumscribing Iranian oil and the urban development of Abadan. The

British library also holds a rich collection of maps, prepared by the British Admiralty and the Basra Port Authority, showing the transformation of Abadan and its environs during the time period under study. The maps, in particular, are untapped primary sources providing detailed cartographic data on the early stages of oil urbanism in Abadan, spatial organization of the city, and different elements of its urban fabric. The National Archives contain correspondence of diplomatic representatives of the Foreign office on the topic. The other valuable source used in this study is the Qatar Digital Library's free online platform which contains the digitized documents of the India Office archives. During the archival work in the UK and in Iran, the author compiled thousands of pages of historical documents which shaped the foundation on which this study rests. The data collected from different archival centers usually complemented each other. When possible, the data was triangulated to verify the authenticity of the information.

1.4 Literature Review

1.4.1 Abadan

Architecture and Urbanism

Laurence Lockhart's account of Abadan in *Persian Cities* (1960) is among the first endeavors to briefly narrate the development of Abadan – albeit from the vantage point of an orientalist/company historian – before and after the emergence of the oil industry. Lockhart's narrative is primarily built on his first-hand experiences as well as the documents of the British oil company. The short chapter “Abadan: an industrial company town,” which appears in Vincent F. Costello's *Urbanization in the Middle East* (1977), is another example that draws primarily on the British Admiralty reports in 1945. Along the

same lines, Xavier de Planhol and Laurence Elwell-Sutton's essay on Abadan, published in *Encyclopedia Iranica* in 1982, concisely gives an account of the history of the city in the medieval and petroleum eras. The essay, which is based on both sociological surveys as well as statistical figures of the national census data, regards Abadan as an “exceptional laboratory” for analyzing the contradictions caused by Iran's economic development and industrialization. Predominately focusing on the second phase of Abadan's urban growth in the 1960s, Elwell-Sutton and de Planhol discuss issues as diverse as economic activities, demography, city quarters, urban organization, and social contrasts.

The patterns of urbanization in Abadan were analyzed from a regional perspective in Ian Seccombe and Richard Lawless's *Settlement Patterns and the Gulf Oil industry* (1987). Analyzing oil company towns across the Persian Gulf through the lens of urban geography, Seccombe and Lawless show how the oil industry, particularly during its construction phase, triggered a major restructuring across Khuzestan's urban systems. The authors also survey the spatial organization of different sections of the company town through maps and images. Mark Crinson's article “Abadan: planning and architecture under the Anglo-Iranian Oil Company” (1997) and book chapter “Oil and architecture” (2003) are the only studies that in some detail portray the spatial practices of the British oil company in Abadan. Analyzing the city from the perspective of urban and architectural history, Crinson has largely focused on the design of the Bawarda Township, the residential quarter designed by James Mollison Wilson for Iranian staff to the south of Abadan town in 1935, and has drawn connections between this project and city planning and architectural practices in the colonial city of New Delhi under the celebrated British architect Edwin Landseer Lutyens. Iranian journalist-lawyer-politician Abulfazl Lesani in his book *Naft:*

Tala-yi Siya ya Bala-yi Iran (Oil: Black Gold or Curse of Iran) (1950) has dedicated a short chapter, titled “Oil City of Abadan,” to describe the physical characteristics of different quarters of the city. Recently, visual representation of Abadan has raised scholarly attention. Mona Damluji's article “The Oil City in Focus” (2013) examines the documentary film *Persian Story* sponsored by the Anglo-Iranian Oil Company in 1953. The film was shot during the last few months before the Company's staff left Abadan in October 1951 in light of the nationalization of the oil industry. Damluji demonstrates how this oil propaganda product has implemented cinematic techniques, such as constructed montages and a dynamic soundtrack, to combine selective fragments of urban landscape, portraying Abadan as a space of modern everyday life in Iran.

Social History and Daily Life

Social history of oil company towns in Iran—with Abadan as their focal point — has been the focus of recent scholarly endeavors. Kaveh Ehsani's classic piece “Social Engineering and the Contradiction of Modernization in Khuzestan’s Company Towns” (2003) provides critical insights into the dynamics of oil modernity experienced in Abadan as well as the implications of what he terms “conflicted” modernity for social relations, urbanization, and citizenship. Rasmus Christian Elling's recent book chapter “On Lines and Fences”, which appears in *Urban Violence in the Middle East* (2015), brings to light a neglected case of urban unrest that broke out in 1942 between Iranians and Indians from two neighboring working-class quarters of Abadan. Elling's story provides an alternative labor history of Abadan and challenges the Iranian leftist and nationalist accounts that render urban

violence in terms of a binary confrontation between the British Oil Company and Iranian oil workers.

Abadan has also been the topic of memoirs, fictional novels, and poetry. Manucher Farmanfarmanian, Iranian aristocrat and senior engineer at Abadan refinery, in *Blood and Oil* (1997) vividly describes the colonial character of Abadan in the 1940s represented by its rigid socio-spatial divide. Of significance is his first-hand account of the living conditions in Abadan's squatter settlement, *Kaghazabad*. Bryce Cameron's *Under Sand, Ice and Sea* (1999) chronicles the memoirs of a Scottish Chemist working for the oil company in Iran in the 1930s. Cameron provides interesting information on the development of the oil industry as well as the lifestyle of European expatriates in Abadan and Masjid-i-Sulaiman. Cameron's account not only casts light on the intra-group dynamics of the British community, but also recounts the lived experience of a senior bachelor employee in Abadan. In a similar vein, *Anglo and Bungalow at Abadan* (2012) narrates the diaries of Iraj Valizadeh, a native of Abadan, and offers colorful accounts of everyday life and social relations in the native quarter of the city in the 1940s and 1950s. Valizadeh's stories unearth social, cultural, and economic life of an Iranian working class family in terms of education, leisure, housing, and public health.

Yehouda Shenhav's "The Phenomenology of Colonialism and the Politics of 'Difference'" (2002) analyzes the documents written in the 1940s by Polish Jewish emissaries, who under the pretense of "construction contractors" at the Abadan Refinery, sought to persuade local Arab and Persian Jewish communities to immigrate to Palestine. The paper is largely concerned with the politics of difference between European and Middle Eastern Jews; however, it provides intriguing insights into various dimensions of

refinery workers' everyday lives as well as the dynamics of social relations among different grades. Zoya Pirzad's award-winning novel *Things we Left Unsaid* (2012) portrays the quotidian life of a middle-class Iranian-Armenian family in the suburb of Bawarda. Pirzad's fiction drills into the mental life of a “modern” Iranian housewife, narrating her psychological reactions to Abadan's urban environment, hierarchical social relations, and consumer culture. Pirzad also depicts the repercussions of oil modernity for social and cultural life of the middle-class Iranian families in Abadan. Dylan Thomas's poetry “Shame and Penicillin in Abadan” (1951), followed by his radio talk “Persian Oil” (1951), are the literary products of the Welsh Poet's visit to Abadan in January 1951. Thomas was commissioned to compose a script for an oil-film sponsored by the Anglo-Iranian Oil Company in response to the rising political tensions in Iran. The short poetry basically serves as a love letter to his “Pearl;” however, it describes life in Abadan in an impressionistic fashion. Employing animal imageries, Thomas portrays the relationship between the bachelor's quarters and the bazaar as mediated by prostitution. In the second piece, using a satirical language, Thomas depicts the life in Abadan town and bitterly criticizes the prevalent poverty and inequality in the city.

1.4.2 Oil industry in Iran

The history of oil and the oil industry in Iran is tightly linked with the operations of the Anglo-Persian Oil Company in the country. One of the early accounts of the activities of the British oil company in Iran is Laurence Lockhart's “The Emergence of the Anglo-Persian Oil Company, 1901-1914,” which appears as a chapter in Charles Issawi's *The Economic History of Iran, 1800-1914* (1971). This concise history was followed by *The History of the British Petroleum Company* triad of which Ronald W. Ferrier's *Volume 1*,

The Developing Years, 1901-1932 (1982) and James Bamberg's *Volume 2, The Anglo-Iranian Years, 1928-1954* (1994) detail the company's activities in Iran. Both books deal with a wide range of issues, such as the company's internal structure, management strategies, and the vicissitudes of production in Iran and elsewhere in the face of local and global challenges. Mustafa Fatih's *Panjāh sāl naft-i Īrān (50 Years of Iranian Oil)* (1956) narrates the general economic history of the oil industry— albeit from the perspective of a former senior Iranian employee. Fatih's account, filled with his own anecdotes as well as company documents, seeks to provide a fair evaluation of company's policies and operations in Iran. Abulfazl Lesani's *Naft: Tala-yi Siya ya Bala-yi Iran (Oil: Black Gold or Curse of Iran)* (1950) portrays the Iranian side of the politics of oil. Representing a nationalist perspective, Lesani's work offers a critique of the economic and political activities of the oil company in Iran. Laurence Elwell-Sutton's *Persian Oil* (1955) is a commentary on the social welfare and paternalistic policies of the A.I.O.C in Iran. Backing up his argument by statistics and personal anecdotes, Elwell-Sutton shows company's investment in social welfare was absolutely disproportionate to the sheer size of Iranian employee. Elwell-Sutton also challenges the company's “civilizing missions” and enumerates the racial-imperial policies that led to discriminatory measures against Iranian staff.

As the discourse on the application of science to industry became pervasive in political and academic milieus across the British Empire, the chairman of the Anglo-Persian Oil Company commissioned the secretary of the British Scientific Instrument Research Association to measure the company's endeavors in Iran against “scientific knowledge and methods.” John W. Williamson's *In a Persian Oil Field* (1927), which

received the endorsement of the Earl of Balfour, was the outcome of this study. The book, which turned out to be part of company's oil propaganda schemes in the late 1920s, intended to outline the industrial, educational, and social “achievements” of the oil development in Iran. A handful of visitors and travelers also have provided some representation of the oil industry in Iran. The British “official” artist Donald Maxwell in *A Dweller in Mesopotamia* (1921) visually and textually depicts the “Dantesque scenery” of the Abadan refinery. Using multiple literary and biblical metaphors, Maxwell offers a historicized imagery of oil and the practice of oil production in Abadan. Victoria Sackville-West in *Twelve Days* (1928) presents a psychoanalytic account of the landscape of the oil industry in Iran. Sackville-West delves into psychological reverberations of the practice of drilling and the act of traversing from the countryside into Abadan— what Sackville-West renders as the “hell of civilization.” Sackville-West is probably one of the first to conceptualize the complexity of the relationship between oil and humanity as well as oil's mythical characteristics, including its invisibility, its secrecy, and its mystery. While praising the ingenuity behind the oil industry, Sackville-West laments that the landscape of Bakhtiari land has been “violently” transfigured by “the enterprise of men from another continent.” Moreover, she sheds light on a dual world caused by the oil industry in Abadan: “the one weary, ignorant, and poor; the other energetic, scientific, and prosperous; but both equally enslaved by the habit of their different modes of thought.”

The discovery of oil and the development of the oil industry in Iran have been studied from various perspectives in recent scholarly works. For instance, Shahbaz Shahnavaz in *Britain and South-West Persia, 1880-1914* (2005) touches upon the dynamics of the early oil development in reference to British Imperial policies and

economic strategies in the Khuzestan Province. Shahnavaz argues that the opening of the Karun River in 1888 followed by the development of the oil industry shifted the political and economic gravity of the region from the northern part of Khuzestan Province towards the south and the Persian Gulf. Arash Khazeni in *Tribes and Empire on the Margins of Nineteenth-Century Iran* (2009) profiles the economic, social, cultural, and environmental implications of the oil industry for the local communities, in particular Bakhtiari tribes. Stephanie Cronin's "Popular Politics, the New State and the Birth of the Iranian Working Class" (2010) details the early history of labor-capital confrontation in Abadan and other oil company towns in southwest Iran. Taking the 1929 Abadan refinery strike as the focal point of her discussion, Cronin meticulously analyzes the political, economic, and social forces that helped shape the Iranian industrial proletariat in Abadan. Richard A. Steward's *Sunrise at Abadan* (1988) recites the political history of Iranian oil industry on the eve of WWII. Steward tells the story of the occupation of Iran by the Allied forces which led to the deposition of Reza Shah and the accession of young Mohammad Reza Shah to the throne. Abadan lies at the center of the story because, as Steward argues, the oil industry at Abadan, being of great significance to the British economy, was threatened by the alleged presence of Germans in Iran. The book also narrates the confrontation between British Indian forces and Iranian army at Abadan.

The oil industry and practices of the British oil company in Iran have been the subject of numerous Doctoral dissertations in different disciplines. Abdul-Hamid Azami Zangueneh's *Le pétrole en Perse* (1933) and Mhammad Nakhai's *Le pétrole en Iran* (1938) analyze the economic dimensions of the oil industry in the context of national and global politics prior to and after the 1933 concessionary agreement respectively. Khodad

Farmanfarmaian's *An analysis of the role of the oil industry in the economy of Iran* (1955) presents a quantitative appraisal of the oil industry under the British management. Employing an econometric model, Farmanfarmaian stipulates that the oil industry to a large degree was insulated from the Iranian economy; in other words, it didn't have much of secondary and tertiary effects on the rest of the Iranian national economy. Neveen Abdelrehim's *Oil Nationalization and Managerial Disclosure* (2010) analyzes the Anglo-Iranian Oil Company's managerial policies towards its stock-holders as well as the Iranian employees following the concessionary agreement of 1933. Abdelrehim asserts that the A.I.O.C. was successful in maintaining the investors' confidence and in defending the company from the Iranian claims when nationalization crisis had loomed. However, the company failed to fulfill its Corporate Social Responsibility (CSR) obligations towards the Iranian employees. Michael Edward Dobe's *A long slow tutelage in western ways of work* (2008) critically examines the pedagogical and managerial policies of the A.I.O.C. and ARAMCO, maintaining that in both cases the companies' policies were designed not only to hamper the process of the localization of the industry, but also to prevent the native employees from ascending through the companies' grading systems. Katayoun Shafiee's *Cracking Petroleum with Politics* (2010) traces the socio-technical process that engaged in the power struggle between the oil company and the Iranian government over the control and distribution of oil between 1901 and 1954. Employing conceptual frameworks drawn from science and technology studies and political economy, Shafiee seeks to determine the mechanisms through which oil revenue affected the local and national politics in Iran and changed the Iranian society on different levels.

The political history of the Anglo-Persian oil conflict, 1951 nationalization of the oil industry, and the ensuing 1953 American-and British-staged coup in Iran – with Abadan lying at the heart of the turmoil– has also received considerable scholarly attention. Laurence Lockhart's "The causes of the Anglo-Persian Oil Dispute" (1953) regards the conflict as a "very complex" and "difficult affair." Lockhart acknowledges that although Iranians should have been compensated for certain hardships, they put themselves at disadvantage by breaking the "sanctity" of contracts and by "refusing to go to arbitration." Norman Kemp's *Abadan: A Firsthand Account of Persian oil Crisis* (1953) is a portrayal of the political quarrels in Abadan at the height of the Iranian oil dispute in 1951. Embracing the British version of the story, the book obviously falls short of offering a balanced account of the oil crisis. Mostafa Elm's *Oil, Power, and Principle* (1992) situates the Anglo-Iranian oil dispute within the context of struggle for national independence and sovereignty during the "twilight era" of British imperial power. Elm also discusses the geopolitical aftermath of the coup, including the suppression of the Iranian nationalist movement, reinstating the Shah, and the emergence of an American-dominated oil consortium in Iran. Stephen Kinzer's *All the Shah's Men* (2003) recounts the story of 1953 coup from a journalist's perspective. Drawing primarily on American newspaper articles and declassified reports of CIA, Kinzer strives to identify political forces that set the stage for the overthrow of the Iranian nationalist government. Ervand Abrahamian's thorough and well-researched work *The Coup* (2013) debunks the conventional wisdom about the 1953 coup. Abrahamian claims that Anglo-American interest in oil, rather than the allegedly rising communist threats, was the real political motivations behind this political rebellion.

1.4.3 Oil literature

Oil Capitalism

Oil has long been a hot topic for scholars from economics, energy and environmental studies, cultural geography, and political sciences. Several categories could be discerned within the oil literature. A large group of scholarly works seeks to give an account of the history of the oil industry in different parts of the world. For instance, Arnold Daum and Harold Francis Williamson's classic books *The American Petroleum Industry* (1981) tell the story of the emergence and evolution of American oil capitalism in the second half of the nineteenth and the first half of the twentieth centuries, the two periods the authors label as age of illumination and age of energy respectively. Along the same lines, Thomas Anthony Buchanan Corley's *A History of the Burmah Oil Company*, published in two volumes, details the operations of the British oil company in Burma and also discusses the company's technical contribution to the development of the oil industry in Iran. Ronald Ferrier and James Bamberg's trilogy on *The History of the British Petroleum Company* (1982, 1994, & 2000) narrates the development of the British firm in the twentieth century. This genre of scholarly work culminates in Daniel Yergin's best-selling *The Prize: The Epic Quest for Oil, Money, and Power* (1991), which charts the evolution of the international petroleum industry, on the one hand, and lays the groundwork for American energy discourse on the other hand. Telling the story of the development of global oil capitalism, this body of literature, as Timothy Mitchell notes, represents the “standard history” of heroic pioneers discovering oil in remote locations and desolate territories and of far-sighted statesmen on the eve of WWI acting to secure this strategic prize.²²

²² Timothy Mitchell, *Carbon Democracy: political power in the age of oil* (New York: Verso, 2011), p.8

Revolving around the notions of “resource curse” and “petro-states,” a genre of research emerged in the 1970s. This scholarship – of which Michael Ross’s book *The Oil Curse* (2012) is an exemplary case – revolves around the notion of oil boom and the corresponding economic and civic dysfunctions and human developmental failures of dystopian oil-rich states. This corpus of literature addresses the “petro-state” question by digging deep into the performance, governance, and politics of the national oil companies that stand at the heart of the contemporary global oil and gas system. Another line of inquiry– represented by Michael Klare’s 2011 book *The Race for What’s Left*– is mainly focused on the global geo-politics of oil, employing a “Malthusian” logic of scarcity and aggressive capitalist competition. This literature's main point is twofold: oil is finite and “non-substitutable,” and industrial capitalism’s voracious desire for acquiring petroleum resources has led to a frontier of violent accumulation operating together with “militarism” and “empire”.²³

There is another growing genre in the oil literature which straddles the “petro-state” and the geo-politics of oil capitalism. This scholarship seeks to transcend the rentier-state paradigm, offering a nuanced analysis of the mechanisms through which oil wealth affects the economic development of the oil-producing countries and corrupts democratic forms of politics. Examining the material development of oil, Robert Vitalis's *America's Kingdom* (2006) demonstrates how the Arabian American Oil Company (ARAMCO) sustained its exclusive control over the oil reserves in Saudi-Arabia not only by engaging in Saudi Arabian nation-and frontier-building projects, but also by manipulating the political relationship between the American and Saudi governments. Vitalis draws parallels

²³ Michael Watts, “Oil Talk,” *Development and Change*, 44, Issue 4 (July 2013), p.1016

between Aramco and A.I.O.C with respect to welfare policies--such as housing, wage systems, and education, among others. Vitalis also casts light on the “panoply” of institutional and legal mechanisms underpinning “white supremacy” that helped the American company practice Jim Crow in oil company towns. Timothy Mitchell's *Carbon Democracy* (2011) shows how oil in the late nineteenth and early twentieth centuries played a central role in both facilitating and frustrating democratic claims across the world, and how transnational oil companies tried to control the establishment of the oil industry in the Middle-East in order to monopolize petroleum production and distribution on the one hand, and weaken democratic claims in Europe on the other hand. Toby Jones's *Desert Kingdom* (2010) analyzes the role of oil in the project of Saudi nation-building from a novel perspective. Combining environmental history, science and technology studies, and political economy, Jones argues that oil wealth enabled the Saudi Kingdom to map, control, and remake vital natural resources- most notably water and agriculture- thereby consolidating its authoritarian political power over the Saudi populace. Jones also documents people's political insurgency against unfair distribution of oil wealth as well as sectarian discrimination in Saudi Arabia. Myrna I. Santiago's *The ecology of oil* (2006) also examines oil development in the Gulf of Mexico through the lens of environmental history. Santiago discusses the mechanisms through which oil capitalism transformed the oil-producing region's natural environment and social systems. These unsustainable changes, as Santiago argues, were among the forces that led to political instability in Mexico and ultimately to nationalization of the industry in 1938.

Oil Culture

The interest in cultural and material aspects of oil emerged in the 1980's among humanistic scholars. This body of scholarship, known as *oil culture*— dealing mainly with oil's consumption side— analyzes, interprets, and explicates the material, mystical, historical, geological, and agential presence of petroleum in culture.²⁴ The proponents of this strand of thought engage with oil as a cultural material. Oil, hence, is conceptualized as a force not only in economic and political life, but also in everyday experience and aesthetics.²⁵ To cultural analysts of petroleum, oil is ubiquitous, being central to virtually every aspect of our lives; it also serves as a tangible driving force behind almost all the luxuries of modern life, although it has been rendered by petro-capitalism as an abstract, infinite, and “invisible” energy input. As Allan Stoekl suggests, writing the history of oil would enable humanistic scholars to reify oil, make it visible, and bring to light the cultural dimensions of oil capitalism.²⁶

The cultural dynamics of oil-boom development made up the first dominant theme in this emerging literature, exemplified by Ryszard Kapuściński's evocative chapter in *Shah of Shahs* (1982) which portrays the petro-mythologies flourishing during the golden age of Iranian oil-boom. Building on Kapuściński's ground-breaking approach, scholars began to examine promotional representations of the oil industry in America and elsewhere. For instance, Brian Black's *Petrolia: The Landscape of America's First Oil Boom* (2000) scrutinizes the “sublime” framework employed by the media to legitimize the disastrous overproduction that swept the “flush field” in northwestern Pennsylvania.

²⁴ Ross Barrett and Daniel Worden, *Oil Culture* (Minneapolis: University of Minnesota Press, 2014), p.xvii

²⁵ *Ibid*, p.xx

²⁶ Allan Stoekl, “Forward,” in R. Barrett and D. Worden (Eds.), *Oil Culture* (Minneapolis: University of Minnesota Press, 2014), p. xix

Fernando Coronil's *The Magical State* (1997) examines the ways in which state-administered spectacles and promotional narratives helped secure popular allegiance to the Venezuelan oil economy. In a similar fashion, Miguel Tinker Salas's *The Enduring Legacy* (2009) highlights the role of oil companies and the emerging middle-class in projecting the notions of corporate interest and oil development as symbols of nationalism as well as in promoting the role of oil as the agent of modernization in Venezuela. Along the same lines, several studies have examined the complex landscape of the oil boom in Nigeria of which Andrew Apter's *The Pan-African Nation: Oil and the Spectacle of Culture in Nigeria* (2008) and Michael Watt's essays on the cultural analysis of Nigeria's booming oil economy of the 1970's are exemplars. Recently, a group of researchers have begun to investigate the cultural practices underpinning the petroleum-based life styles in oil-consuming societies. For instance, Cotton Seiler's *A Republic of Drivers* (2009) or David Gartman's "Three Ages of the Automobile: The Cultural Logics of the Car" (2004) are exemplary cases.

Oil Urbanism

There is also a thin but growing sub-field within this scholarship which is focused on the critical analysis of oil capitalism's spatial and symbolic forms. These studies mainly examine the socio-spatial characteristics of oil company towns and the distinctive ways of life that they forged. For instance, Miguel Tinker Salas's *The Enduring Legacy* (2009) analyzes the manner in which oil camps in Venezuela functioned as social and cultural laboratories implanting new models of work, social life, consumerism, leisure, and citizenship. Salas also shows how the architecture of company towns was used as a tool to reinforce social division along racial and occupational lines. Reem Alissa's dissertation

Building for Oil (2012) examines the role of oil as the agent of political, social, and cultural change at the level of everyday urban life in Kuwait. Alissa maintains that company town, as a modern architectural and urban planning prototype, along with other actors, helped nurture urban modernity in Kuwait. Like Salas, Alissa gives an account of planning and Architectural practices of the British oil company—that mirrored both racist ideologies and hierarchies of economic and political domination— and shows how socio-spatial engineering provided new models of family and neighborhood life for the oil company's Kuwaiti employees. Nelida Fuccaro's "Shaping the Urban Life of Oil in Bahrain" (2013) offers a micro-level analysis of the social and cultural outcomes of Bahrain's oil boom. Rendering oil company towns as "harbingers of new leisure and consumer culture," Fuccaro shows how the new forms of public communication — such as independent and government-controlled press, cinema, as well as the oil propaganda practices— created influential models of urban and suburban life shared by both expatriates and Bahraini citizens. Farah al-Nakib's "Kuwait's Modern Spectacle" (2013) sheds light on the paradoxes of oil modernization in Kuwait between 1950 and the Iraqi invasion of 1990. Al-Nakib analyzes the contradictions between ambitious state-run mega-urban projects and the urban experience of everyday life in the capital city of Kuwait. Arbella Bet-Shlimon's "The Politics and Ideology of Urban Development in Iraq's Oil City" (2013) also analyzes the effects of the political and social properties of oil on the trajectory of urban development in Kirkuk before the 1958 revolution.

1.4.4 Company Town

The concept of company town was a late nineteenth-century creation, first applied in the United States to mining camps and smelters in Appalachia. As a by-product of industrialization and capitalist expansion, company towns appeared between 1830 and 1930 during the early industrial age in Europe and North America.²⁷ In the 1930s, Horace Davis provided one of the first scholarly definitions of this entity as being a “community” whose inhabitants are predominantly the employees of a single company, or a group of companies, that also owns a substantial part of the real estate and houses.²⁸ Company towns were used as a way to make manufacturing or mineral extraction possible in isolated regions or in places without easy access to established urban centers, and also as a means to secure a stable labor force. In most cases, the company played a double role of employer and landlord. In the former capacity, it hired, fired, and organized personnel for production. As landlord, it created and managed the company town, controlled housing assignment, provided medical and sanitary services, supplied water and energy, established company stores, and in some cases even oversaw workers' leisure and social life. Specific characteristics varied according to the dominant economic activity, the location of the industry, the presence of private or state capital, the reliance on local or migrant labor, and the relative autonomy of company towns from local and national authorities. Working arrangements and spatial organizations followed the logic of maximizing production but were also influenced by such factors as power relations, socio-occupational hierarchies, and the ethnic, racial, and gender composition of the working population. As

²⁷ John Garner, *The Company Town: Architecture and Society in the Early Industrial Age* (Oxford: Oxford University Press, 1992), p.3. J. Garner, *The Company Town*, p.3

²⁸ Horace Davis, “Company towns,” in *Encyclopedia of Social Sciences* (New York: Macmillan, 1937), 4:11, p.1.

industrialization and capital investment expanded, company towns emerged in other parts of the world where they often acted as pioneering “devices” in broader westernizing efforts.²⁹

The literature on company towns is very rich. The rise and decline of these communities drew the attention of scholars as early as the 1960s. For instance, James Allen in *The Company Town in the American West* (1966) provided economic and social histories of two hundred company-owned towns in eleven states across the western region of the United States. While making no generalizations about the image of these towns, Allen stressed company paternalism, in particular the provision of housing and services to laborers, as a significant characteristic shared by these settlements. Typology of company towns accounts for another body of scholarship exemplified by the works of urban geographer John Douglas Porteous. In “The Nature of the company town” (1970), for instance, Porteous distinguishes between two types of company towns: extractive and model. The former—used to open up previously unexploited territories—functioned as a temporary pioneering device, especially suited to the nations undergoing rapid economic development; whereas model company town was a means of uplifting and molding the workers through socio-religious ideals or philanthropic desires of the employer. Porteous also stipulates that extractive company towns are the product of economic pioneering, while manufacturing towns are the outcome of socioeconomic forces. Providing a detailed analysis of urban form and planning in his selected case-studies, Porteous sheds light on the deliberate company policy of residential segregation along occupational classes.

²⁹ Marcelo J. Bores and Susana B. Torres, “Company Towns: Concepts, Historiography, and Approaches” in *Company Towns*, ed. Marcelo J. Bores and Susana B. Torres (Palgrave MacMillan, 2012), pp.1-5

Socio-spatial organization and architectural characteristics of company towns became the focus of another line of inquiry. In “Social Class in Atacama Company Towns” (1974) Porteous delves into the mechanisms of social control in Chilean company towns. Porteous maintains that American copper companies in the Chilean desert of Atacama, inspired by company planning policies in Europe and the United States, reinforced labor control through both physical and social features of company towns, including rigid ground plan, architectural uniformity, the dominance of the townscape by company institutions, and strong ethnic and class segregation. John S. Garner's edited book *Company Town* (1992) is an anthology of studies on early-industrial-age company towns in west Europe, Scandinavia, and Americas. John Garner himself provides a historical account of the evolution of early company towns between 1830 and 1930, discussing issues as diverse as typology, the characteristics of model company towns, paternalism, social engineering, garden city prototypes, imagery practices, planning, and housing, among others. Margaret Crawford's *Building the Workingman's Paradise* (1996) looks at the gradual development of American company towns since the late eighteenth century through the lens of urban and architectural history. Conceptualizing housing as the main bond between employer and company workers, Crawford shows how the failure of Pullman model company town in the late nineteenth century gave rise to the emergence of a “new” generation of company towns designed and planned by architects and planners. Crawford also offers a detailed analysis of the economic, social, and intellectual contexts within which “new” company towns were built, discussing such issues as union organization, shifting interpretations of paternalism and social reforms, and economic fluctuations.

There is also emerging scholarship within company town literature that moves beyond the formal analysis of these settlements, rendering them as contested spaces in which diverse interests, contrasting ideas of community, and unequal power relations co-existed. For instance, Oliver J. Dinius and Angela Vergara's edited volume *Company Towns in the Americas* (2011) encompasses a series of essays rethinking the manner in which company towns were shaped. The studies compiled in this book discuss how social ideology and economic rationale, as the main forces behind the creation of company towns, were overshadowed by local culture and contextual variables, such as national politics and social protest. The book also examines the mechanisms through which American multinational corporations exported American ideals of work discipline, race, and gender to Latin America. Marcelo J. Borges and Susana B. Torres's edited book *Company Towns* (2012) is a collection of studies approaching the concept of company town from an international and comparative perspective. The contributions of the book recognize the common patterns of company towns across time and space, while stressing their adjustment to specific historical, cultural, and political contexts.

1.4.5 British Imperial urbanism

The literature on architecture and urbanism in the context of the British Empire is pretty rich. A strand of thought in this vast scholarship focuses on the relationship between the process of colonialism and the resulting urban form in the “colonial cities” – or what is known as colonial urbanism. This field of research which expanded in the last decades of the twentieth century drew primarily on “dependency theory,” which portrayed the new phases of imperialism, assuming that overseas economic expansion were crucial for the

new phases of capitalism.³⁰ This theory led to “dependent urbanism” school of thought, which analyzed urban patterns in terms of a general process of resource exploitation and emphasized the changing modes of production and accumulation of surplus. David Harvey, the leading exponent of this movement, in *Social Justice and the City* (1973) conceptualizes urbanism as a mirror that reflects different aspects of society.³¹ Building on this system of thinking, Anthony King in *Colonial Urban Development* (1976) examines the effects of three variables of British colonialism – culture, technology, and power-structure – on urbanization and urban development. In King's view, colonial urban development is the outcome of the interplay between urban form of an industrializing western power and the urban fabric of a “pre-industrial” foreign society. The “colonial city” is the urban area in the colonial society most typically characterized by the physical segregation of its ethnic and socio-cultural groups. By urbanization, King alludes to the “unplanned” or “organic” urban growth, a process “whereby the proportion of a given population living in places, defined as urban, increases at the expense of those living in non-urban areas.” King conceptualizes urban development as the more limited process of “directed growth” of the existing or new urban centers. King in *The Bungalow* (1995) examines one of the most complicated colonial artifacts in a global context. King maintains that the diffusion of this housing type across the world is a reflection of the socio-spatial division of labor within the system of colonial urban development. King stresses the nebulous character of bungalow and its myriad forms and meanings which transcend period, place, function, and even the realm of ideas.

³⁰ Eric J. Hobsbawm, *The Age of Empire: 1875-1914* (New York: Vintage Books. 1987). pp.60-61

³¹ David Harvey, *Social Justice and the City* (Johns Hopkins University Press, 1973), p.204

Robert K. Home in *Of Planting and Planning* (1997) explores some of the ideas and policies applied to the creation of colonial towns and cities and their underlying “power-knowledge relationships.” Home enumerates the three co-existing, yet competing, ideological positions that exerted a continuing influence over the British colonial urban landscape. The first principle was the desire for state control articulated through the physical form of ports and towns, and the civic design language of baroque avenues, esplanades, and public buildings. The second ideology was the implementation of capitalist policies aiming to achieve the maximum accumulation of wealth from trade, extraction of resources, and production. A third ideal was utopianism which included the experimentation with urban form and social organizations that were less achievable at the metropole. Home also discusses the political and colonial symbolism conveyed by colonial building types. For instance, the clock tower signified the western time disciplines, or the post office symbolized the world-wide network of communications that Empire helped to foster. Home argues that colonial building regulations discriminated against vernacular design solutions, such as Indian court yards and Chinese air wells, which had evolved over time to address local climatic concerns. Rather, the British opted for bungalow designs with plot ratios that prevented “over-development.” The bungalow was usually enveloped by a veranda which functioned not only as a climatic regulator but also as a smooth transitional space between interior and exterior. When located on the outside of the dwelling rather than in a courtyard, veranda allowed for the surveillance of the surrounding landscape, and therefore functioned as an important feature for planters and colonial officials. Discriminatory zoning and racial segregation in the British colonial context account for another sub-topic in this literature. For instance, A. J. Christopher's “Urban

segregation levels in the British overseas Empire and its successors, in the twentieth century” (1992) shows that the most severe examples of structural segregation were exercised in South Africa, while in the tropics European populations were largely transitory and structural segregation was only loosely enforced. Christopher stipulates that the evolution of segregation in the British colonial city was complex, and rarely was there rigid enforcement of legalized segregation.

The relationship between modernism and architectural practices across the British Empire has also drawn the attention of urban and architectural historians. Mark Crinson, for example, in *Modern Architecture and the End of Empire* (2003) shows that the relationship between imperialism and modernism is far more complicated than has often been assumed. Crinson maintains that architecture— as a mode of representation— works as a cultural, economic, and spatial medium through which to apprehend the ideologically constructed notion of empire. “Architecture of empire,” however, includes not only the canonical imperial architecture in early twentieth-century London or the regionalist architecture in New Delhi, but also other spatial practices in remote locations across the empire. The image of empire, as Crinson explains, was mutable but everywhere it appropriated the past in order to establish its hold on time; it also concealed empire's transience, its dynamic of exploitation, and its contingent modes of control. Crinson's critical point is that the architectural and city planning features of New Delhi set standards for urban and architectural practices across the empire by offering a coherent empire-pervading style. Its urban form was a grandiose choreography of monuments expressing the primacy of executive over representative power; residential layouts and locations reflected hierarchical differences along socio-economic status, occupation, and race; routes

like the main Raj path featured lavish traffic facilities, ceremonial axialities, and monumental symmetries; Indian past was relegated to ornaments; and overall, the project embraced a sense of garden city spaciousness. Crinson notes that the imperial impacts of New Delhi can be traced across the empire in as widely disparate and distant examples as the marrying of monuments and graded residences in the planning of Abadan.

There is also a growing literature examining the architecture and urbanism of British colonial cities through the lens of post-colonial theories. For instance, Swati Chattopadhyay's *Representing Calcutta* (2005) rethinks the constructed image of modernity in colonial Calcutta by delving into British and Bengali portrayals of the city. Along the same lines, William Glover's *Making Lahore Modern* (2007) investigates social and material aspects of modernization in colonial-era Lahore. Glover demonstrates how the material environments of everyday life were considered to be among the most important “conditions” retaining “old forms of life,” and their systematic rebuilding was the focus of a wide range of colonial efforts. Stephen Leg in *Spaces of Colonialism* (2007) investigates urban structuring and governance of Delhi under the British Raj by employing a Foucauldian framework.

CHAPTER 2

LAND, OIL, AND EMPIRE: THE QUEST FOR THE OIL FRONTIER IN SOUTHWEST IRAN

This chapter gives an account of the process of identification, delineation, and acquisition of land for construction of the oil refinery on Abadan Island in 1908. It shows how the project of land acquisition for the oil infrastructure unfolded against the backdrop of the British imperial and commercial interests in the Persian Gulf and set in motion novel political and power dynamics in Khuzestan Province in Southwest Iran. In particular, the strategic alliance between the British Empire, the nascent oil enterprise, and the local chieftain helped establish the foundations of the oil frontier in the region. I argue that oil instituted a complex web of relations among British diplomatic and military agents, oilmen, the local tribal leader, and the Iranian Government, which circumscribed the politics of land acquisition. The oil company utilized the imperial intelligence and the British political capital to acquire the most advantageous land under the most favorable terms; the project of land acquisition enabled the British Empire to consolidate its power in Southwest Iran; the local tribal chieftain used the project to advance its claim to the island; and, the land transaction motivated the Iranian Government to get more actively involved in the Khuzestan affairs.

2.1 Imperialism, State-Building, and the Oil Concession

Discovery and exploitation of oil in Southwest Iran in May 1908 marks the culmination of foreign concessionary activities in Khuzestan Province which laid the groundwork for several historical processes, including expansion of the British imperial networks, extension of the Iranian Government's centralization efforts, and integration of the region

into the global economy.³² On the eve of the discovery of oil, while the dynamics of the Great Game—as the Anglo-Russian rivalry in Central Asia was termed—created a “semi-colonial” situation in Iran,³³ the British Empire had become the predominant imperial power in south Iran.³⁴ The Great Game ended, at least on paper, on August 31, 1907, when Britain and Russia signed a secret accord on Afghanistan, Tibet, and Iran. With respect to the latter state, the two imperial powers agreed to partition the country into three zones of influence.³⁵ According to this agreement, Northern provinces as far interior as Esfahan, became the Russian territorial sphere. Southeastern provinces as far west as Bandar Abbas on the Persian Gulf became Britain's zone of influence. Central Iran, including the Southwestern province of Khuzestan, was regarded as the “Neutral” sphere, where no party

³² Arash Khazani, *Tribes and Empire on the Margins of Nineteenth Century Iran* (University of Washington Press, 2009), p.12

³³ Ahmad Ashraf. “The Roots of Emerging Dual Class Structure in Nineteenth-Century Iran”. *Iranian Studies* 14, no. 1/2 (1981): 5-27.

³⁴ In the early nineteenth century, Great Britain viewed Iran, then called Persia, as a strategic bulwark against the expansion of rival empires, particularly Tsarist Russia, towards India. Not only did Iran become a buffer zone between British India and Russia, it was also part of a chessboard on which the Great Game, as the Anglo-Russian rivalry in central Asia came to be known, was played out. Both imperial powers regarded Iran as a supplier of raw materials and a potential market for their manufactured goods. However, for Britain trade with Iran was only a means of achieving political and strategic ends. With a view to advancing her imperial interests, the British Empire relentlessly competed with the Russians to intervene in Iran's internal affairs, to exert influence on the Qajar court, to bribe Iranian statesmen, and to secure concessions and commercial treaties from Qajar shahs — all at the expense of Iran's political sovereignty and economic independence. Houshang Sabahi, *British Policy in Persia, 1918-1925* (London: Frank Cass and Company Limited, 1990), Introduction.

³⁵ Increased Anglo-Russian imperial practices coupled with the absolute despotism of Qajar shahs gave rise to a nationalist movement which culminated in the Constitutional Revolution of 1906-1911. The rise to power of liberals in London and the emergence of Germany as the new potential threat to the British imperial interests compelled Great Britain to revisit her imperial policies in order to uphold Europe's balance of power. This meant making new alliances and reaching comprehensive agreements with her traditional rival powers, France and Russia. The Anglo-Russian Agreement, or the “unblushing specimen of imperial presumption” — to put it in Shareen Blair Brysac's words— underlined the “integrity and independence” of Iran, yet in reality undermined her territorial sovereignty. Brysac, Shareen Blair. “A Very British Coup: How Reza Shah Won and Lost His Throne”. *World Policy Journal* 24, no. 2 (2007): 93.

was supposed to enjoy any predetermined rights. However, this region became a *de facto* British sphere.³⁶

Historically, the British Empire had political, commercial, and strategic stakes in the Persian Gulf.³⁷ Thanks to its strategic location on the high road to India, the Persian Gulf earned an ever-increasing importance in the eyes of British policymakers in the course of the nineteenth century and by the early twentieth century it had already become the “British Lake.”³⁸ Treaties of loyalty and cooperation were forcibly imposed on the sheikhdoms along the southern littoral of the Gulf from Kuwait to Aden — turning them into British protectorates.³⁹ On the Turkish and Persian littorals of the Gulf, where the

³⁶ Benoy Kumar Sarkar, “The Reshaping of the Middle East”, *The Journal of Race Development* 9, no. 4 (1919): 342.

³⁷ The British presence in the Gulf dates back to the seventeenth century. Following the formation of the East India Company in 1600 and the dispatch of the first English “mission” to Iran in 1615, British fleet supported King Abbas I in expelling the Portuguese from the Hormuz Island in 1622. In return East India Company was allowed to establish a trading post at the port town of Bandar Abbas. Later, the post was transferred to Bushire (Bushehr) which eventually became the main British Residency in the Gulf from 1763 until 1947 when it was relocated to Bahrain on the other side of the Gulf. For a detailed historical account of the British commercial and political interests in the Persian Gulf and southwest Iran from the perspective of a British officer in the region, see John Gordon Lorimer, *Vol I. Historical. Part IA & IB & Part II* (Calcutta: India Office Press, 1915)

³⁸ By the early twentieth century, the necessity of maintaining a predominant influence across the Gulf had become an axiom of the British imperial policy to such a degree that the establishment of a naval base or a fortified station by any foreign power along the Gulf waterways was regarded as a “grave menace to the British interest.” Los Angeles Herald in 1903 labeled this policy as the British Monroe Doctrine. The British viewed the 200-by-500-mile sheet of water between Arabia and Iran as one of the two major routes between India and Britain— the other being the Red Sea and via the Suez Canal. It is not surprising that Lord Curzon, Viceroy of India (1899-1905), in his address to the House of Lords regarded the Persian Gulf “as part of the maritime frontier of India.” Lord Curzon to the House of Lords, 22 March 1911. Digitized version of House of Lords Archives.

http://hansard.millbanksystems.com/lords/1911/mar/22/persia-and-turkey-in-asia#column_588. For more information see Los Angeles Herald 7 May 1903 — California Digital Newspaper Collection: <https://cdnc.ucr.edu/cgi-bin/cdnc?a=d&d=LAH19030507.2.24> . For more on the British strategic, political, and commercial interests in the region, see Arnold T. Wilson, *The Persian Gulf* (Oxford: Clarendon Press, 1928), preface; See also, Benoy Kumar Sarkar. “The Reshaping of the Middle East”. *The Journal of Race Development*. 9, no. 4 (1919): 334

³⁹ The status of the Arab Sheikdoms was described by the British as being “in special treaty relations with the British government”. This was a unique category fitting neither a colony nor a protectorate. For more discussion on this form of administration, see Aileen Keating, *Mirage: Power, Politics, and the Hidden History of Arabian Oil* (New York: Prometheus Books, 2005), 21-22

influence of respective governments was loose, Britain could manage to establish an informal empire. Here, the flag-follows-trade formula was adopted.⁴⁰ Concessions and commercial treaties opened up the region to the international trade and helped consolidate the British influence in the “Neutral Zone.”⁴¹

In 1901, Qajar king Mozaffar-al-Din Shah (1896-1907) granted a concession to British capitalist William Knox D'Arcy to “search for and obtain, exploit, develop, render suitable for trade, carry away and sell natural gas, petroleum, asphalt and ozokerite...for a term of sixty years.”⁴² The concession covered most parts of Iran with the exception of the five Northern provinces which fell into the Russia’s “Zone of Influence.” D'Arcy was also granted the exclusive right to lay pipeline from oil wells to the Persian Gulf, establish distribution depots, construct and maintain factories, and undertake all other works and services necessary for the operation of the concession. D'Arcy was also required to

⁴⁰ In those regions, imperialism was predicated upon the “flag-follows-trade” formula, whereby British firms would lay the foundations for political domination and, in turn, would benefit from the peace and security that the political presence of “the flag” would offer. As early as the mid-nineteenth century, the Ottoman and Iranian Governments were pressed to open up the major transportation and trade routes at the head of the Persian Gulf. In Turkish Arabia, under pressure by the Foreign Office, the Sublime Porte agreed to share with the British firm Lynch Brothers the monopoly of steam navigation on the Shatt-al-Arab, the Euphrates, and the Tigris. Similarly, the opening of the Karun River to the British steam navigation in 1888 enhanced the commercial and, subsequently, the political position of Britain in Southwest Iran. Among the outcomes of cash-crop farming was economic dependence of the region and the vulnerability of farmers to market fluctuations of prices as well as the quality and quantity of date harvests. For a detailed analysis of the British imperial policies in the Persian Gulf Region in the early twentieth century, see Marian Kent, “Moguls and Mandarins: Robinson and Gallagher and British interests and policies in the Ottoman Empire in the Early Twentieth Century”, in *Moguls and Mandarins: Oil, Imperialism and the Middle East in British Foreign Policy 1900-1940* (Routledge, 2013), 7-34

⁴¹ For instance, in 1898 and 1903 Lynch Brothers obtained two concessions to lay roads between Khuzestan Province and urban centers of the Iranian Plateau. John Paxton, *The Statesman's Year Book: Statistical and Historical Annual of the States of the World* (London: MacMillan & Co. Ltd, 1906), p.1247. Moreover, the opening up of the region to international trade led to the demise of subsistence farming and the rise of cash-crop agriculture. For a detailed analysis of the social and economic impacts of the Karun opening on Khuzestan province, see Shahbaz Shahnavaaz, *Britain and the opening up of South-West Persia 1880–1914: A study in imperialism and economic dependence* (RoutledgeCurzon, 2005)

⁴² For a complete version of the D'Arcy Concession, see R. W. Ferrier, *The History of the British Petroleum Company: The Developing Years: Volume 1 The Developing Years 1901-1932* (The British Petroleum Company Ltd., 1982), “Appendix 1.1”, p.640

establish a company and pay the Iranian Government £20,000 in cash and £20,000 in stocks, in addition to an annual royalty equal to sixteen percent of the net profits of all companies founded.⁴³

To the Iranian Government, the practice of granting concessions was an economic tool to overcome the chronic deficit and supplement tax revenues.⁴⁴ Concessionary projects also created an opportunity to extend the government's influence in the outlying provinces.⁴⁵ Besides strengthening the British imperial domination, concessionary projects were designed to establish and maintain control over natural environment and local populations. Imperial powers and state-builders alike conceived of systematic production and accumulation of knowledge about natural environment and local communities as a precursor to the control of the political environment.⁴⁶

The selection of Abadan Island as the ultimate site for construction of an oil refinery in southwest Iran exemplifies the collaboration of science and imperial knowledge to

⁴³ Fuad Rouhani, "William Knox D'Arcy", *Encyclopedia Iranica*, 1994.
<http://www.iranicaonline.org/articles/darcy-william-knox>.

⁴⁴ Faced with empty treasury, the Qajar shahs had no choice but to seek foreign investment for the development of resources and expansion of state-building efforts. The practice of granting concessions to select European financiers began in the rein of Nasir-al-Din King (1848-1898). To read more on the concessions awarded under Nasir-al-Din and what came of them, see Nikkie Keddie and Yann Richard, *Modern Iran: Roots and Results of Revolution* (Yale University Press, 2006), pp.54-62

⁴⁵ The Anglo-Iranian telegraph concession of 1863, one of the first modern imperial projects in the region, fulfilled the British Empire's prime objective through completion of the last segment of the Indo-European telegraph line. It also helped strengthen the connection between the southwestern frontier and the Qajar Capital in Tehran. Soli Shahvar. "Iron Poles, Wooden Poles: The Electric Telegraph and the Ottoman-Iranian Boundary Conflict, 1863-1865." *British Journal of Middle Eastern Studies* 34, no. 1 (2007): 23-42. Similarly, the Karun River concession in 1888 reinforced the presence of the Iranian government in Khuzestan. In the wake of the opening of the Karun River to international trade the Iran Government appointed in 1889 a representative, known as *karguzar*, at Khuzestan to enforce the Karun Navigations Regulations. *Karguzar*, or Foreign Office Agent, was also charged with the conduct of all public business related to foreigners, dealing directly with Tehran and not subject to the control of any local authority. This agency had already existed at Bushire and had some tensions with the British Resident. John Gordon Lorimer, *Gazetteer of the Persian Gulf. Vol I. Historical. Part II*, p.1678

⁴⁶ Toby Craig Jones, *Desert Kingdom: How Oil and Water Forged Modern Saudi Arabia* (Harvard University Press, 2010), p.33

dominate and remake nature and nomadic pastoral societies in Khuzestan. The following chapter suggests that the oil enterprise utilized the corpus of knowledge on southwest Iran compiled by diplomatic and military agents of the British Empire to identify and evaluate alternative sites for the refining center. The imperial intelligence also shaped the ways in which the oilmen manufactured, imagined, viewed, and used the natural environment and people. The geographical and ethnographic information in conjunction with the scientific and technical expertise pertaining to refining and production of oil helped establish a new outpost on the global oil frontier. The imperial knowledge of Khuzestan Province was the product of numerous reconnaissance and exploration missions conducted by British diplomatic agents and military officers in south Iran and in the Persian Gulf. This body of data took on various forms, such as maps, ethnographies, encyclopedic gazetteers, annual and military reports, etc. The oil enterprise, as a wing of British imperialism, reciprocated the favor within a couple of years. During WWI, for instance, the oil Company provided the India Office with the maps and the “extensive knowledge” about the region that the Company had accumulated during its activity in Khuzestan.⁴⁷

⁴⁷ D. Garrow to Lieutenant General Herbert Cox, May 23rd, 1918. “T Wynne (India Office)”, BP Archives, ArcRef 68731, p.41

2.2 In Search of Land for Refinery: Potential Locations on the Iranian Littoral

On June 7th, 1908, only two weeks after the discovery of oil at Masjid-i-Sulaiman,⁴⁸ George Reynolds, the main geologist and the general manager of the Oil Concessions Syndicate,⁴⁹ informed Captain Lorimer, the British Consul at Ahwaz, of the Syndicate's plan for acquisition of a piece of land in Southwest Iran to serve as a potential terminus for a pipeline which was to be laid from the oil wells to the head of the Persian Gulf.⁵⁰ This correspondence was part of the routine communication between an official of the Oil Syndicate and a British consular officer in Khuzestan. Since the beginning of operations in 1903 in the West of Iran, the oil enterprise always enjoyed the good offices of the British consuls in the region in particular when there was a need to cut a deal or make agreements with local chieftains. This particular correspondence, however, suggests that while the search for oil was underway in southern foothills of the Zagros Mountains, the question of the location of a seaboard loading or refining installation was under consideration by the syndicate management in Glasgow. Such speculations gained momentum soon after oil

⁴⁸ Oil was struck in commercial quantities on May 26, 1908, at Masjid-i-Sulaiman (Solomon's Temple), also known as Midan-i-Naphtun (Valley of Oil), in southern foothills of the Zagros Mountains in Southwest Iran. Ronald W. Ferrier, *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982), p.86; To read more on the discovery of oil in Masjid-i-Sulaim, See Arnold Wilson, *S. W. Persia: Letters and Diary of a Young Political Officer, 1907-14* (London, 1941)

⁴⁹ Soon after D'Arcy established the First Exploitation Company in 1903, drilling began near Qasr-i-Shirin in West of Iran. Overwhelmed with the exuberant expenses of operations, D'Arcy began contemplating selling the concession. The British Admiralty's interest in the fuel oil supply facilitated the commercial connection between the Glasgow-based Burmah Oil Company and D'Arcy, which resulted in the formation of Oil Concessions Ltd. in 1905. Oil Concessions Syndicate was liquidated in 1909 when the Anglo-Persian Oil Company was floated. Ronald W. Ferrier, *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982), pp.53, 70, and 72

⁵⁰ Captain Lorimer to Major Cox, 8th July 1908, File 1421/1908 Pt 1 "Persia: oil; D'Arcy Oil Syndicate" [249r] (19/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*

was struck in marketable quantities in May 1908 and the need for its transport to the high seas became a business imperative.

At first, a scheme was proposed to build reservoirs in Iran, somewhere near the head of the Persian Gulf, and put up a refinery either in India or in Britain. The port cities of Bombay (present-day Mumbai) and Karachi on the western coast of the Indian subcontinent were regarded as potential locations for a refinery. Bombay and Karachi were more favorable than Southwest Iran because they were located within the British dominion. To some British agents, Iran was viewed as a foreign sovereignty with potential hostility to British interests.⁵¹ Also, within British political and commercial circles, Iran was portrayed as a disturbed country with no efficient administration.⁵² Karachi was deemed desirable due to availability of cheaper labor and sound industrial infrastructure. The advantage of Karachi over Bombay was its proximity to the profitable markets of Northern India. These early schemes proved uneconomical for several reasons. The Government of India had levied a duty tax on import of crude oil to India to protect the Burmah Oil Company—then the only British oil firm— against other global suppliers of petroleum, in particular Standard Oil Company, in the Indian market. Moreover, transportation of crude oil from the head of the Persian Gulf to the Indian subcontinent was costly. Finally, the Oil Syndicate as an infant industry had not yet built enough credit to secure the government bonds required for building a refinery in India.⁵³

⁵¹ A. T. Wilson to Major P. Cox, 14th May 1909, File 1421/1908 Pt 4 'Persia: oil; Anglo-Persian Oil Co and Bakhtiaris' [211r] (279/292), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/2, in *Qatar Digital Library*

⁵² Oil News, "The Persian Deal: Production and Refining Figures," June 6, 1914. P.2

⁵³ George Reynolds to The Concessions Syndicate Ltd., 17th April 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.256

For practical reasons, the syndicate management began to search for potential sites within the Iranian territory. Archival records suggest that at least three areas at the northern head of the Persian Gulf were selected as potential “export bases” for *Persian oil*. These areas are illustrated in Figure 2.2. As I will discuss in what follows, in the process of identification of the three locations, the oil enterprise drew on the imperial intelligence about Southwest Iran, consciously aligned its interests with the British Government, and contributed to the fulfillment of the British imperial objectives in the region.⁵⁴



Figure 2.1 Approximate demarcation of Khuzestan Province in the early twentieth century.

Source: *Skeleton Map of Persia, May 1913 [9r] (2/4)*, British Library: India Office Records and Private Papers, IOR/L/PS/10/379, f 9, in Qatar Digital Library

⁵⁴ There are numerous examples of the conscious alignment of the Company’s policies with the British political interests in the region. The appointment by the Foreign Office of the Company’s agent at Kasr-i-Shirin, a border town to the northwest of Abadan, as the unpaid vice-consul is an exemplar of the overlap of interests between the two parties. For read the full account of this story, see File 1421/1908 Pt 4 'Persia: oil; Anglo-Persian Oil Co and Bakhtiari' [105r] (67/292), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/2, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100030500367.0x000013> [accessed 22 October 2018]

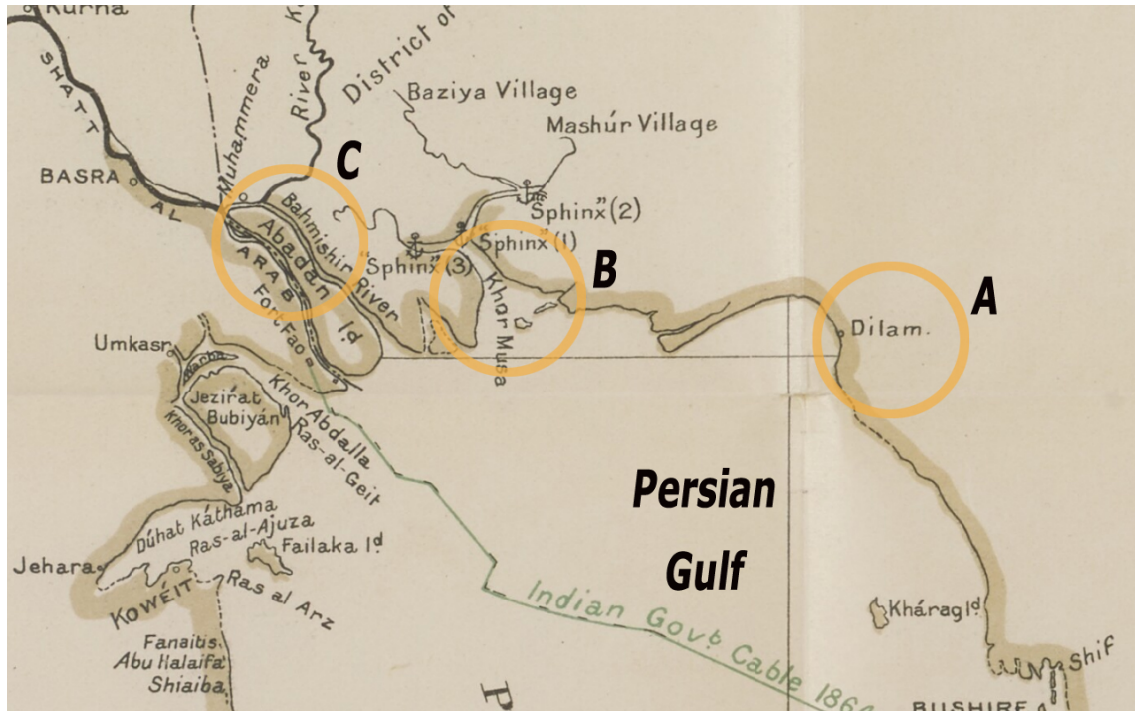


Figure 2.2 Three potential locations on the Persian Gulf proposed for the refinery. A) Bandar Dilam, B) Khor Musa, C) Khorramshahr District.

Source: "GENERAL OUTLINE MAP OF THE PERSIAN GULF", 1903. British Library: India Office Records and Private Papers, IOR/L/PS/20/64, f 55, in Qatar Digital Library

2.2.1 Bandar Dilam

One of the potential areas pinpointed for building a refinery was Bandar Dilam, a small port of the wheat-growing district of Behbahan (Circle A in Figure 2.2). It was some eighty five miles northwest of the port town of Bushire and around a similar distance east of the mouth of the Shatt-al-Arab.⁵⁵ Located in the administrative province of the Gulf Ports, Bandar Dilam offered the shortest caravan route from the Persian Gulf to Isfahan and other destinations in the Iranian plateau.⁵⁶ It used to be a thriving trading port in the eighteenth century which had gradually lost its historical prominence in the nineteenth and early twentieth centuries. One of the main merits of Bandar Dilam was its navigability. It was

⁵⁵ For more information on Bandar Dilam and its surroundings, see John Gordon Lorimer, *The Gazetteer of the Persian Gulf, Vol. II, Geographical and Statistical* (Calcutta: India Office Press, 1908), p. 458-60

⁵⁶ The Living Age, "Isfahan to Bushire" (1889), 5(182), p.412

the first point on the constantly changing sand banks of the Persian littoral to the east of the mouth of the Shatt-al-Arab River to be navigable by large vessels.⁵⁷ However, its anchorage was located three miles off shore.⁵⁸ This would have posed practical challenges to landing of heavy machinery and pipeline material as well as loading of petroleum products. Moreover, Bandar Dilam was connected to the Indo-European telegraph network.⁵⁹ Large tracts of state-owned land were available for acquisition. Per Article 3 of the D'Arcy Oil Concession, the concessionaire was entitled to uncultivated state land free of charge to use for production of oil. A hypothetical trajectory of pipeline between the oil wells and Bandar Dilam would traverse the *oil belt*⁶⁰ in South Iran covered by the Oil Concession. The pipeline would also pass through the area known for its natural oil springs which could make it easy for future exploratory operations. However, Bandar Dilam was surrounded by swampy tracts of land which were regarded as a technical impediment to pipe-laying work. Moreover, due to the lack of enough intelligence, the security and maintenance of the oil infrastructure in certain southern precincts were not guaranteed.⁶¹

To make a sound assessment of the potentialities of the area, the Oil Syndicate solicited assistance from the British Government. With a view to collecting first-hand information and surveying the region in terms of the requirements of the Syndicate, Lieutenant Arnold T. Wilson, the British military officer commanding the Ahwaz Oil

⁵⁷ 'Military Report on S. W. Persia, Volume II, Arabistan' [8r] (20/96), British Library: India Office Records and Private Papers, IOR/L/MIL/17/15/10/2, in *Qatar Digital Library*. p.5

⁵⁸ John Gordon Lorimer, p.458

⁵⁹ 'Persian Gulf and Gulf of Oman: Resources and Coast Defenses.' [43] (49/114), British Library: India Office Records and Private Papers, IOR/L/PS/20/C74, in *Qatar Digital Library*, p.43

⁶⁰ The "oil belt" was a thirty-to fifty-mile-wide region extending for 350 miles from Kermanshah in a south-westerly direction to Bushire.

⁶¹ George Reynolds to The Concessions Syndicate Ltd., 17th April 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.256

Guards,⁶² was dispatched to the neighborhood.⁶³ The data collected by Lieutenant Wilson during his field visit helped the Oil Syndicate arrive at a better understanding of the environmental and social characteristics of Bandar Dilam. Lieutenant Wilson was later commissioned to expand his survey throughout the southern districts of Khuzestan and develop intimate relations with local tribal leaders. He also prepared maps, reports, and confidential memoranda about the region's geography, tribal societies, economy, and politics. Not only did such geographic, military, and political undertakings serve the interests of the British government to control nature and nomadic tribal communities, they benefited the oil company, as well. The only existing map of the region in 1909 was one of the products of the British Officer's exploratory endeavors.⁶⁴

2.2.2 Khor (Hor) Musa

A second location proposed for oil tankage and refinery was Khor (Hor) Musa,⁶⁵ a deep channel in the mudflats at the head of the Persian Gulf some sixty miles to the west of Bandar Dilam (Circle B in Figure 2.2).⁶⁶ Located in the southern section of Khuzestan Province, the inlet was comprised of two main branches. As Figure 2.2 illustrates, the eastern channel would extend for seventeen miles then divide into two smaller khors, each

⁶² In 1908, the Government of India decided to deploy a body of Indian *sowars* near Ahwaz for the protection of the operations of the Oil Syndicate at Maidan-i-Naftun. Lieutenant Arnold Wilson was appointed officer in charge of that military unit. For more information, see *Annual Persia Report, 1909*. FO 416/111 (10261774), p. 32

⁶³ Captain Lorimer to Major Cox, 8th July 1908, File 1421/1908 Pt 1 "Persia: oil; D'Arcy Oil Syndicate" [249r] (19/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*

⁶⁴ A. T. Wilson to Major P. Cox, 8th January 1910, File 1421/1908 Pt 2 'Persia: oil; Ahwaz oil guard' [10r] (19/482), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/2, in *Qatar Digital Library*

⁶⁵ In Persian language, Khor means an arm of the sea and Musa means Moses.

⁶⁶ Briton Cooper Busch, *Britain and the Persian Gulf, 1894-1914*, (University of California Press, 1967), p.42

leading to one village. The western branch, which was navigable by local boats, would extend inland for some fifty miles to a point close to the course of the Karun River.⁶⁷ Khor Musa had a navigable stream of twenty-five miles which provided ample room for large vessels on its banks. The only impediment to movement of oceangoing vessels and oil tankers was a shoal, one and a half miles in length, which carried only three fathoms (18 feet) of low water. Similar to Bandar Dilam, the land surrounding Khor Musa was quite marshy. This shortcoming coupled with the scarcity of fresh water supplies, an important requirement for the refining of oil, presented technical and engineering challenges.⁶⁸ Despite its functional merits — i.e. shipping advantages and good pipeline connections to the oil fields— inland transport from the Khor to the oil wells seemed complicated and costly.⁶⁹

The selection of Khor Musa as a potential location for the prospective refinery is also indicative of the Oil Syndicate's attempt to link the oil infrastructure and the new oil frontier with the British imperial interests in the region. Khor Musa rose to prominence in the early twentieth century when it turned into a key element of the British defense scheme against Russia's expansionist policy towards the warm waters of the Persian Gulf— which, as mentioned earlier, the British Empire was trying to keep exclusively as the “British Lake.”⁷⁰ In 1904 when the Karun Irrigation Scheme was under consideration in Tehran,

⁶⁷ 'Persian Gulf and Gulf of Oman: Resources and Coast Defenses.' [43] (49/114), British Library: India Office Records and Private Papers, IOR/L/PS/20/C74, in *Qatar Digital Library*. p. 43

⁶⁸ 'Persia. Annual Reports, 1932-' [210r] (419/644), British Library: India Office Records and Private Papers, IOR/L/PS/12/3472A, in *Qatar Digital Library*
<https://www.qdl.qa/archive/81055/vdc_100056661168.0x000014> [accessed 22 October 2018]

⁶⁹ Laurence Lockhart, *Memo*, 12th June 1927, BP Archives, ArcRef 71439, “Abadan Refinery, Historical Notes”

⁷⁰ In 1903 the British naval forces of the Persian Gulf Division reconnoitered different sections of the Persian Gulf and pinpointed Khor Musa as a strategic location capable of accommodation of a defensible naval station. To read more on this, see 'Persian Gulf and Gulf of Oman: Resources and Coast Defenses.'

which threatened the hegemony of the British Empire in the region, Lord Curzon, then the Viceroy of India, suggested that Khor Musa should be opened up for navigation to the plains of Khuzestan as a compensation for any British commercial loss in the Karun area.⁷¹ The Khor took on new significance in 1906 when it was considered a potential terminus for different railroad projects envisioned by the competing imperial interests. For instance, the Khor was regarded as an alternative station at the head of the Persian Gulf for a German imperial artery, the Baghdad Railway.⁷² In response to this scheme, the Persian Railway Syndicate,⁷³ a British firm, in 1911 developed a plan to build a railroad between Khorramshahr and Khor Musa, as part of a larger trans-Iranian railway project.⁷⁴

None of these imperial projects had materialized in 1908 when the Oil Syndicate began to examine the potentialities of the channel. However, there is no doubt that the management was fully aware of the strategic, commercial, and military significance of the Khor for the British imperial policy in the region. In 1912, the British Government formally

[43] (49/114), British Library: India Office Records and Private Papers, IOR/L/PS/20/C74, in *Qatar Digital Library*. p. 43

⁷¹ A. T. Wilson, 'A précis of the Relations of the British Government with the Tribes and Shaikhs of Arabistan'. [63] (77/134), British Library: India Office Records and Private Papers, IOR/L/PS/20/E96, in *Qatar Digital Library*. p.63

⁷² Prior to the Anglo-Russian agreement of 1907, Tsarist Russia's imperial ambition to reach the warm waters of the Gulf was regarded by Britain as a constant threat to her imperial presence in the region. In the early twentieth century, however, it was Germany that was actively seeking access to the Gulf. British officials became so agitated on learning that the Germans had planned to extend the Berlin-Baghdad railway to the head of the Persian Gulf. British officials believed that commercial activities were a precursor to political hegemony in the region. This mindset explains the degree of anxiety that the commercial presence of Germany provoked in both London and Calcutta. Interdepartmental committees were shaped to examine the potential termini for the proposed Baghdad railway at the head of the Gulf. For more on this see 'Report (with Maps) on the country adjacent to the Khor Abdullah, and places suitable as Termini of proposed Bagdad Railway, by Captain E W S Mahon, RE July 1905' [13r] (1/10), British Library: India Office Records and Private Papers, IOR/L/PS/18/B165, in *Qatar Digital Library*

⁷³ Persian Railway Syndicate was formed in 1911. It was comprised of British commercial interests trading in the Persian Gulf including British Indian Steam Navigation Company, Sir John Ellerman, Mr. Frank C. Strick, Anglo-Persian Oil Company, Ltd., Imperial Bank of Persia, S. Pearson and Sons, Ltd., and Lynch Bros., Ltd. C. Greenway to Foreign Office, 24th April 1919, BP Archives, ArcRef 71402, p.483

⁷⁴ A. T. Wilson, "Khor Musa and Bandar Shapur," *Journal of The Royal Central Asian Society*, 16:4, (1929) p. 510-513

2.2.3 Khorramshahr (Mohammerah) District

A third alternative was the Khorramshahr district in Southern Khuzestan (circle C in Figure 2.2). Khorramshahr (then called Mohammerah or Muhammareh), located at the junction of the Shatt-al-Arab and the Karun River (See Figure 2.3), was a desirable location for a refinery since it possessed all the characteristics that the oilmen were seeking. It was a well-connected port town in Southwest Iran and second only to Basra in trade in the Shatt-al-Arab region.⁷⁷ By various accounts, Khorramshahr along with Bushire and Basra were the principal ports on the Persian Gulf through which trade would enter Iran.⁷⁸ Khorramshahr was navigable by large vessels and was connected to the Indo-European telegraph line. Post and telegraph services were also available. Abundant supplies of fresh water could be obtained from the adjoining rivers. Khorramshahr grew in size and importance in light of the opening up of the Karun to international trade in 1888. Gradually, merchants from Khuzestan's major cities – Shushtar and Dizful– and European businesses opened offices in Khorramshahr.⁷⁹ The population of the town also increased from 3000 in

⁷⁷ Khorramshahr was originally founded in 1812 by the head of the Muhaisin tribe as a military outpost against the Turks or the Arab tribes under Turkish influence. The town stood originally on both sides of the Karun River. The establishment of the city also signified the gradual rise of the Muhaisin tribe vis-à-vis the rival tribe, the Ka'ab, which was historically the dominant political power in southern Arabistan. The Sheikh of Muhaisin eventually supplanted the chief of the Ka'ab. The town was eventually divided around 1819 into two parts with the Sheikh of Muhaisin controlling the part situated on the northern bank of the river and the chieftain of the Ka'ab tightening its hold over the part located on the southern bank. It was the northern part that eventually thrived from a petty fort into a commercial depot of considerable importance and attracted general attention. The southern segment evolved into a big village that came to be known as Kut-ash-Sheikh, or Ka'ab Sheikh's castle. See John Gordon Lorimer, *Gazetteer of the Persian Gulf. Vol I. Historical. Part II* (Calcutta: India Office Press, 1915), pp.1648-9

⁷⁸ Basrah was on the trade route to Iran through the Tigris river to Baghdad and then via Kermanshah. Bushire was the principal seaport of Southern Persia. It was situated on the northeast coast of the Persian Gulf. In 1908, it had a population of about 30,000. John Green. *Dues and Charges on Shipping in Foreign Ports: A Manual of Reference for the Use of Shipowners, Shipbrokers, and Shipmasters* (George Philip & son, Limited, 1908), p.958

⁷⁹ The presence of an Indian Post Office facilitated the remission of money to Bombay which ranged weekly between Rs 5000 and 20000. 'Military Report on S. W. Persia, Volume II, Arabistan' [11r] (26/96), British Library: India Office Records and Private Papers, IOR/L/MIL/17/15/10/2, in *Qatar Digital Library*

1882 to around 10,000 in 1908.⁸⁰ A few miles above the town was the headquarters of the local Arab chieftain (Sheikh Khaz'al Khan, also known as Sheikh of Khorramshahr), who was the *de facto* ruler of Southern Khuzestan and on good terms with the British Empire.⁸¹ Iranian Government agencies, such as the Customs and *Karguzari* (Foreign Office Agency), also operated in Khorramshahr.

Like Khor Musa, Khorramshahr had occupied a strategic position in the British imperial policy towards Southwest Iran. In the late nineteenth century Khorramshahr was viewed as a port town with potential to turn into the emporium of trade between Armenia, Arabia, Iran, and India.⁸² In the early twentieth century, the district of Khorramshahr was characterized as a *de facto* British protectorate and a dependency of England like Hyderabad, Egypt and Tibet.⁸³ Before the Great War, the Government of India was considering making use of Khorramshahr as a potential “naval station” for the British Empire in the Persian Gulf.⁸⁴ A British consulate was operating in the town, one of the two

⁸⁰ Shahbaz Shahnavaz, 2005, p.122

⁸¹ Since 1897 Sheikh Khaz'al Khan, the head of the Muhaisin tribe, became the Sheikh of Muhammareh and the actual ruler of Southern Arabistan. With the implied, if not expressed, consent of the elders of various tribes, Sheikh Khaz'al was also the chieftain of the majority of Arab tribes in the region. He had an amicable relationship with the Qajar Government, and was awarded such titles as the Governor of the Shatt-al-Arab and Karun, and Sarhadd-dar [the Warden of the Marches]. Sheikh Khaz'al was also awarded by Qajar shahs such titles as *Sardar Arfa'* and Muizz-us-Saltaneh. John Gordon Lorimer, *The Gazetteer of the Persian Gulf*, p. 97. It should be noted that despite maintaining special relationships with the Sheikh, the British Government never viewed him at the same level as khedives, princes, and even the sheikhs of the Arabian littoral of the Persian Gulf. 'Historical Summary of Events in Territories of the Ottoman Empire, Persia and Arabia affecting the British Position in the Persian Gulf, 1907-1928' [19v] (45/188), British Library: India Office Records and Private Papers, IOR/R/15/1/730, in *Qatar Digital Library*; For a full account of the relationship of the British Government with Sheikh Khaz'al, see 'File 29/6 British Relations with Khazal, Sheikh of Khorramshahr' [front] (1/28), British Library: India Office Records and Private Papers, IOR/R/15/2/1747, in *Qatar Digital Library*

⁸² 'Military Report on South-West Persia, Including the Provinces of Khuzistan (Arabistan), Luristan, and Part of Fars' [178] (175/466), British Library: Printed Collections, V 8685, in *Qatar Digital Library*

⁸³ Benoy Kumar Sarkar. "The Reshaping of the Middle East", *The Journal of Race Development* 9, no. 4 (1919), 342

⁸⁴ Report on Messrs Greenway and Hamilton's Visit to Persia, 28th April 1911, BP Archives, ArcRef 64689, p.5

British diplomatic offices in Khuzestan. On the eve of discovery of oil, Khorramshahr was home to the largest community of Europeans in the Persian Gulf, with several European firms, such as the Lynch Brothers and the Imperial Bank of Persia, having offices in town. Despite all the merits, no uncultivated land was available on the Khorramshahr foreshore. As Figure 2.3 shows, a continuous strip of date gardens and villages had occupied the banks of the Shatt and the Karun River between the Turco-Iranian border and the town.

2.3 Abadan Island

The failure to identify appropriate land with enough river frontage in Khorramshahr made the Oil Syndicate look for other potential sites in the district. Eyes turned to a mudflat island across the Karun River from Khorramshahr. The alluvial Island of '*Abadan*,⁸⁵ locally known as *Jazirat-al-Khidhar* (Khidhr Island),⁸⁶ had all the prime advantages of a refining center. It was located some 138 miles to the southwest of the oil fields area and lay in a south-easterly direction on the border of Qajar Iran and Turkish Arabia— Present-day Iraq— which in 1908 was part of the Ottoman Empire.⁸⁷ As the schematic map in

⁸⁵ In British correspondence, "Abadan" gradually replaced "Abbadan." Eventually, in 1924 the Permanent Committee on Geographical Names officially adopted the former transliteration format. H.E. Nichols to W. C. F. Fairley, June 27th, 1924. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.857

⁸⁶ The latter originated from a saint whose mausoleum was located near the center of the island. The shrine of Khidhar or Khezr, shown as "Tomb" in Figure 2.4, was a little nearer to the north than to the south end of the island, around two miles from the Shatt-al Arab River and 1 mile from the Bahmanshir River.

⁸⁷ The western bank of the island was a tentative frontier between Iran and the Ottoman Empire. The border was drawn in 1850 by the Anglo-Russian Mediating Commission which in the wake of the Erzurum Treaty of 1847 strove to settle the long-lasting territorial disputes between the two neighboring states. Under the terms of the Erzurum Treaty, the Ottomans became the owner of the Shatt-al-Arab while Persia was awarded this strategic island and her subjects could enjoy the right of navigation on the Shatt from its mouth upstream to a point two miles north of the confluence of the Shatt and the Karun where the frontier would run inland. The exact demarcation of the Turco-Persian frontier remained a matter of contestation throughout the twentieth century. It was fixed in 1913-1914 and amended in 1937. Negotiations over the border dispute continued into the 20th century even after the collapse of the Ottoman Empire and the establishment of the British mandate in Iraq. The boundary dispute, particularly

Figure 2.4 illustrates, Abadan was surrounded by the region's major transportation routes: the Karun River on the north, the Shatt-al-Arab on the west, and the Bahmanshir (also known as Bahmishir) River on its east. The Persian Gulf marked the Island's southern edge.⁸⁸ Therefore, it was possible to transport petroleum products from Abadan to the inland markets in Iran and the Asiatic Turkey *via* the adjoining rivers, and to the regional and global markets *via* the Persian Gulf.⁸⁹

the disagreements over the maritime rights to the Shatt-al-Arab, marked the history of relations between the two neighboring countries in the following decades which culminated in the Iraq-Iran war of 1980. To read more on the border dispute, see Alexander Melamid, "The Shatt al-'Arab Boundary Dispute," *Middle East Journal*, Vol. 22, No. 3 (Summer, 1968), pp. 350-357; Kaiyan Homi Kaikobad, *The Shatt-al-Arab Boundary Question: A Legal Reappraisal* (Clarendon Press, 1988). Turco-Persian frontier is the topic of numerous archival records at both the British National Archive and the India Office Records. For instance, see "Memorandum respecting the frontier between Mohammerah and Turkey," 1912. British Library: India Office Records and Private Papers, IOR/L/PS/18/B380, in *Qatar Digital Library*; Also see File 1356/1912 Pt 1 'Turco-Persian Frontier: negotiations at Constantinople.' [122r] (253/885), British Library: India Office Records and Private Papers, IOR/L/PS/10/266, in *Qatar Digital Library*. For a map that shows the changes in the frontier, see 'The Shatt al-arab portion of the Perso-Iraqi frontier as fixed in 1913-14 and amended in 1937' [12r] (2/4), British Library: India Office Records and Private Papers, IOR/L/PS/12/1201, f 12, in *Qatar Digital Library* <https://www.qdl.qa/get-highlighted-words/81055/vdc_100059806291.0x00001b> [accessed 25 October 2018]

⁸⁸ John Gordon Lorimer, *The Gazetteer of the Persian Gulf, Vol. II, Geographical and Statistical* (Calcutta: India Office Press, 1908), p. 1.

⁸⁹ Prospectus of the Anglo-Persian Oil Company. 19 April 1909. File 1421/1908 Pt 4 'Persia: oil; Anglo-Persian Oil Co and Bakhtiaris' [214v] (286/292), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/2, in *Qatar Digital Library*

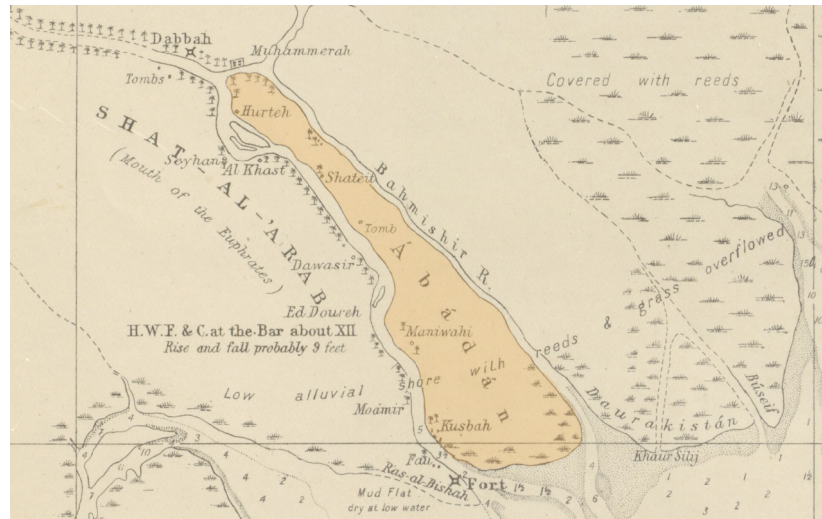


Figure 2.4 Schematic map of Abadan Island, 1897.

Source: *THE SHAT-AL-'ARAB* [123r] (1/2), British Library: India Office Records and Private Papers, IOR/L/PS/10/266, f 123, in *Qatar Digital Library*

2.3.1 Abadan's Environment and Society on the Eve of Oil Development

Abadan was located in the delta of the lowland portion of the basin of the ancient Asiatic rivers—the Euphrates, Tigris, and Karun— where the great Mesopotamian plain met the Persian Gulf.⁹⁰ Geo-historical accounts suggest that the island was originally a spit separating the waters of the Karun and the Bahmanshir from those of the Tigris. The continuous deposit of silt by the rivers on the shallow floor of the upper portion of the Persian Gulf gradually extended this spit south-eastwards. Simultaneously, the land on the west bank of the Tigris was thrust forward in the same direction causing the Euphrates to join the Tigris and form the Shatt-al-Arab. After the first settlements began to emerge on the island around the eighth century a channel known as Haffar (digger) was dredged at its

⁹⁰ 'Field Notes on Lower Mesopotamia' [9r] (24/112), British Library: India Office Records and Private Papers, IOR/L/MIL/17/15/48, in *Qatar Digital Library*, p.3

north-western corner, connecting the Shatt-al-Arab with the Karun — as a result of this process the spit turned into an island.⁹¹

The northern part of the island was one of the nearest points to the oil fields where deep water made it possible for ocean-going tankers to cruise the Shatt-al-Arab.⁹² The only impediment to navigation was the infamous bar at the mouth of the Shatt in the Persian Gulf that blocked the passage of steamers drawing over eighteen feet. Such ships upon arrival had to lighten part of their cargo outside the bar and reload after passing the bar. However, there existed two prevailing gales in the locality causing variation not only in the temperature, but also in the Shatt's water level. “Shamal,” a north-westerly wind, would blow the water out, while the southerly wind would drive it into the Shatt. The latter wind would even enable steamers up to twenty-two feet to pass the bar and navigate the Shatt.⁹³

Although the island contained large tracts of uncultivated land with broad frontage to the adjoining rivers, it was not a desolate “Desert Island,” as a historian of the Anglo-Persian Oil Company characterized it.⁹⁴ Such a distorted account of Abadan’s natural environment, which perfectly fit into the discourse of “civilizing mission” propagated by the Company and the agents of the British Empire, represents a conscious attempt on the part of the Company to reconstruct the natural environment of Abadan prior to oil

⁹¹ Laurence Lockhart, *Persian Cities* (London: Luzac, 1960), pp. 165-166

⁹² The Naft, 7 (July 1931), p.14

⁹³ Andrew Campbell to James Hamilton, 27th Novemebr 1908, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [361v] (288/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

⁹⁴ Henry Longhurst, *Adventure in Oil* (London: Sidgwick and Jackson, 1959), p.44. Also, see John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.145

development. Archival documents suggest that at the turn of the twentieth century the date industry was booming on the Island with more areas coming under cultivation each year.⁹⁵

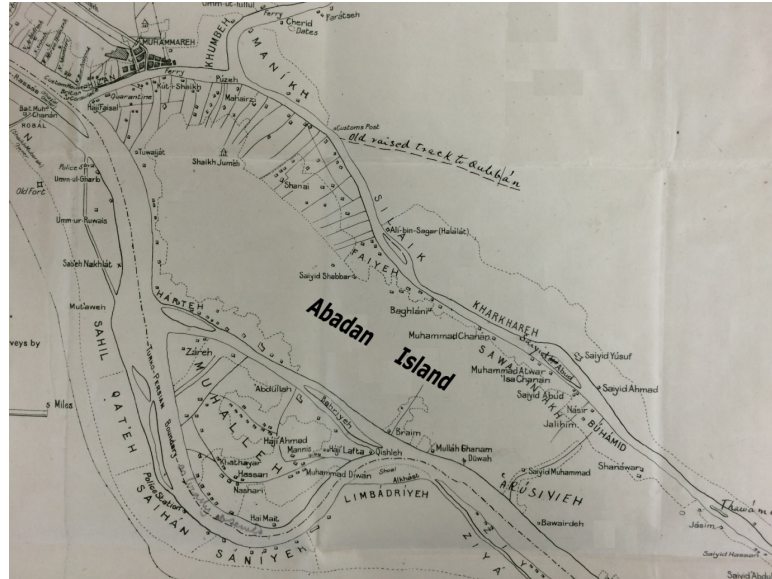


Figure 2.5 Settlement layout and patterns of date plantations in the northern section of Abadan Island, 1909. Dashed lines represent the boundaries of the existing date gardens.
Source: British National Archives FO 925/41221

On the eve of discovery of oil, Abadan Island, as shows in the maps prepared by British diplomatic agents in the region, was fringed with stretches of date palm plantations. At least 55 agricultural settlements and villages were recorded to have existed on the island.⁹⁶ Abadan was part of the date-producing region, known as palm belt, which stretched along both banks of the Shatt-al-Arab and its main distributaries. Date was the

⁹⁵ Andrew Campbell to James Hamilton, 27th November 1908, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [362r] (289/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*. With a view to enhancing the island's agricultural production an "irrigation scheme" was under consideration which aimed to encourage foreign investment and introduce novel irrigation techniques such as centrifugal pumps. Arnold T Wilson, Report on Abadan Island, 23rd March 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow," p.202

⁹⁶ For a complete list of the villages on the island, see John Gordon Lorimer, *The Gazetteer of the Persian Gulf, Vol. II, Geographical and Statistical* (Calcutta: India Office Press, 1908), pp. 4-7

main article of export and food staple in the region. Date cultivation was also a major agricultural activity in the Persian Gulf region.⁹⁷ The edge of the island on all sides was intersected by numerous creeks which were used as the principal means of irrigation as well as a mechanism of tidal control. While the center of the island was mostly uncultivated, the margins adjoining the rivers were covered with palm dates. Depending on the quality of soil and depth of water currents, the extent of cultivation and the density of gardens varied across the island.⁹⁸ As Figure 2.5 shows, continuous stretches of plantations with varying depths marked the Bahmanshir bank of the Island. On the Shatt-al-Arab bank, however, date groves were in patches — though date planting was in progress.⁹⁹

Based on the existing historical documents, we can estimate that in 1908-1909 Abadan Island had a floating population between 12,000 and 24,000.¹⁰⁰ The fluctuation of population could be attributed to several factors, such as the movement of nomadic communities and the seasonal nature of date agriculture, among others.¹⁰¹ The majority of

⁹⁷ For more information on date production and date trade in the Persian Gulf region, See J G Lorimer, "Appendix D" in *Gazetteer of the Persian Gulf. Vol I. Historical. Part II.1915. [2294] (811/1262)*, British Library: India Office Records and Private Papers, IOR/L/PS/20/C91/2, in *Qatar Digital Library*

⁹⁸ Andrew Campbell noted that "where adjoining channels were deepest there were no villages or cultivation."

⁹⁹ Arnold T Wilson, *Report on Abadan Island*, 23rd March 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.202

¹⁰⁰ John Gordon Lorimer, *The Gazetteer of the Persian Gulf, Vol. II, Geographical and Statistical* (Calcutta: India Office Press, 1908), pp.7&160; Shanavaz, 2005, p.122

¹⁰¹ The British Gazetteer of the Persian Gulf suggests that in the 1900s the population of Abadan amounted to 24,000 souls. This figure is quite confusing given the fact that the total number of the "settled" inhabitants of the district of Khorramshahr, of which Abadan Island was a division, was estimated by various sources between 12,000 and 23,000 in 1908-1909. On the other hand, based on the aggregate of the population of village dwellers in Abadan provided by the Gazetteer one would arrive at the Figure 3.1,400 which might be the population of the settled communities. In other words, it is likely that the Gazetteer has not distinguished between the settled and the nomadic populations of the Island. According to the same source, nomadic inhabitants made up half the population of Southern Khuzestan. The large concentrations of nomads meant that the population of the region was shifting throughout the year. It is probable that the nomadic population of Abadan which accounted for half the inhabitants was moving from winter to summer to other districts of the province or even to the Turkish side of the Shatt.

inhabitants of Abadan, like other districts of Southern Khuzestan, were from the region's major Arab tribes, the *Muhaisin and the ka'ab*.¹⁰² In addition, small communities of Persians, Bahrainis, Africans, Baluchis, mixed Arabs and Idans (immigrants from the Ottoman side of the Shatt) resided on the island.¹⁰³

Abadan Island was a borough of the district of Khorramshahr, which was the seat of the semi-autonomous tribal administration of Southern Khuzestan. In general, tribal communities on the peripheries of major provincial cities and towns enjoyed a considerable degree of autonomy from the Qajar Government.¹⁰⁴ Abadan Island was administered under

It is also possible many were recruited from the neighboring villages to help out during the harvest seasons. Famines, epidemics, and political upheavals were also other causes that might be responsible for frequent changes in the population of Abadan.

¹⁰² John Gordon Lorimer, *The Gazetteer of the Persian Gulf, Vol. II, Geographical and Statistical* (Calcutta: India Office Press, 1908), p.160. Arabs of Khuzestan were distinct in ethnicity, language, dress, and customs from the so-called Ajami populations, the term used by local Arabs to call the neighboring Lurs, Bakhtiari, and other Persian-speaking communities of Northern Khuzestan. Persian and Arabic were concurrently spoken in Khuzestan. However, in the southern section of the province Arabic was the colloquial language which contained a certain proportion of Persian words, yet people were often unable to understand Persian which was more of the official language. 'Military Report on S. W. Persia, Volume II, Arabistan' [9v] (23/96), British Library: India Office Records and Private Papers, IOR/L/MIL/17/15/10/2, in *Qatar Digital Library*.

¹⁰³ John Gordon Lorimer, *The Gazetteer of the Persian Gulf, Vol. II, Geographical and Statistical* (Calcutta: India Office Press, 1908), p.7. Abadan reflected general social characteristics of Southern Khuzestan. Around ninety five percent of the populations in the southern division of the province were of Arab origin. Arabs of Khuzestan were a hybrid race with a considerable infusion of Persian blood. Perhaps owing to generations of contacts, Arabs of the region had more in common with their Persian countrymen than with Arab brothers of the Ottoman side of the Shatt. The most striking point was that the majority of Arabs of Khuzestan were followers of the Shiite sect of Islam—the faith of the majority of Iranians. However, the two major elements of the population, i.e. Arabs and Persians, did not always have an amicable relationship. (Shahbaz Shahnava, pp.122-3).

¹⁰⁴ For a critical study of the social, cultural and political life of Bakhtiari tribes in Qajar Iran see Arash Khazeni, *Tribes and Empire on the Margins of Nineteenth-Century Iran* (University of Washington Press, 2010). To understand the political structure of Khuzestan Province, we should take a close look at the ways in which Qajar shahs ruled Persia/Iran. In fact, Qajars' control outside their capital Tehran was minimal. Qajar's system of governance was predicated largely upon bargains with local leaders and balancing off different factions against one another. Unlike the Safavids, the Qajar government's intervention in the economy was only intended to prevent urban unrest—for instance, in case of acute shortages of major staples or when the price of commodities inflated too high. The Qajars also granted governorships and the rights to collect customs and mint coins to the highest bidders. James Gelvin, *Modern Middle East: A History* (Oxford University Press, 2011), P.81-82. To read more on the administrative history of Qajar era, see Ann K. S. Lambton, *Qajar Persia: Eleven Studies* (Tauris, 1987), See

a feudal system. It was divided into four executive units, of which the most populous village functioned as the headquarters for a local sheikh, or headman, acting as a representative of the Sheikh of Khorramshahr. Headmen of the villages were mostly Saiyids (descendants of Prophet Mohammed).¹⁰⁵

2.3.2 Alternative Sites

In spring 1908, Andrew Campbell, General Manager of the Burmah Oil Refinery near Rangoon, was dispatched to Khorramshahr to survey Abadan Island and choose an appropriate location for a refinery. Not only did Campbell thoroughly examine the island, he also drew extensively on the local information about the environmental characteristics of Abadan. Campbell also supplemented his analysis with the British intelligence material. For instance, he used the Admiralty map to evaluate the navigability of the rivers surrounding the island. Combining this information with the technical-functional requirements of a petroleum refining plant, Campbell identified two sites on the western shore of Abadan, which, he believed, were “excellent” locations for construction of a refinery (Sites A and B in Figure 2.6). Campbell also suggested that the land required for refinery should be larger than 500 acres with a river frontage of at least 1500 yards.¹⁰⁶ Despite offering water with less impurities and cooler temperature—the factors that played a major role in the refining process of the day¹⁰⁷—the Bahmanshir River, in Campbell’s

also Handbook Prepared under the Direction of the Historical section of the Foreign Office, *Persian Gulf* (London: H.M. Stationary Office, 1920), No.76, p.54

¹⁰⁵ Lorimer, p.1262

¹⁰⁶ Andrew Campbell to James Hamilton, 27th November 1908, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [362r] (289/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁰⁷ The Bahmanshir River was ten to twelve degrees cooler the Shatt in summer. G. B. Reynolds to Wallace, 4th February 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.73

view, was “too shallow and narrow for navigation.”¹⁰⁸ The undulating river was navigable by vessels of seven-foot draught for only thirty miles upstream from the Persian Gulf and then for the rest of its course was “clogged” by sandbanks which prohibited the movement of any craft larger than local “sea-going” boats.¹⁰⁹

Campbell's first pick, shown as Site A in Figure 2.6, was in the southern part of the island, right below the anchorage point, shown as “Chellabi Point” on the Admiralty Chart. Site A, as Campbell described it, was some twenty miles “inside the bar” at the mouth of the Shatt and fifteen miles above the Fao telegraph station. Campbell's second alternative, Site B in Figure 2.6, was located in the northern section of Abadan, twenty-nine miles above the Fao telegraph station and approximately eleven miles below Khorramshahr. Both sites were in “barren,” uncultivated areas where no major villages or date groves existed. Therefore, the question of compensation for the loss of date trees was eliminated. The proposed sites were also accessible by “safe draught,” eighteen-foot steamers. Owing to its proximity to the Persian Gulf and the Fao telegraph station, which meant good connectivity to London and India through the Indo-European Telegraph Line as well as easier maritime communication with India, Campbell favored Site A over Site B.¹¹⁰

¹⁰⁸ Andrew Campbell to James Hamilton, 27th November 1908, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [362r] (289/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁰⁹ Handbook of Mesopotamia. Vol. II. 1917' [11] (20/542), British Library: India Office Records and Private Papers, IOR/L/MIL/17/15/41/3, in *Qatar Digital Library*, Introduction. p.11

¹¹⁰ Andrew Campbell to James Hamilton, 27th November 1908, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [362r] (289/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

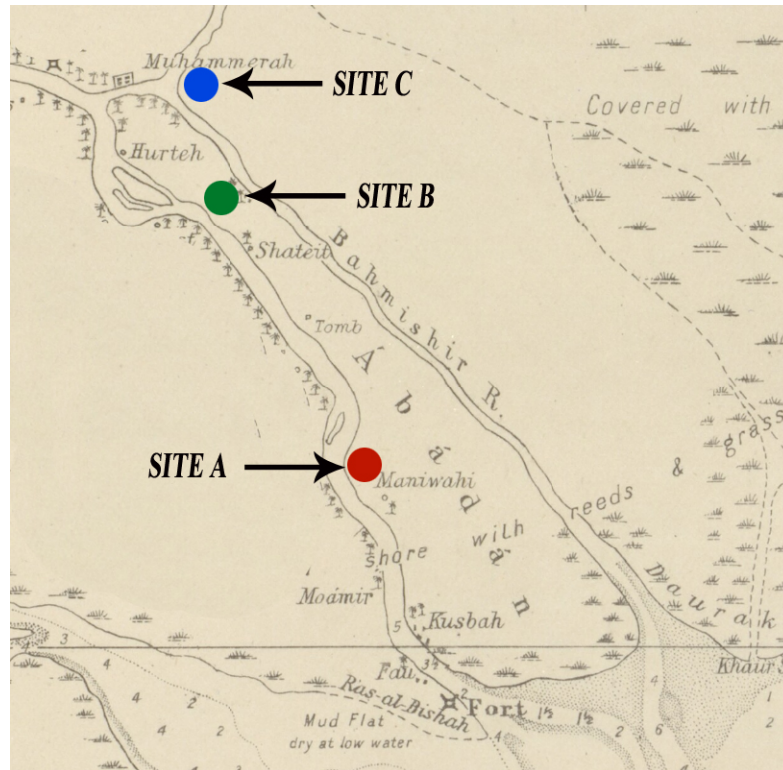


Figure 2.6 Three alternative sites proposed for the refinery.

Source: 'THE SHAT-AL-'ARAB' [123r] (1/2), British Library: India Office Records and Private Papers, IOR/L/PS/10/266, f123, in Qatar Digital Library)

The selection of the most advantageous site triggered a series of correspondence among Syndicate officials and British diplomatic and military agents. George Reynolds, the Syndicate General Manager, and Lieutenant Arnold Wilson, the British military officer, both with intimate knowledge of the locality, had good reasons to disagree with Campbell. They both dismissed the southern site on various grounds. Reynolds and Wilson maintained that the refinery should not be positioned far from Khorramshahr. Proximity to the commercial and political center of Southern Khuzestan, in their view, meant better security and easier access to services, amenities, and “daily requisites” for future employees.¹¹¹ Furthermore, the northern site, being eleven miles by river and seven miles

¹¹¹ George Reynolds to The Concessions Syndicate Ltd, 16th February 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.82

by land from Khorramshahr, provided a better communication with the newly established headquarters of Strick, Scott & Co., the Managing Agents of the Anglo-Persian Oil Company.¹¹² Reynolds believed that proximity to the Fao telegraph station, one of the merits of the southern site as cited by Campbell, would be of no use to the future refinery.¹¹³ This opinion was perhaps due to the requirements of the Ottoman Telegraph Regulations that prohibited transmission of coded messages at the Fao telegraph station.¹¹⁴

A set of empirical information collected by Lieutenant Arnold Wilson and other military officers rendered Site A unfit for a refinery. For instance, the sharp bend of the course of the Shatt-al-Arab near the southern site, coupled with strong water currents during flood seasons, was believed to endanger the safe berthing of ships.¹¹⁵ The southern site was also prone to frequent flooding. It was located below the area locally known as *Tingah* (strait) where the width of the island reduced to less than two miles. This part of Abadan was so low-lying that it was often up to one foot under water during high-tide months.¹¹⁶ Furthermore, owing to such factors as low elevation, proximity to the Persian Gulf, and frequent floods, the soil below the *Tingah* area, where the southern alternative site was located, was saline. The high amounts of salt in the soil was considered a negative

¹¹² Laurence Lockhart, "Memo," 12th June 1927, , *Abadan Refinery, Historical Notes*. BP Archives, ArcRef 71439. Strick, Scott & Co. served as the Anglo-Persian Oil Company's Managing Agency in Iran until January 1st, 1923, when T.L Jacks and Arnold Wilson replaced them. H. E. Nichols to Arnold T. Wilson., November 30th, 1922. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.456

¹¹³ George Reynolds to The Concessions Syndicate Ltd, 25th January 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.53

¹¹⁴ George Reynolds to the Concessions Syndicate Ltd, 8th April 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.241

¹¹⁵ Laurence Lockhart, *Memo*, 12th June 1927, BP Archives, ArcRef 71439, "Abadan Refinery, Historical Notes"

¹¹⁶ High tides reached 10 feet in spring between May and October.

factor for construction and foundation work.¹¹⁷ In contrast, the northern site was more elevated and less likely than the southern site to be flooded. Moreover, Abadan was less than two miles wide at the northern site which made it possible to access the Bahmanshir River as the potential source of water supply.

The two alternative sites offered contrasting scenarios for the trajectory of a pipeline. If a refinery were to be erected on Site A, a hypothetical pipeline, laid in a direct line from the oil wells, needed to traverse impassable marshes and floodplains of Southern Khuzestan. While the pipeline had to pass five natural obstacles to approach Site A, there was only one major barrier, the Bahmanshir River, to reach Site B.¹¹⁸ Moreover, placing the refinery in close proximity to the Karun River, the major transportation route in Southwest Iran in 1908 and, undoubtedly, the most economical path to carry pipeline material from the head of the Persian Gulf to the oil fields, meant economizing on construction and patrol of the pipeline. In other words, the farther the location of the refinery from the Karun River, the higher the costs of transport of material and laying the pipeline. The same economic logic guided the path of the pipeline when it was actually built in 1911. As Figure 2.7 illustrates, the trajectory of the pipeline in the areas where the natural terrains permitted was close to the course of the Karun River. After traversing two ranges of hills¹¹⁹ and entering the flat lands of Southern Khuzestan, the pipeline ran parallel

¹¹⁷ Arnold T Wilson, *Report on Abadan Island*, 23rd March 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.201

¹¹⁸ Lieutenant Arnold Wilson to G. Reynolds, 16th February 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.87

¹¹⁹ Imam Reza and Tul-i-Khayyat

to the Karun River and remained close to the course of river before crossing the Bahmanshir.¹²⁰



Figure 2.7 The southernmost segment of the oil pipeline. Represented by the dashed line in the map, the pipeline remained very close to the course of the Karun River in the areas where natural terrains permitted.

Source: BP Archives, ArcRef 67573D

A third alternative was proposed by the British Consul-General at Khorramshahr. This location, Site C in Figure 2.6, was located off Abadan Island in the area known as Manikh near the junction of the Karun and Bahmanshir rivers. Site C was only one mile away from Khorramshahr and offered several advantages. For instance, it was located on

¹²⁰ Ronald W. Ferrier, *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982), p.132.

the track of steamers running on the Karun River, owned and operated by the British firm Lynch Brothers. It was cooler than Abadan and its proximity to Khorramshahr was obviously advantageous to the Company. Building a refinery at Manikh would have saved costs on more than eight miles of pipeline and a great deal of transport and carting. It could also have eliminated the tortuous task of laying a pipe across the Bahmanshir River.¹²¹ Manikh, however, was omitted from the list of alternatives after a survey by a British military officer proved it unfit for a refinery. Sounding measurements off the site revealed that this very location was not fully navigable for ocean tankers and steamers. Furthermore, very strong eddies were spotted near the site in the Karun River which, the officer believed, would interfere with handling and berthing of ships.¹²²

Taken all factors together, site B offered competitive advantages over other alternatives. Its ground was relatively flat, yet the risk of inundation in its proximity was miniscule. It was endowed with deep water and located near Khorramshahr port town. Furthermore, it was a natural location for a refinery considering the most efficient and cost-effective trajectory of the pipeline.¹²³ As a historian of the Anglo-Persian Oil Company once noted, locating a thoroughly suitable area in the “flat swampy district” was a very difficult task. Although site B was not an ideal place it was the best possible “compromise.”¹²⁴

¹²¹ A. T. Wilson, *Note on an Alternative Site*, 23rd March 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p. 308

¹²² Lieutenant A. Willock to Major Cox, 25th May 1909, in *The Anglo-Persian Oil Company 1908-1916*, “D. Correspondence re Abadan and Manikh Site”, FO 460/3

¹²³ A. T. Wilson, *Report on Abadan Island*, 23rd March 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p. 204

¹²⁴ Laurence Lockhart, “Memo,” 12th June 1927, *Abadan Refinery, Historical Notes*, BP Archives, ArcRef 71439

2.4 Land Acquisition Project

2.4.1 Delineation of the Site

Acquisition of land for refinery faced three major challenges: delineation of the site, determination of the amount of land required, and identification of the “tenure of purchase.”¹²⁵ Following a pattern established two centuries earlier by the East India Company, the oil enterprise decided to obtain land in Southwest Iran for the purpose of extraction, transport, refining, storage, and export of oil.¹²⁶ The Syndicate Works Manager in February 1909 roughly delineated the boundary of the required land. Preparing a rough sketch, shown in Figure 2.8, Reynolds selected one square mile piece of land between the Braim and Bawarda villages. Avoiding nearby “cultivation and dwellings,” the site, as the Works Manager described it, stretched from the Shatt-al-Arab on the west to the Bahmanshir River on its east.¹²⁷

¹²⁵ Lieutenant Arnold Wilson to Major Cox, 10th May 1909, “D. Correspondence re Abadan and Manikh Site,” *The Anglo-Persian Oil Company 1908-1916*, FO 460/3.

¹²⁶ Ehsani, Kaveh. “Social Engineering and the Contradictions of Modernization in Khuzestan’s Company Towns: A Look at Abadan and Masjed-Soleyman”. *IRSH* 48, (2003): 372.

¹²⁷ G. Reynolds to Captain D. Lorimer, 14th February 1909, File 1421/1908 Pt 1 'Persia: oil; D'Arcy Oil Syndicate' [249v] (20/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*

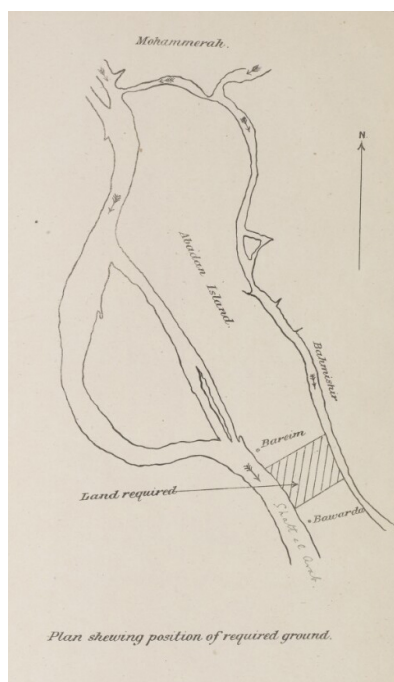


Figure 2.8 Approximate tracing of the required land for the refinery drawn by the Syndicate Works Manager.

Source: British Library, India Office Records and Private Papers, IOR/L/PS/10/143/1

Braim was the eleventh largest village on the western shore of the Island downstream from the confluence of the Karun River and the Shatt-al-Arab. Villages on the western shore of the island were on average two miles apart. Braim consisted of 50 mud houses. The inhabitants of the village were from the *Thawamir* sub-division of the *Ka'ab* Tribe. Bawarda (Bawairdeh) was located two miles below Braim. It was comprised of 20 mud huts and was home to Arab tribesmen from *Al Bu Ma'arrif* sub-division of the *Muhaisin* Tribe. To avoid suspicions of the local authorities — which the Oil Syndicate hoped would help them in the course of land negotiations — Reynolds never visited Abadan in person. As a result, his conception of the position of the site and its surroundings was far from reality. By superimposing a hypothetical, one-square-mile rectangle on the map of Abadan Island, taken from the 1909 plane table surveys prepared by Lieutenant

Arnold Wilson, we can visualize the position of the proposed site vis-à-vis the adjacent agricultural communities. Figure 2.9 shows that the selected site could not easily stretch from the Shatt to the Bahmanshir River, since the bank of the Bahmanshir was covered with villages and date gardens. Moreover, the land between Braim and Bawarda was filled with three agricultural settlements and date groves, which all were missing in Reynolds' account of the site. As Figure 2.9 illustrates, the only location with no date groves that offered one-mile river frontage was the area named *Duwah* lying between the two agricultural settlements identified as *Mullah Ghanam* and *Arusiyeh*. *Mullah Ghanam* was an agricultural estate owned by a local landlord. However, no historical records could be found on *Duwah*. It could be inferred from the map that *Duwah* was a small hamlet consisting of a few huts. *Arusiyeh* was also an agricultural settlement two miles south of Braim.¹²⁸ Based on the reconstructed map, it can be estimated that the site selected for the refinery was half a mile below *Braim*, 150 yards below *Mulla Ghanam*, and half a mile above *Arusiyeh*.¹²⁹

¹²⁸ J G Lorimer, 1908, p.6

¹²⁹ J G Lorimer, 1908, p.6

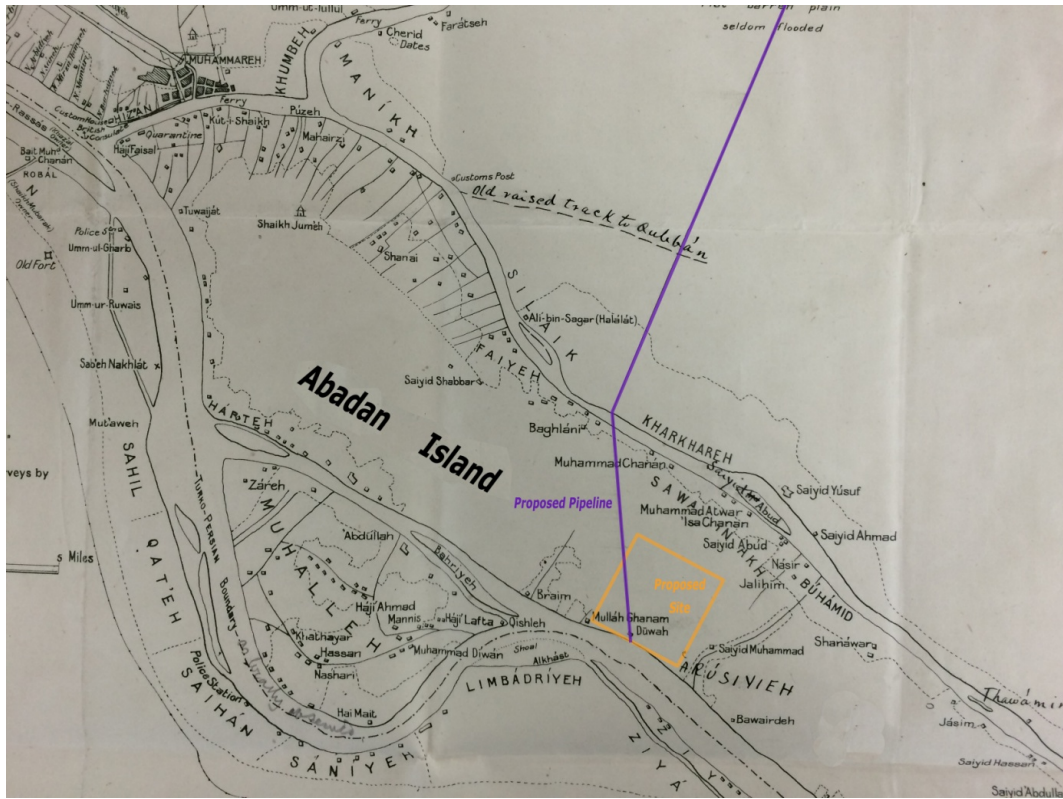


Figure 2.9 Reconstructed map of the proposed site for the refinery and the trajectory of the oil pipeline. As the map shows, the one-square-mile site was placed on a hamlet known as *Duwah* which is completely missing from the official account of the land acquisition.

Source: "Sheet No. 1, Map of Shatt-Al-Arab and Bahmanshir", 1909, FO 925/41221

2.4.2 Assessment of Land Value

The obstacles facing the Oil Syndicate regarding land acquisition in Abadan were twofold. First, the ground was under the control of the Sheikh of Khorramshahr. Under the 1903 royal decree (*farman*), the ownership of Abadan Island along with large swaths of land in the Khorramshahr and Karun districts were granted to the Sheikh on behalf of Arab tribesmen, making him the *de facto* owner of the whole of Southern Khuzestan. The royal mandate, nevertheless, prohibited the sale or transfer the ownership of land to foreign

subjects.¹³⁰ Moreover, local landlords were prohibited from selling or leasing their land without the Sheikh's sanction.¹³¹

The second impediment to land acquisition on Abadan Island was to make assessment of the market value of properties, especially in the northern section of the island.¹³² Once again, the oilmen relied on British imperial intelligence to solve the problem. Confidential enquiries were made from the British Consul at Basra to get an estimate of the market value of land on the Ottoman side of the Shatt-al-Arab. It turned out that, on the western bank of the Shatt, price of land varied between £60 and £120 per *jareeb* (acre),¹³³ depending on the proximity to Basra and the cultivability of land — whether the land was fully reclaimed, partially reclaimed, or complete waste land (good for cereal

¹³⁰ Qajar king Mozaffar-al-Din Shah had issued in January 1903 a tripartite *farman* (decree) whereby he awarded the Sheikh and his tribespeople the ownership of agricultural and uncultivated State lands in Southern Khuzestan. Tribes and their chieftains were central to the defensive power of the Qajar state. Stephanie Cronin, *Tribal Politics in Iran: Rural conflict and the new state, 1921–1941*, by S. Cronin, (Routledge, 2007), p.17. The Shah hoped this friendly gesture would safeguard the loyalty of the Sheikh and Arab tribesmen in the southernmost section of the outlying province, especially near the contested frontier with the Ottoman Empire. In return, the sheikh surrendered to the Persian Government his hereditary “rights” to the Khuzestan Customs. “A Précis of the Relations of the Sheikh of Khorramshahr with the Anglo-Persian Oil Company”, 1924, in *Anglo-Persian Oil Company Limited: Confidential Letter Book*, BP Archives, ArcRef 71402, p.794. There were also unsubstantiated reports that the Sheikh had bought for the sum of £17000 the land on the left bank of the Karun River including Abadan Island and this purchase had been registered at the British Legation in Tehran. See G. B. Reynolds to Captain Lorimer, 7th March 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.159. “Farman, dated Shawal, 1320 (January 1903), for Territory at Mohammerah, Jazirat-al-Khidhar (Abadan Island), Bahmanshir, and Karun”. File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [294v] (154/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*. The *farmans* were registered at the British Legations at Tehran. Furthermore, On the advice of Sir A. Hardinge, British Minister in Tehran, the name of the Sheikh was omitted from the document to deprive the Persian Government of an excuse for refusing to grant the firman. See also: Arnold T Wilson, *Memorandum on Abadan Island*, 23rd March 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.200

¹³¹ Arnold T Wilson, *Memorandum on Abadan Island*, 23rd March 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.201

¹³² G. B. Reynolds to The Concessions Syndicate Ltd, 16th February 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.83

¹³³ One jareeb equaled a square with each side measuring 204 feet and 2 inches, or 4669 sq. yards, which was equal to one acre. Crow to Reynolds, 3rd March 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.160

cultivation but not for date palm).¹³⁴ However, the political situation on the Iranian side of the Shatt was quite different. Historically, property law in Qajar Iran deprived foreigners of owning land.¹³⁵ As mentioned earlier, the 1903 royal decree also prohibited the Sheikh and local landlords from selling land to foreign subjects. While land purchase was out of the question, leasing remained the only option available to the Oil Syndicate.¹³⁶ It was reported that a piece of ground at the southern part of the island was leased for agricultural purposes at £2.2 per jareeb (acre).¹³⁷ As mentioned earlier, the quality of soil and water in the northern section of the Island was much better than the southern part. In 1909, capitalist agricultural activity along the northern shore of Abadan was on the rise. Multiple pieces of lands were rapidly “sold” to local Arabs and brought under cultivation. As a result, the northern section of the island had gained a “prospective value.”¹³⁸

Disregarding the real market value of land, the syndicate management rendered the proposed site “waste ground,” arguing that “it should be obtained for about one pound per acre at the very outside.”¹³⁹ As shown in the previous chapter, the area selected for refinery was not a waste land as the syndicate management described it. Rather, a hamlet known as *Duwah* stood there which was surrounded by agricultural settlements. Even the general

¹³⁴ Francis Edward Crow to Reynolds, 3rd March 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.160

¹³⁵ Firuz Kazemzadeh, *Russia and Britain in Persia: Imperial Ambitions in Qajar Iran* (I.B.Tauris, 2013), p.659

¹³⁶ Major P. Cox to Captain D. Lorimer, 9th March 1909, File 1421/1908 Pt 1 'Persia: oil; D'Arcy Oil Syndicate' [252v] (26/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*

¹³⁷ As it was common practice at the time, the crop was equally divided between the tenant farmer and the Sheikh. Arnold T. Wilson to McDouall, 13th March 1909, *Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow*, BP Archives, ArcRef 177165, p.210

¹³⁸ A. T. Wilson, “Report on Abadan Island,” 23rd March 1909, *Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow*, BP Archives, ArcRef 177165, p. 203

¹³⁹ Reynolds to The Concessions Syndicate Ltd., 17th April 1909, *Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow*, BP Archives, ArcRef 177165, p.255

manager disagreed with the syndicate management, maintaining that thanks to irrigation schemes and centrifugal pumps the land now has a “value it never had before.”¹⁴⁰ Further, the price demanded for land for non-agricultural purposes was higher than the speculated figures for agricultural uses.¹⁴¹

2.4.3 The Politics of Land Acquisition

The Oil Syndicate employed various tricks and tactics to obtain the required land at the lowest possible rate and under the most favorable terms. From the outset, while the exact location and particulars of the site were yet to be decided, to avoid early speculation by the Sheikh, the whereabouts of the prospective refinery were kept confidential. The Syndicate general manager once suggested that upon the commencement of land negotiations no representative associated with the Syndicate should show up near Abadan or set foot on the island, and simultaneously a “diversion” be created in a different direction.¹⁴² Even for a while, British consular officers in the region were not briefed on the definite route of the pipeline and the exact location of the refinery. Another strategy adopted by the Oil Syndicate was to conceal any association between the land identified for acquisition and the oil enterprise, and to introduce an intermediary to lease the land.¹⁴³ The Imperial Bank of Persia was first proposed to take on the role of an agent.¹⁴⁴ Upon the Bank’s inability to

¹⁴⁰ Reynolds to The Concessions Syndicate Ltd., 17th April 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.255

¹⁴¹ A. T. Wilson, “Report on Abadan Island,” 23rd March 1909, *Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow*, BP Archives, ArcRef 177165, p. 203

¹⁴² G. B. Reynolds to Wallace, 4th February 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.72

¹⁴³ G. Reynolds to Captain D. Lorimer, 14th February 1909, File 1421/1908 Pt 1 'Persia: oil; D'Arcy Oil Syndicate' [249v] (20/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*

¹⁴⁴ Wallace to Reynolds, 7th January 1909, File 1421/1908 Pt 1 'Persia: oil; D'Arcy Oil Syndicate' [250r] (21/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*

play that role another British firm, Grey, Paul & Co., was considered for the job. Some Syndicate officials even entertained the idea of introducing the Political Resident and British Consul-General at Bushire as the client, since, it was believed that the British agent was able “to get the land much cheaper than any private individual.”¹⁴⁵

Despite such cautionary tactics, the Syndicate's interests and activities in the region, as the British Consul at Ahwaz noted, had become “public knowledge.” As a result, the oil enterprise’s proposal to orchestrate a “benami transaction” through an intermediary was met with objection from British political representatives in the region. For instance, British Consul at Ahwaz dismissed the idea of concealing the real identity of purchasers, since in his view, “the sheikh would not sell unless he knew for what purpose the land was wanted, and had assurance that the Persian Government would raise no objection.”¹⁴⁶ Concurring with the Consul's argument, Political Resident believed that the Syndicate should commence negotiations with the sheikh head-on, suggesting that the sheikh would, for the sake of “self-preservation,” even embrace any British vested interest in his territory. Opposing the nominal purchase scheme, British Minister at Tehran also believed that rather than using a third firm as a “stalking-horse,” the Syndicate should deal directly with the Sheikh.¹⁴⁷

¹⁴⁵ G. B. Reynolds to Wallace, 4th February 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.72

¹⁴⁶ Captain Lorimer to Major Cox, 15^h February 1909, File 1421/1908 Pt 1 'Persia: oil; D'Arcy Oil Syndicate' [249v] (20/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*

¹⁴⁷ Sir G. Barclay to Sir Edward Grey, 24th March 1909, File 1421/1908 Pt 1 'Persia: oil; D'Arcy Oil Syndicate' [268r] (57/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*

2.4.4 Imperial Interests and Land Negotiations

On April 14th, 1909, immediately after the Anglo-Persian Oil Company was floated and took over the Concessions Syndicate Ltd.,¹⁴⁸ a wire was dispatched to Reynolds, allowing him to contact the Sheikh and secure the best terms on which to obtain land for refinery. The Works Manager was also permitted to discuss with the Arab chieftain the questions surrounding the land and security for the pipeline which passed for 100 miles within his territory. On April 20th after a brief interview with the Sheikh and his deputy, Reynolds drew up a draft agreement.¹⁴⁹ The Sheikh asked for £2000 for the lease of one square mile of land (equivalent to 640 acres), that was roughly equal to £3 per acre, on Abadan Island and the right to the laying of pipeline anywhere in his territory.¹⁵⁰ While Reynolds and British diplomatic envoys in Southern Khuzestan believed that the Sheikh's proposed rate was not "unreasonable," the Directors of the Anglo-Persian Oil Company were not willing to pay more than £500 annually— which was less than £1 per acre. In the Directors' view the company was entitled under Article 3 of the D'Arcy Concession to obtain free of cost any uncultivated state-owned land. Furthermore, they regarded any rental advanced to the Sheikh as a "subsidy" to safeguard his goodwill and cooperation.¹⁵¹

In these circumstances, the Foreign Office took the opportunity not only to break the deadlock in the land negotiations, but also to achieve an imperial goal in Southwest

¹⁴⁸ With the authorized capital of £2,000,000 and £1,000,000 ordinary shares, the Anglo-Persian Oil Company became the third largest British oil company of the day in terms of capitalization. R.W. Ferrier, p.107

¹⁴⁹ For the draft Agreement see Reynolds to Major Cox, 30th April 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p. 270-273

¹⁵⁰ Reynolds to The Concession Syndicate Ltd. 24th April 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.259

¹⁵¹ E.N. Wallace to Foreign Office, 28th April 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [383r] (331/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

Iran. British officials were aware of Sheikh's urgent need for capital for implementation of a small-scale irrigation scheme on the Karun River. They used this confidential information as a leverage to cut a deal that would favor both the oil company and the British Empire. Sir Edward Grey, Foreign Secretary, and Sir G. Barclay, British Minister at Tehran, believed that better terms might be reached with the Sheikh if new incentives such as a loan or extended "assurances"¹⁵² be offered to him.¹⁵³ Through advancing an "irrigation loan" to the Sheikh in the name of the British Government—which in reality was to be furnished by the A.P.O.C—the British Government was able to secure "reasonable" terms for the land, and simultaneously, obtain from the Sheikh the monopoly of irrigation works on the Karun River.¹⁵⁴ This would ensure that only a British enterprise or a multinational company endorsed by the British Government would be allowed to undertake any irrigation schemes on the Karun River. This concession put an end to a potential threat to the British

¹⁵² The British Empire enjoyed full collaboration and loyalty of Sheikh of Khorramshahr as a quid pro quo for pledges of financial support and security assurances in the face of potential threats from the Iranian and Ottoman governments. In light of the Constitutional revolution and increased Russian influence in Southwest Iran, the Sheikh received in 1902 general assurances against any encroachment on his "rights" from Sir A. Hardinge, British Minister at Tehran (1900-1906). These assurances were repeated in 1908 by Major Cox, British Consul-General at Bushire, and in 1910 were extended to his successors. See 'Persian Gulf. Handbooks prepared under the direction of the Historical Section of the Foreign Office - no 81' [58] (64/94), British Library: India Office Records and Private Papers, IOR/L/PS/20/C189, in *Qatar Digital Library*. p.58; *Annual Persia Reports in 1908*, from "Extracts from Annual Persia Reports, 1906, 1909, 1910, 1911, 1912, 1913 regarding loans, and complete reports for 1908 & 1913" [102v] (62/106), British Library: India Office Records and Private Papers, IOR/L/PS/18/C144, in *Qatar Digital Library*. P.32. For a detailed account of British assurances to the Sheikh, see File 345/1908 Pt 1 'Mohammerah: situation. British assurances to Sheikh.' [5v] (15/416), British Library: India Office Records and Private Papers, IOR/L/PS/10/132, in *Qatar Digital Library*

¹⁵³ Sir G. Barclay to Sir Edward Grey, 17th Mach 1909, File 1421/1908 Pt 1 'Persia: oil; D'Arcy Oil Syndicate' [271r] (63/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*. Also, See Sir Edward Grey to Sir G. Barclay, 17th June 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [364r] (293/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁵⁴ Sir Edward Grey to Sir G. Barclay, 28th April 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [386r] (337/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

imperial interests in the region posed by commercial and political presence of foreign rivals.¹⁵⁵

Quite displeased with the initial rate proposed by the Sheikh, the Directors of the A.P.O.C succumbed to the Foreign Office's proposition.¹⁵⁶ The Company also solicited the diplomatic assistance of Major Cox, Political Resident and Consul-General at Bushire, who undoubtedly was Britain's most powerful diplomatic representative in the Persian Gulf region.¹⁵⁷ At the Foreign Office's order, Political Resident accompanied by the Consul-General at Khorramshahr and J. B. Lloyd, the representative of the Company's new Managing Agents in Iran,¹⁵⁸ commenced negotiations with the Sheikh and his deputy.¹⁵⁹ The Sheikh's local adviser was also "consulted" to influence the talks. During the negotiations, the Political Resident constantly reminded the Sheikh of the favors and assurances that the chieftain had received from the British Government and pressed him to show his appreciation by generous treatment of the "first British undertaking" in his

¹⁵⁵ As early as 1903 various schemes were proposed to the Persian Government for the agricultural development of the Karun region. For a detailed historical account of the Karun irrigation scheme, see File 1552/1904 Pt 1 'Mohammerah: Karun Irrigation Scheme.' British Library: India Office Records and Private Papers, IOR/L/PS/10/40, in *Qatar Digital Library*. For a synopsis of the Karun Irrigation scheme from 1903 through 1912, see 'A précis of the Relations of the British Government with the Tribes and Shaikhs of Arabistan. By Lt A T Wilson, Acting Consul for Arabistan' [63] (77/134), British Library: India Office Records and Private Papers, IOR/L/PS/20/E96, in *Qatar Digital Library*. p.63.

¹⁵⁶ Reynolds to The Concession Syndicate Ltd. 24th April 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.279

¹⁵⁷ Captain Lorimer to Major Cox, 8th July 1908, File 1421/1908 Pt 1 "Persia: oil; D'Arcy Oil Syndicate" [249r] (19/218), British Library: India Office Records and Private Papers, IOR/L/PS/10/143/1, in *Qatar Digital Library*

¹⁵⁸ J. B. Lloyd and C. A. Walpole from the Calcutta office of Shaw Wallace & Co. were identified as the APOC's Managing Agents in Persia. See G. Reynolds to the Concessions Syndicate Ltd., 25th May 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.333

¹⁵⁹ Major Cox to G. Reynolds, 16th May 1909, BP Archives, ArcRef 177165, "Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow", p.327-331

territory.¹⁶⁰ After four rounds of discussions, the Sheikh agreed to lease to the Company an area “free of date trees” of roughly one square mile — equivalent to 650 jareeb (acres) or 2000 yards by 1577 yards¹⁶¹ — between the two villages of Braim and Bawarda with a frontage of 2000 yards on the Shatt for the period of the Oil Concession. The Company also rented a strip of land, 30 yards in width, connecting the initial site to the Bahmanshir River. In return, the Sheikh received a payment package worth £16,500 (equivalent to approximately £2,000,000 in 2020)¹⁶² comprised of £10,000 as a loan, bearing an interest rate at 6 percent and repayable in ten years, and £6,500 for the ten-year lease of the property. Other points of dispute were eventually resolved, and the agreement was concluded on July 16, 1909.¹⁶³

2.4.5 Constitutional Government and the Abadan Agreement

The agreement was signed only three days after the pro-constitutional forces marched on Tehran, deposed Mohammad Ali Shah, and reinstated the Constitutional Government. At the Sheikh's request, the Company and British officials agreed to keep the details of the Abadan Agreement confidential and postpone the commencement of operations until political crisis in Tehran would end.¹⁶⁴ The reason for the secrecy lay in the Sheikh's fear

¹⁶⁰ P. Cox to Foreign Office, 18th May 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [379r] (323/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁶¹ One yard was equivalent to one Iranian measurement unit *zar'a*.

¹⁶² £1 in 1908 is equivalent to £119.30 in 2019. See:

<https://www.officialdata.org/uk/inflation/1908?endYear=2019&amount=1>

¹⁶³ For the final text of the Agreement and the memorandum of Political Resident on the negotiations see P. Cox to Sir Edward Grey, 18th July 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [317r] (199/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁶⁴ Sir E. Grey to P. Cox, 23rd July 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [308r] (181/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

of the potential consequences of the agreement. It was possible that the Abadan Agreement would trigger the hostility of the influential *ulama* (religious leaders), constitutionalist leaders, and public opinion towards him.¹⁶⁵ As a precautionary measure, the Sheikh even requested that the money be paid to him in gold rather than a bank draft.¹⁶⁶ Signs of popular resentment were felt in the region. Public opinion at this time was informed by a modern nationalist discourse which rejected the legitimacy of the oil concession and challenged the British imperial presence in the region.¹⁶⁷ To prevent probable popular protests, the Oil Guards were kept on call at Ahwaz.¹⁶⁸

The Sheikh's apprehension proved realistic. In October 1909, in the wake of the commencement of operations at Abadan, rumors spread in Tehran about a mutual arrangement between the Sheikh and the Anglo-Persian Oil Company. Subsequently, the Iranian Government pressed the Sheikh to release the content of the agreement. The British Consul-General at Khorramshahr believed that sooner or later the agreement must be communicated with the Iranian Government and that the Company and the Sheikh should act in harmony regarding the level of detail that should be disclosed to Tehran.¹⁶⁹ The Sheikh first procrastinated his response to the Central Government and asked the British

¹⁶⁵ Louis Mallet to the Anglo-Persian Oil Company, 21st July 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [336r] (237/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁶⁶ Major Cox, July 16th, 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [346r] (257/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

<https://www.qdl.qa/archive/81055/vdc_100030500369.0x000065> [accessed 15 November 2018]

¹⁶⁷ Stephanie Cronin, "Popular Politics, the New State and the Birth of the Iranian Working Class: The 1929 Abadan Oil Refinery Strike," *Middle Eastern Studies*, (2010) 46:5, p.707

¹⁶⁸ Lloyd, Scott and Co. to the Anglo-Persian Oil Company, 17th July, 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [337r] (239/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁶⁹ A. T. Wilson to Wilson to Lloyd, Strick & Co., 24th October 1909, in *The Anglo-Persian Oil Company 1908-1916*, "E. Relations with Sheikh Khazal. Labor at Abadan and other questions", FO 460/3, p.46

officials to remain silent on this matter.¹⁷⁰ When the story of the agreement appeared in the Indian Press, the British Minister in Tehran called on the Sheikh to share the agreement with the Iranian Government.¹⁷¹ The Abadan Agreement raised objections at Tehran for several reasons. The Constitutional Government believed that any agreement between the oil company and local tribal leaders would infringe upon Iranian sovereignty. In the Government's view, Abadan Island was entirely state-owned land and the Sheikh had no special rights to it.¹⁷² Tehran considered the agreement "null and void," because it was not officially countersigned by local Iranian authorities.¹⁷³ The Iranian Government also cautioned the A.P.O.C that every accord between the Company and private individuals should be submitted to Tehran for ratification, otherwise no assistance could be rendered in times of disputes.¹⁷⁴

The Sheikh, however, believed that similar agreements were made between the oil enterprise and the Bakhtiari Khans in the past. Furthermore, on accounts of the 1903 royal decree and hereditary rights, the Sheikh considered himself the legitimate proprietor of the island and as such entitled under clause 3 of the Oil Concession to lease a piece of his own

¹⁷⁰ A. T. Wilson to Sir G. Barclay, 25th October 1909, in *The Anglo-Persian Oil Company 1908-1916*, "E. Relations with Sheikh Khazal. Labor at Abadan and other questions", FO 460/3, p.47

¹⁷¹ Sir G. Barclay to Sir E. Grey, 3rd November 1909, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [301r] (167/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁷² Mr. Marling to Sir Edward Grey, 14th May 1910, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [297r] (159/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁷³ Ministry of Foreign Affairs to Sheikh Khaz'al, 13th August 1910, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [271v] (108/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁷⁴ A. T. Wilson to Sir G. Barclay, 26th January 1910, in *The Anglo-Persian Oil Company 1908-1916*, "E. Relations with Sheikh Khazal. Labor at Abadan and other questions", FO 460/3, p.43

property.¹⁷⁵ Minister of Interior, himself a Bakhtiari constitutionalist, suggested that a Government-appointed commission be dispatched to Khorramshahr to make inquiries into the transactions between the Sheikh and the Company and calculate the amount the former was liable to pay to the Government. This proposal was shelved after the Minister received a “serious warning” from the British Government protégé in Tehran who stipulated that the Abadan Agreement like the other deals made between the Oil Syndicate and the Bakhtiari Chiefs would enjoy the backing of the British Government.¹⁷⁶ Although the Constitutional Government failed to further challenge the Abadan Agreement, it never recognized the accords between the Company and local tribal leaders that threatened Iranian sovereignty.¹⁷⁷ Moreover, Iranian officials began to watch the Khuzestan affairs more intimately and kept an eye on the activities of the Company and the Sheikh.

¹⁷⁵ Sheikh Khaz'al to Ministry of Foreign Affairs, 31st October 1910, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [272r] (109/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁷⁶ Mr. Marling to Sir Edward Grey, 14th May 1910, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [297r] (159/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

¹⁷⁷ For instance, see Mushir-ud-Dowleh to E. Grant Duff, 26th July 1906, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [348v] (262/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

CHAPTER 3

FROM PETRO-CAMP TO PETRO-SCAPE: SPATIAL ENGINEERING, COLONIAL IDEALS, AND LABOR CONTROL, 1908-1924

This chapter retells the early history of Abadan. It provides an analysis of the evolution of Iran's symbol of early oil urbanism from its inception in 1909, when it was designed and built as an oil camp, through 1924, when it turned into a sprawling industrial settlement with a population of more than 30,000. This is the time when the Anglo-Persian Oil Company, for the reasons that I will discuss in the next chapter, implemented the first package of comprehensive reforms and incorporated some elements of model company towns into Abadan's physical-spatial structure to ameliorate the difficulties and inequalities that rapid industrialization had created. Uncertainties about the chemical and commercial potentialities of Iranian crude oil overshadowed the initial layout of the refinery. Its spatial organization, as I will discuss in this chapter, was as much the embodiment of social and technical necessities of oil production as it was the outcome of colonial precedents and the conceptions of laissez-faire capitalism, old-style paternalism, and labor control. In tandem with the increased petroleum outputs, Abadan grew in size and population. Both extensions and alternations were made to the oil camp on a piecemeal basis as expediency demanded.¹⁷⁸ Gradually, several indigenous settlements emerged around the Refinery which accommodated not only local workmen but also migrant laborers and other fortune-seekers who had moved to the island in the hope of finding

¹⁷⁸ John Cadman, 1925 "Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924," BP Archives, ArcRef 68331, p.38

employment with the growing oil industry. In the course of fifteen years, Abadan evolved from a primitive oil camp into an “industrial landscape” or what I term petro-scape.¹⁷⁹

The lack of unitary character in Abadan created a pattern of urbanism that had a lot in common with colonial cities. A closer scrutiny also reveals that Abadan’s spatial structure consisted of three separate parts which echoed the Company’s social visions and labor policies. As I will show in what follows, the Company utilized various spatial tools and methods to engineer the space, to increase its control over the workforce, to forge the desired social order, to recreate the unequal power structure similar to colonial models, and, last but not least, to ovoid labor militancy. This is manifested in the provision of company-sponsored welfare services — such as housing, social amenities, healthcare, and public utilities — as well as the policing and protection of the oil infrastructure. Nevertheless, workmen and local inhabitants were not passive recipients of the Company’s domination. In the last section of this chapter, I will show how they defied the company’s spatial coercion through creating spaces of resistance on different geographic scales. Also, loose control over some neighborhoods, where non-European personnel and local inhabitants of the town resided, gave rise to the emergence of the first indigenous industrial settlement in Iran’s modern history.

Although the town’s development was primarily driven by oil, Abadan was a multidimensional phenomenon. As Nelida Fuccaro put it, due to the rapid pace of urbanization triggered by oil development, early oil cities were “more multifaceted and

¹⁷⁹ Here I draw inspiration from Margaret Crawford’s analysis of evolution of company towns. For Crawford, industrial landscape or economic landscape is “the direct translation of the technical and social necessities of particular method of industrial production into a settlement form.” See Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.2

less permanent than others.”¹⁸⁰ This chapter will analyze Abadan’s built form from a critical perspective. Drawing on Margaret Crawford’s approach to the analysis of company towns in *The Workingman's Paradise*,¹⁸¹ I will show how the built environment of Abadan was the product of an interplay of such determinants as industrial design, colonial practices, technical requirements of the oil industry, capitalist logic, vernacular construction techniques, regional and climatic conditions, and social order. In other words, I will situate the physical-spatial form of the oil town within broader contexts where factors such as industrial restructuring, immigration, ethnic divisions, imperialism, labor control, and paternalism are as significant as architectural design, pragmatism, and functionalism.¹⁸²

3.1 Temple of Oil in the Garden of Eden

*“There can hardly be a doubt that Abadan Island, formed by the [Bahmanshir] estuary and the Shatt-el-Arab, will be the place selected. It is worth a passing thought that, according to a tradition and the firm belief of the Mohammedan dwellers in Mesopotamia and [Khuzestan], this piece of ground, watered by the Tigris, Euphrates, and the Karun, and destined within five years to become a prosaic settlement, paved and tin-roofed, the home of men seeking the welfare of the world and their own profits by one of the most disfiguring and evil-smelling processes known to modern science – is no other than the veritable Garden of Eden itself!”*¹⁸³

¹⁸⁰ Nelida Fuccaro. “Introduction: Histories of Oil and Urban Modernity in the Middle East.” *Comparative Studies of South Asia, Africa and the Middle East* 33, no. 1 (2013): p.3

¹⁸¹ In order to offer a flexible explanatory framework for analysis of the physical form of the company town, Margaret Crawford discusses company town design within several broader contexts. Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.5

¹⁸² Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.5

¹⁸³ Perceval Landon’s visionary account of Abadan Island in the light of potential oil development not only illustrates the anti-industrial utopian fantasy of the late Victorian era which dramatized the encounter between industrial capitalism and nature, but also offers a cross-sectional portrait of the materiality of oil and the new way of life that the oil industry brought to Abadan. Perceval Landon, “Through Persia to a New Oil Field,” *The World's Work*, 1909, p.10253

3.1.1 The Oil Enclave

Andrew Campbell, Burmah Oil Company works manager at the Rangoon refineries, who was previously engaged in the selection of the site for the Abadan refinery, devised the first scheme for distillation of Iranian crude oil. In May 1909, based on Campbell's analysis, two petroleum products, Water White, a type of burning oil for lamps, and a lesser grade kerosene, known as Victoria, were considered for production at Abadan. This plan was altered in February 1910 when Charles Greenway, the APOC Managing Director, suggested that for commercial reasons the Company should produce fuel oil and benzene (motor spirit).¹⁸⁴ Campbell's field visit to Abadan, coupled with the distillation program he proposed for Iranian oil, inspired the first rudimentary layout of the Abadan refinery—which was designed to handle 2,000,000 gallons of crude oil per month. The tentative plans, initially prepared in Rangoon, were sent to London where they were modified by John Gillespie, the consultant engineer to the Burmah Oil Company.¹⁸⁵

¹⁸⁴ Ronald W. Ferrier, *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982), p.148; Also see, C. Greenway to J. Hamilton, 17th February 1910, *Anglo-Persian Oil Company, Ltd. Private Letter Book, Volume 1*. BP Archives, ArcRef 54484. p.142

¹⁸⁵ *The Naft*, 7 (July 1931), p.14

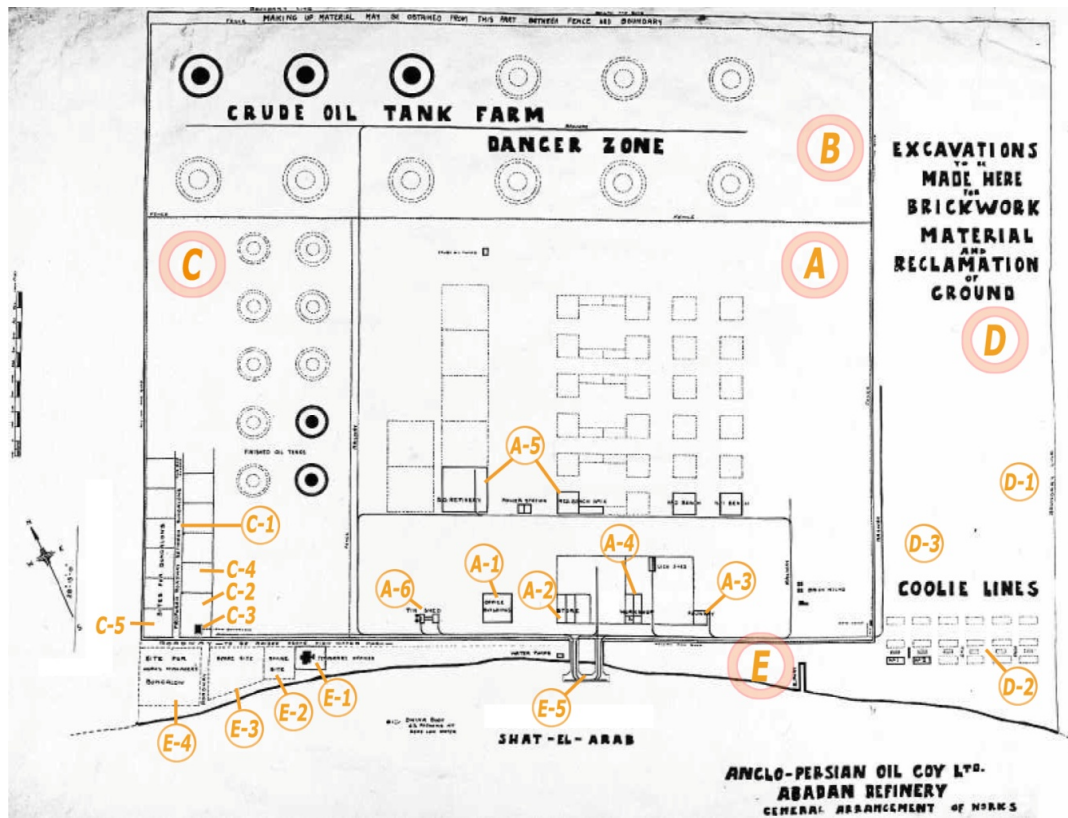


Figure 3.1 Abadan Refinery, general layout and land use, August 1910. The solid and dashed lines represent the finished and incomplete sections, respectively.
 Source: BP Archives, ArcRef 36509

An early plan of the arrangement of works at Abadan dated August 1910 (Figure 3.1) indicates that the Abadan refinery was designed as an industrial camp. Such settlements have received various names in different contexts, but in English-speaking countries they are categorized under the umbrella term “company town.”¹⁸⁶ Given the breadth and diversity of these industrial settlements, scholars have failed to provide a precise definition of company town. The definition that *Encyclopedia of Social Sciences* formulated more than eighty years ago still serves the purpose: “a community inhabited

¹⁸⁶ For a thorough survey of the concepts, historiography, and approaches to the study of company towns, see Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), pp.1-40.

chiefly by the employees of a single company...which also owns a substantial part of the real estate and houses.”¹⁸⁷ In these communities the company may function not only as the employer but also as the landlord and even the provider of public utilities.

Historically, the company town symbolized the rise and gradual hegemony of industrial capitalism. It also served as an outpost introducing industrial modernity into previously unexploited territories.¹⁸⁸ Throughout the nineteenth and twentieth centuries, industrialists, entrepreneurs and corporations used different versions of industrial settlements as a device not only to exploit natural resources in remote areas, but also to effectively manage and control labor force, enhance production and profit, and implement social ideals.¹⁸⁹ In academia, scholars and researchers have formed different conceptualizations of the company town. Some view it as the means of advancing the corporate power’s civilizing missions, while others conceive it as the space of transnational interaction or the site of labor-capital encounter.¹⁹⁰ Specific characteristics of these settlements varied according to a myriad of factors, including, among other things, the dominant economic activity, the location of the industry, the existence of private or state capital, and the degree of autonomy of company town from local or state governments.¹⁹¹

¹⁸⁷ Horace P. Davis, “Company Town,” in the *Encyclopedia of the Social Sciences*, vol. 4, New York: The Macmillan Co. 1930, p.119.

¹⁸⁸ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.6

¹⁸⁹ Oliver J. Dinius and Angela Vergara, “Company Towns in the Americas: An Introduction,” in *Company Towns in the Americas: Landscape, Power, and Working-Class Communities*, ed. Oliver J. Dinius and Angela Vergara (Athens: The University of Georgia Press, 2011), p.2

¹⁹⁰ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.6

¹⁹¹ Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.2

For the sake of this study, it is important to figure out how we could position the Abadan refinery within the broad spectrum of company towns. I argue that the Abadan oil camp resembles the resource towns and extractive industries known as “enclaves” that proliferated in colonial and neocolonial settings in the late nineteenth and the first half of the twentieth century. Financed, equipped, and managed by foreign interests, enclave economies were export-driven, *de facto* autonomous entities located in remote, thinly populated areas, where the influence of the local or central government was feeble, and whose production was not fully integrated into the host country’s national economy.¹⁹²

The Abadan refinery, as it was initially designed, possesses the characteristics of the first generation or so-called “classic” company towns, which were the direct product of the second phase of global capitalism characterized by extensive regime of accumulation of wealth.¹⁹³ In the United States, company towns in this period ranged between two typologies: industrial landscape, also known as economic landscape, and model towns.¹⁹⁴ While the former was primarily predicated upon economic logic that aimed at maximizing industrial production and profitability, the latter type was driven by social ideologies and utopian visions of creating orderly and harmonious communities where designers/reformers in collaboration with industrialists sought a compromise between

¹⁹² Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.8

¹⁹³ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.6

¹⁹⁴ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.2

capital and labor, and between optimal conditions of production and betterment of workers' living and working environment.¹⁹⁵

As Margaret Crawford notes, the spatial-physical structure of industrial landscape was the product of “vernacular expression” of industrial needs, where the technical and social requirements of a particular method of industrial production determined application— and modification— of earlier examples. On the contrary, in model company towns, professional design and some degree of planning were the main determinants of built form.¹⁹⁶ While the Abadan oil camp had an initial plan, it was not a planned company town. However, as I will discuss in this chapter, in the postwar years, several attempts were made to remake the oil camp and invest its physical-spatial structure with some elements of model towns.

3.1.2 Anatomy of the Oil Camp: Engineering the Refinery and Cracking Petroleum

Like other classic company towns, the Abadan oil camp consisted of two distinctive parts: 1) place of production, and 2) housing for working populations. As Figure 3.1 shows, the initial settlement lacked social services, such as healthcare, educational or entertainment facilities, that many classic company towns of the time would provide to their employees. Although some of these amenities were gradually provided to certain elements of the workforce, the reason why welfare services were not incorporated into the Abadan refinery's initial spatial program could be attributed to the mentality of the designers and the predisposition of the Company Directors. Both Campbell and Gillespie belonged to the

¹⁹⁵ Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.3

¹⁹⁶ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.4

generation of shop culture engineer-entrepreneurs of the second half of the nineteenth century, who were concerned primarily with the “engineering of materials” rather than the “engineering of men.” This generation, by and large, interested itself in traditional engineering operations, such as design of machines and layout of shop floors or construction of workshops.¹⁹⁷

The designers of the Abadan refinery provided immediate technical solutions to the pressing question of how to crack Iranian oil into major marketable products in an economical way. As a chemist, Andrew Campbell designed the structure of burning oil refinery— including distillation boilers, stills, and benches— based on his experiments with the Iranian oil samples in the Rangoon laboratory. Gillespie complemented his colleague’s work by adding the requisite infrastructure and designing the layout of sheds, workshops, and piping network. However, the Abadan oil camp, as a whole, did not have a long-term development plan. As a result, in the postwar years, the refinery became highly congested, partly because there was no sufficient space between the machines nor enough room for internal expansion of different sections.¹⁹⁸ This necessitated the reorganization of the refinery’s production core in 1924. For their part, the Company Directors, imbued with the ideas of colonial paternalism and economic pragmatism, were not keen on providing social services with no tangible “economic value” to the Company. Indeed, minimizing capital expenditure remained the cornerstone of the Company’s fiscal policy until 1924.¹⁹⁹

Grounded in the technical knowledge and refining procedures of the late nineteenth and early twentieth century, the engineering of the Abadan refinery was predicated upon

¹⁹⁷ Lindy Biggs. “The Engineered Factory.” *Technology and Culture* 36, no. 2 (1995): S177

¹⁹⁸ J. B. Lloyd, 1923, “Abadan,” *Abadan (Notes on a Visit)*, BP Archives, ArcRef 28604/003

¹⁹⁹ J. B. Lloyd, 1923 “Abadan-Sundry Notes,” *Memorandum by Mr. J. B. Lloyd on his Visit to Persia*. BP Archives, ArcRef 72016

the industrial logic of oil production. Besides environmental, social, and political circumstances, previous experiments in the Rangoon refineries influenced the design of the oil camp.²⁰⁰ As Figure 3.1 illustrates, internal fencing divided the oil camp into five separate zones, each dedicated to one stage of the process of oil production. A network of narrow-gauge railway, four feet and six inches wide, ran around the compound, connected different zones, and facilitated material handling.²⁰¹

As in other company towns, the production core, (zone A, Figure 3.1), dominated the compound. Organizing the company town around the industrial production unit symbolizes the rationalized logic of mechanized production and epitomizes the supremacy of expediency over ideology. Zone A encompassed all the workshops, plants, facilities, and infrastructure that played central roles in processing crude oil and administering the company town. As Figure 3.1 shows, the sections that were in commission by August 1910 included: office building (A-1), stores (A-2), foundry (A-3), workshop (A-4), distillation boilers, stills and benches (A-5), treatment plants, tin-making shed (A-6), and the pipe work. To facilitate radio communication with vessels and oil tankers a watch tower was erected next to the office building. Overtime, Campbell and other chemists became more familiar with the idiosyncratic characteristics of Iranian crude oil and enhanced the techniques to produce a larger volume of refined products with higher quality standards. In

²⁰⁰ For instance, distillation process at the Abadan refinery followed the Rangoon Refinery model, known as the Henderson System. Soon after construction was begun, it became clear that the Henderson System was not capable of efficiently treating Iranian crude oil which contained large amounts of sulfur— the latter being the cause of its notorious odor. As a result, technical modifications had to be made in Section A which delayed the completion of the refinery for a few months. See Ronald W. Ferrier, *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982), p.135

²⁰¹ 'Administration Reports 1905-1910' [274r] (552/616), British Library: India Office Records and Private Papers, IOR/R/15/1/710, in *Qatar Digital Library*

tandem with these developments, new plants and industrial elements were added to the company town's production core.

The refinery also included other sections that supported the production process. Zones B and C, for instance, accommodated tank farms designed for storing crude oil and refined products, respectively. Crude oil was highly volatile and more inflammable than distilled petroleum. As a result, reservoirs of crude oil were placed at the back of the refinery within a safe distance from zone A. Due to the accumulation of high volume of crude oil, zone B was dubbed Danger Zone. The refinery's riverfront, zone E, also contained some infrastructural and administrative components, such as water pump and wharf (E-5), the works manager's residence and temporary office (E-4 & E-1), and the main foreshore gateway. The central part of zone E served not only as the terminus for the export of Iranian oil and refined products to the regional and global markets, but also acted as the point of entry for the machines and materials used for building the refinery. The number and diversity of wharves on the refinery's foreshore gradually increased and this section eventually turned into the Abadan Port.

Besides devising the physical layout and designing the distillation process, the designers of the Abadan oil camp engaged in traditional engineering operations, such as construction work. Upon his visit to southwest Iran in 1908, Campbell learned about the vulnerability of Abadan to flooding and suggested that protective measures be considered when building the refinery. For instance, he recommended raising all foundations above high-tide level.²⁰² The early map of the refinery (Figure 3.1) shows that roads were also

²⁰² Andrew Campbell to James Hamilton, 27th November 1908, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [362r] (289/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

elevated above the high-water mark. Given the scarcity of building materials on the island and its vicinity, Campbell also advised that bricks be used as the major construction material.²⁰³ Based on Campbell's recommendations, a rectangular tract of land in the southern section of the site, where he had spotted abundance of good-quality clay (Zone D, Figure 3.1), was designated for "Brickwork Material and Reclamation of Ground."

The form and configuration of individual buildings in the refinery facilitated labor control. In the late nineteenth and early twentieth century, with a view to maximizing visibility and control of workers' movement, factory buildings were designed on the basis of open-space layout that included "as few columns as possible" and avoided unobservable corners and unproductive passageways. Therefore, the ideal factory excluded buildings with the form of an L, T, or E, and preferably consisted of rectangular single-story structures.²⁰⁴ Similarly, at the Abadan oil camp, as Figure 3.2 illustrates, major structures in the production zone — namely, tin-shed, main office, store, workshop, and foundry — took rectangular forms. Furthermore, the distance between buildings made possible the "panopticonic gazes" across the oil camp.²⁰⁵

²⁰³ Andrew Campbell to James Hamilton, 27th November 1908, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [362r] (289/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

²⁰⁴ Lindy Biggs. "The Engineered Factory." *Technology and Culture* 36, no. 2 (1995): S185

²⁰⁵ Andrew Herod, "Social Engineering through Spatial Engineering: Company Towns and the Geographical Imagination," in *Company Towns in the Americas: Landscape, Power, and Working-Class Communities*, ed. Oliver J. Dinius and Angela Vergara (Athens: The University of Georgia Press, 2011), p.31

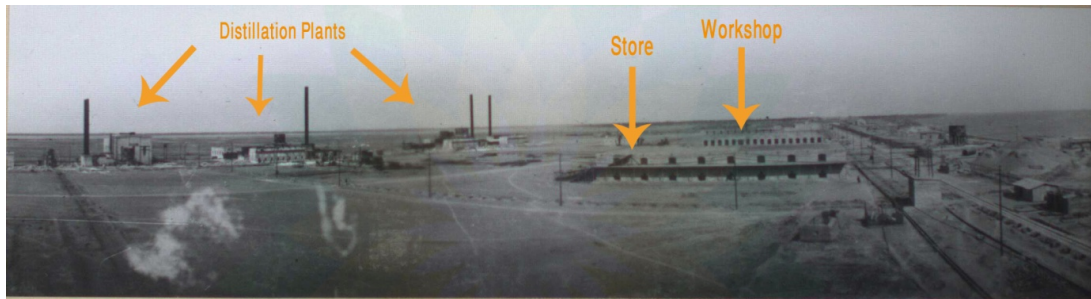


Figure 3.2 A panoramic view of Section A taken from the Watch Tower looking East, circa 1910.

Source: BP Archives, ArcRef 36509

3.2 Tripartite Oil Town: Paternalism, Spatial Technologies, and Economic Pragmatism

Like other employers that set up enclave company towns in remote areas, the Anglo-Persian Oil Company encountered the necessity of provision of accommodation and other amenities to oil workers to ensure efficient undertaking of operations. Historically, companies pursued different objectives by provision of social and welfare services. The so-called paternalistic efforts aimed to enhance the performance of workers, cultivate employees' loyalty, resolve the inherent contradictions between capital and labor, develop a "personal bond" between workmen and employers, weaken the degree of solidarity among the workforce, and forge a positive public image for the companies.²⁰⁶ Margaret Crawford defines paternalism as "all varieties of enforced benevolence that interfere with a person's liberty of action for that person's good." As Crawford notes, welfare services were usually accompanied by the "discourse of benevolence." Companies publicized paternalistic programs under the guise of altruistic measures and used these services as

²⁰⁶ Marcelo J. Borges and Susan B. Torres, "Company Towns: Concepts, Historiography, and Approaches," in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.14. Also see Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.33

evidence of their commitment to well-being of their employees. Paternalistic efforts, however, provided employers with a strong tool for labor control by creating a system of “structured dependency” surrounding the workers’ daily lives.²⁰⁷ For their part, workers were not passive actors in the system of paternalism. In fact, as I will discuss later, with their agency and activism, workmen made employers rethink and revise paternalistic policies.²⁰⁸

In company towns erected in colonial and neocolonial settings the benefits of company paternalism corresponded to the privilege of “whiteness.”²⁰⁹ Similarly, welfare services at Abadan were allocated according to the preconceived hierarchical structure of the labor force which was defined based on employees’ occupational status and racial properties. Although in the early 1920s the Company formally introduced a “grading system”²¹⁰, which was seemingly designed based on qualifications and experience of workmen, in reality a three-tier system governed the categorization of the staff. This system served as the main mechanism of regulating salaries and wages as well as allocation of company paternalism.

The first category, known as the first class, consisted mainly of European staff of different grades. In the early years of operations, the first tier mainly consisted of Scotsmen who were former employees of the Burmah Oil Company.²¹¹ Over the course of the

²⁰⁷ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.12

²⁰⁸ Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.13-17

²⁰⁹ Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.18

²¹⁰ R.W. Ferrier, p.308.

²¹¹ In October 1909, R. R. Davidson, a twenty-year-old marine engineer in the employ of the Glasgow-based firm G. & J. Wier, was dispatched to Abadan to make the preparatory arrangements for the receipt

following decades, the population of this group increased and gradually diversified but remained predominantly European and overwhelmingly Scottish. Nonetheless, from the late 1920s for the sake of publicity several hand-picked Iranians, who had received university degrees from British universities, were admitted into this tier. Clerical staff along with foremen and skilled artisans made up the second-class personnel. The majority of this category were Indian nationals. It also included a handful of skilled workmen from Iraq, Burma, and China. At the outset of operations, Iranians constituted a small percentage of the second tier. In the light of the so-called “Iranianization” of the labor force in the 1920s and 1930s, the second tier turned into a category comprised of salaried office workers and technical men of Indian and Iranian nationals. The lowest tier—obviously the largest among others—initially consisted of semi-skilled, unskilled and contract workmen and manual laborers. This category was mainly comprised of local Iranian and Arab tribesmen and peasants from southwest Iran. In the 1930s, the third class included Indian and Iranian semi-skilled and unskilled laborers.²¹² Not only did the foregoing tiered social structure determine the whole life of the community, it also created a tripartite urban space similar to a typical colonial city in British India.²¹³

and sorting out of the material and machinery for the refinery and pipeline. Davidson was the company's only representative on the Island between October 1909 and May 1910. The construction of the refinery in real earnest was commenced in May 1910 when four experienced staff members of the Burmah Oil Company, including N. C. Ramsay, the Abadan refinery's first Works Manager, together with a handful of skilled artisans from the Rangoon refinery arrived at Abadan. The other companions were R. Pitkethly, assistant works manager, J. H. Young, superintending engineer, and D. R. Porteous, storekeeper who together with Ramsay and Davidson formed the nucleus of the Abadan Refinery European staff. See Ronald W. Ferrier, *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982), p.135.

²¹² L. P. Elwell-Sutton, p.93

²¹³ Anthony King stipulates that the Indian colonial city is comprised of three major elements: the “native city,” the “cantonment” and the “civil station.” Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.55. Similarly, Touraj Atabaki conceptualizes Abadan in its early years as a tripartite company town. See: Touraj Atabaki, “Far from Home, But at Home: Indian Migrant Workers in the Iranian Oil Industry”, *Studies in History* 31, no.1 (2015), p.104.

Company paternalism at the Abadan oil camp mainly catered for the first-class personnel or the British cadre. The Company's policy towards this group of employees was a mixture of welfare state and the British Raj.²¹⁴ While Indian workmen received selective housing and welfare services, local laborers were completely excluded from the discreet paternal benevolence of the Company. In this chapter I will show that the spatial structure of Abadan was the joint product of the Company's paternalistic policy, colonial reference models, and engineering of space. This is illustrated in living arrangements as well as other company-sponsored social, entertainment, healthcare, and public services.

3.2.1 Residential Spaces

Housing was the most significant element in the framework of company paternalism. Not only was housing arrangement used as a means of labor control, it also served as a spatial tool for shaping social relations and forging a hierarchical technical order. Labor geographer Andrew Herod maintains that the joint goal of designers and industrialists in a typical company town is to control the social and political life of workmen by hegemonizing and manipulating the physicality of the built environment. In other words, Herod notes, the design of company town aims at "social engineering" through deliberate "spatial engineering."²¹⁵ At the Abadan oil camp, spatial engineering manifested itself in both production and non-work spheres on different geographical scales. While labor control lay at the heart of spatial planning strategies, the Company aimed to accomplish

²¹⁴ Mark Crinson believes that company paternalism in Abadan could be situated between British model towns like Bournville and colonial mining towns in South Africa. Mark Crinson, "Abadan: planning and architecture under the Anglo-Iranian Oil Company," *Planning Perspectives*, 12 (1997), p.347.

²¹⁵ Andrew Herod, "Social Engineering through Spatial Engineering: Company Towns and the Geographical Imagination," in *Company Towns in the Americas: Landscape, Power, and Working-Class Communities*, ed. Oliver J. Dinius and Angela Vergara (Athens: The University of Georgia Press, 2011), p.21

numerous goals by employing various “spatial technologies,” such as separation, enclosure, boundary-making, and spatial coercion.

One of the manifestations of spatial engineering at the Abadan refinery was the separation of employee housing. As Figure 3.1 vividly illustrates, residences for British and “native” personnel were situated on opposite sides of the oil camp. Housing for British staff (C-1, Figure 3.1) was located upstream from the refinery on the western corner of zone C. Accommodation for “native” workmen was provided downstream from the refinery in the lower section of zone D. This housing arrangement laid the foundations for socio-spatial segregation of the workforce—one of the features that made Abadan similar to colonial settlements.²¹⁶ The company’s official discourse justified the separation of residential quarters merely on the “disciplinary” grounds.²¹⁷ In reality, however, spatial segregation of housing had its roots in the colonial practices and served several functions.

In the colonial city, separation of the European quarter from the indigenous town was partly informed by the prevailing scientific and medical theories of the second half of the nineteenth century which assumed a causal relationship between physical distance and bacterial infection. It was also based on the “British/native” divide, which was the mainspring of the colonial order, and aimed to create a dominance-dependence relationship between the colonial community and the indigenous populations.²¹⁸ Drawing on this

²¹⁶ As Laurence Elwell-Sutton shows, segregation and discrimination along racial and ethnic lines was in full-swing in Abadan. To read more on this see, Laurence Paul Elwell-Sutton, “The Company’s Civilizing Mission,” in *Persian oil: a study in power politics*. (Lawrence and Wishart, 1955), pp.88-103. Mark Crinson also characterizes Abadan as a colonial company town. Mark Crinson, “Abadan: planning and architecture under the Anglo-Iranian Oil Company,” *Planning Perspectives*, 12 (1997), p.341; Touraj Atabaki, “Far from Home, But at Home: Indian Migrant Workers in the Iranian Oil Industry”, *Studies in History* 31, no.1 (2015), p.104

²¹⁷ R. G. Nielson to C. A. Walpole to, May 29th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

²¹⁸ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.48

reference model, separation of housing helped inscribe a semi-colonial power structure onto the spatial layout of Abadan, which, among other things, served as a tool to exercise control over labor and implement discriminatory welfare programs without causing conflict. Minimizing contact between European and “native” employees was also a means of safeguarding the cultural identity of British employees.²¹⁹ There is ample evidence that strict labor and residential separation was enforced in other company towns in neocolonial and colonial contexts, in which segregation based on the “racialized view of the world” was a cultural norm.²²⁰ Similar trends are also discernable in the oil enclaves and resource towns of the early twentieth century in Latin America — such as Mexico, Argentina, and Venezuela, to name just a few— where company towns were organized along occupational hierarchies determined by race and national origins.²²¹

3.2.1.1 Bungalow Area: Enclave within an Enclave. Following the Anglo-Indian practices, the selection of the site for European residences across the oil landscape was predicated upon the “criteria of health,” construed according to the culture-specific understanding of the causes of disease.²²² In the second half of the nineteenth century, in

²¹⁹ Gail Ching-Liang Low, *White Skins/Black Masks: Representation and colonialism*, (London and New York: Routledge, 1996), p.153

²²⁰ Oliver J. Dinius and Angela Vergara, “Company Towns in the Americas: An Introduction,” in *Company Towns in the Americas: Landscape, Power, and Working-Class Communities*, ed. Oliver J. Dinius and Angela Vergara (Athens: The University of Georgia Press, 2011), p.13

²²¹ For instance, foreign-controlled oil companies near Tampico, in the Gulf of Mexico, enforced strict segregation of labor and housing. Another example is the state-owned company town, known as “EL3,” built around the oil fields in the Patagonia region of Argentina, in which the planning and design of residential estates followed a hierarchical order and reflected the company town’s social structure. See: Marcelo J. Borges and Susan B. Torres, “Labor resistance and Accommodation among Immigrant Workers in the Oil Company Towns of Patagonia, Argentina,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), pp. 18 & 117

²²² Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.114

accordance with the prevailing European health and sanitary systems, several guidelines were devised in British India to regulate the location and layout of residential space for the European settlers. These rules suggested that such environmental factors as air, soil, water, and elevation should be taken into account, when evaluating the ideal sites.²²³ Following these colonial conventions, prime locations were earmarked for the European staff quarters and considerable attention was paid to the provision of adequate ventilation, efficient drainage and sewerage disposal, clean water supplies, and elevated terrains. For instance, in the oil fields, a prominent spot, known as the Guards' Hill, with a commanding view of the entire valley, the coolest location in the hot weather and well-protected from the sulfuric smells of the oil wells, was designated for the accommodation of British staff.²²⁴

A similar approach was adopted in Abadan. As part of the process of examination of the potential sites for the refinery, the bank of the Bahmanshir River was first regarded as a “salubrious place” for housing the British employees. The eastern foreshore of Abadan offered a cooler temperature and higher quality water supplies compared to the western shore.²²⁵ However, it was considered “mosquito-ridden” and even notorious as the site of frequent outbreaks of malaria. In the end, it was suggested that staff residences should be distanced from the stagnant pools and creeks of the eastern shore and be located in the center of the island or near the bank of the Shatt-al-Arab river.²²⁶ As mentioned earlier,

²²³ Roy Macleod and Milton Lewis, *Disease, Medicine and Empire: Perspectives on Western Medicine and the Experience of European Expansion*, (London: Routledge, 1988), pp.40-41

²²⁴ Charles Ritchie to Strick, Scott & Co., 9th September 1911, *London Copies of Persia Correspondence between Manager, Strick, Scott and Company, Mohammerah, and Charles Ritchie, Agent, Strick, Scott and Company, Ahwaz*. BP Archives, ArcRef 71449

²²⁵ The Bahmanshir River was ten to twelve degrees cooler the Shatt in summer. G. B. Reynolds to Wallace, 4th February 1909, BP Archives, ArcRef 177165, “Letterbook: GB Reynolds in Persia to The Concessions Syndicate Ltd in Glasgow”, p.73

²²⁶ Lieutenant Arnold Wilson to Major Cox, 10th May 1909, in *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal. Labor at Abadan and other questions”, FO 460/3

staff housing eventually was placed at the western corner of the oil camp. Given the direction of prevailing winds, this neighborhood was shielded from the strong odors and gases emanating from the refinery.²²⁷

Colonial models also governed the architecture of the European quarter. This neighborhood, which came to be known as the Bungalow Area, was designed as a gated residential estate and was fully separated by metal fences from the other parts of the refinery. Representing an enclave within the oil enclave, the Bungalow Area contained a set of culture-specific values expressed in manifestations of modernity—such as spacious, solidly built bungalows, surfaced roads, manicured lawns, and electric light, heating, and ceiling fans.²²⁸ The neighborhood resembled the Anglo-Indian sector in the colonial city or what Anthony King terms the “colonial urban settlement.”²²⁹ The latter itself was based on the earlier colonial settlements and the residential models of the upper-middle class and the “landed gentry” in the metropolitan society.²³⁰ The Bungalow Area also had a lot in common with the contemporaneous “white zones” that multinational oil companies had built in oil enclaves in Central America and the Caribbean.²³¹

Resembling a residential block within the European quarter in the colonial city in India, such as the *civil station* or *hill station*, the initial layout of the Bungalow Area, as Figure 3.1 shows, consisted of a straight avenue, known as the High Street, which ran

²²⁷ Mark Crinson, “Abadan: planning and architecture under the Anglo-Iranian Oil Company,” *Planning Perspectives*, 12 (1997), p.343

²²⁸ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.146

²²⁹ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.45

²³⁰ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.57

²³¹ Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.19

perpendicular to the Shatt-al-Arab river, and was lined with rows of rectangular plots reserved for detached residences. The reference model for the High Street was the *Mall*, the main thoroughfare in the Anglo-Indian settlement. As a place of social interaction and personal display, the colonial *Mall* itself was a reinterpretation of the principal avenues in the metropole that connected the major political, social, and religious institutions.²³²

As Ching-Liang Low notes, “a topos of linearity and geometry” underlay the Anglo-Indian settlement. The geometric lines in the colonial city “are not only literal descriptions of the physical settlement patterns of the European community, but are also vivid testimonies to the culture’s persistent interest in demarcation, naming and segregation.” For Ching-Liang Low, such preoccupation with “walls, detachment and spaces-in-between” originated from the settlers’ deep-seated anxiety about the destruction of racial boundaries by daily activities of “native” population.²³³ Indeed, the Company’s obsession with demarcation manifested itself at the outset of operations when the first enclosure was put up around the refinery. In March 1910 soon after the Sheikh of Khorramshahr and the representative of the Company jointly confirmed the exact demarcation of land on the ground, the boundary of the one-square-mile site was marked with brick pillars.²³⁴ Unclimbable metal fencing, ten feet high, enclosed the site, separating it from the adjacent date gardens and agricultural settlements.²³⁵ Similar to the colonial

²³² Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.86

²³³ Gail Ching-Liang Low, *White Skins/Black Masks: Representation and colonialism*, (London and New York: Routledge, 1996), p.158

²³⁴ A. T. Wilson to Lloyd, Strick & Co., 1st March 1910, in *The Anglo-Persian Oil Company 1908-1916*, “D. Correspondence re Abadan and Manikh Site”, FO 460/3

²³⁵ 'Administration Reports 1905-1910' [274r] (552/616), British Library: India Office Records and Private Papers, IOR/R/15/1/710, in *Qatar Digital Library*

examples in India, the fences were used to keep the local population off the site.²³⁶ In other words, “lines of demarcation were also lines of defense.”²³⁷ At Abadan, for the purpose of social control a physical enclosure was utilized to separate the refinery’s space from the public realm. Enclosure was thus used as part of a spatial technology of control.²³⁸ Spatial enclosures and partitioning are also capable of enforcing bodily discipline.²³⁹ Andrew Herod maintains that the practice of crossing the physical boundary that circumscribes workplace creates a sense of self-discipline and instills a set of work-related values, attitudes, and behavior in workers.²⁴⁰ Therefore, building fences within the refinery and separating different zones were also used as mechanisms for labor control and discipline.

In order to maximize hegemony over space, Company officials even planned to make the foreshore exclusive to the refinery and block the public access to the site’s riverfront by extending the northern and southern fences up to six yards beyond the low water line into the river.²⁴¹ Beside the underlying colonial disposition and social control, the idea of cutting the public access to the riverfront was driven by economic logic. If implemented, some 2000 yards of fencing material on the refinery’s frontage could have been saved. The legal advice from the British military officer prevented a potential

²³⁶ Anthony D. King, *The Bungalow: The Production of a Global Culture*. (Oxford University Press, 1995), p.43

²³⁷ Gail Ching-Liang Low, *White Skins/Black Masks: Representation and colonialism*, (London and New York: Routledge, 1996), p.158

²³⁸ Andrew Herod, “Social Engineering through Spatial Engineering: Company Towns and the Geographical Imagination,” in *Company Towns in the Americas: Landscape, Power, and Working-Class Communities*, ed. Oliver J. Dinius and Angela Vergara (Athens: The University of Georgia Press, 2011), p.28

²³⁹ Michel Foucault, *Discipline and Punish: The Birth of the Prison* (French ed., 1975; English ed., New York: Pantheon Books, 1977), p.201.

²⁴⁰ Andrew Herod, “Social Engineering through Spatial Engineering: Company Towns and the Geographical Imagination,” in *Company Towns in the Americas: Landscape, Power, and Working-Class Communities*, ed. Oliver J. Dinius and Angela Vergara (Athens: The University of Georgia Press, 2011), p.28

²⁴¹ Lloyd, Strick & Co. to A. T. Wilson to, 29th June 1910, in *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal. Labor at Abadan and other questions”, FO 460/3. p.64

encroachment upon the public realm which could have not only curtailed the daily passage of local crafts but also upset ecological balance on the island. Lieutenant Wilson reminded the managing agents that Article No.1 of the Abadan Agreement prohibited the Company from blocking public right-of-way along the riverfront.²⁴² The Company's obsession with fencing aroused suspicion in Tehran. The Iranian Government accused the Company of building a fort and secretly importing guns and ammunition to Abadan. To verify these claims the agent of the Iranian Foreign Office in Khorramshahr, known as *Karguzar*, visited the refinery site.²⁴³

Tents and Tins: Early Accommodation at the Oil Camp

At the outset of operations, the Company experimented with a variety of housing types and construction techniques to accommodate the first group of British personnel who were brought to Abadan for their managerial and specialized technical skills. European employees were engaged on three-year contracts.²⁴⁴ Moving from Burma and India to Iran, British oilmen draw inspiration from familiar settlement models in colonial settings. As in the oil fields, tents were pitched to shelter the first group of employees at Abadan. In November 1909, three plinths for a tent and store huts were constructed in the area

²⁴² A. T. Wilson to Lloyd, Strick & Co., 30th June 1910, in *The Anglo-Persian Oil Company 1908-1916*, "E. Relations with Sheikh Khazal. Labor at Abadan and other questions", FO 460/3. p.65.

²⁴³ *Persia Annual Report, 1909*. FO 416/111. p.42

²⁴⁴ For instance, the senior general assistant of Lloyd Scott & Co. (Lamb) came from Rangoon to Iran on the basis of three-year engagement of £600, £640, and £650 with free quarters and leaves in 1912 and 1913. Similarly, Greenwood, Junior Oil Assistant, was recruited from the Calcutta Oil Department for £360, £400, and £440 for three years with free quarters and leave "at usual time and on usual terms." C. Greenway to J. Hamilton, 13th December 1910, *Anglo-Persian Oil Company, Ltd. Private Letter Book, Volume 1*. BP Archives, ArcRef 54484. p.194. The salary range defined for a junior engineer employed at Abadan, Tembi or Fields for a three-year engagement was £200, £225 and £250 without allowance for messing. Strick, Scott & Co. to the Anglo-Persian Oil Company Ltd., London, 11th October 1911, in *London Copies of Persia General Correspondence*. BP Archives, ArcRef 71449

designated for European housing (C-2 in Figure 3.1).²⁴⁵ Although evidence is scanty regarding the composition and internal layout of these canvas structures, it seems that they were built on the service tent model, which was prevalent in India in the early twentieth century, and consisted of “a large and lofty room surrounded by double walls of canvas enclosing space between them with partitions at two or more corners for bath or store rooms.”²⁴⁶

To the west of the tents a typical colonial-style building was erected. It was a makeshift structure lined with timber and clad in corrugated iron (C-3 in Figure 3.1; also see Figure 3.3).²⁴⁷ The “tin bungalow” or “tin hut,” as the building came to be known, was rectangular in plan and featured a relatively high masonry plinth, a pillared verandah, and a thatched, high-pitched roof truncated at its apex — all characteristic elements of a typical Anglo-Indian bungalow of the eighteenth and nineteenth centuries. In colonial India, this type of structure was usually built for impermanent accommodation of British sojourners.²⁴⁸

²⁴⁵ C. A. Walpole to A. T. Wilson, 3rd November 1909, in *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal, Labor at Abadan and other questions”, FO 460/3. p.35.

²⁴⁶ Anthony D. King, *The Bungalow: The Production of a Global Culture*. (Oxford University Press, 1995), p.28

²⁴⁷ Henry Longhurst, *Adventure in Oil*. (London: Sidgwick and Jackson, 1959), p.46

²⁴⁸ Anthony King maintains that the Anglo-Indian bungalow had borrowed its key elements— i.e. free-standing, single-storey structure, the plinth, the pitched, thatched roof, and the verandah— from the indigenous Bengal hut. Anthony D. King, *The Bungalow: The Production of a Global Culture*. (Oxford University Press, 1995), p.28



Figure 3.3 A view of the first settlement at the Abadan refinery, circa 1911. From left to right, the tin bungalow, tents, and No.2 Bungalow under construction.
Source: BP Archives, ArcRef 36509



Figure 3.4 A photo of the first settlement in the Oil Fields, circa 1908. The caption reads: “Building on right with verandah was messroom and two bedrooms, building nearest camera was offices and that farthest from camera (near hills) was servants’ quarters.”
Source: BP Archives, ArcRef 64874

The Bungalow: A Colonial Housing Prototype

The term bungalow deserves some further discussion here. It was the nomenclature used to describe the first series of dwellings erected for the accommodation of British employees in Iran. In the 1930s and 1940s, it was used to describe almost all types of company

housing. As part of the cultural legacy of oil, the term remained in public usage and became part of the social and architectural vocabulary in Khuzestan Province even after the nationalization of the oil industry in 1951. In his masterful study of the bungalow across time and space, Anthony King shows that this type of dwelling is a multidimensional phenomenon— it is the physical as much as the cultural, the social, the political, and the economic. The meaning of the term evolved since the seventeenth century, when it was first used to describe the peasant's hut in Bengal. In the colonial context, however, the term described a type of housing "suitable for the European occupation." Anthony King notes that, "the bungalow, and the architecture in which it is expressed, becomes a symbol of the new imperial power."²⁴⁹

By building the first bungalow at Abadan, British oilmen not only introduced a novel housing prototype, but also transplanted the concomitant colonial attitudes and social relations as well as a host of norms, behavior and domestic lifestyle which were hitherto nonexistent in southwest Iran. The tin bungalow thus served as the culturally controlled environment and the territorial unit for the first colony of British expatriates in Abadan. It was also the harbinger of the socio-spatial hierarchy and the lack of unitary character in Abadan's physical-spatial form.²⁵⁰ Indeed, along with the bungalow such colonial distinctions as "sahib" and "mehsahib" arrived at Abadan and began to draw hard and fast racial lines within the workforce.²⁵¹

²⁴⁹ Anthony D. King, *The Bungalow: The Production of a Global Culture*. (Oxford University Press, 1995), p.1-9

²⁵⁰ Mark Crinson, "Abadan: planning and architecture under the Anglo-Iranian Oil Company," *Planning Perspectives*, 12 (1997), p.345

²⁵¹ Laurence Paul Elwell-Sutton, *Persian oil: a study in power politics*. (Lawrence and Wishart, 1955), p.102

Although there is no evidence on the internal layout of the first bungalow at Abadan, it can be assumed that it followed the original colonial model which consisted of a main central chamber surrounded by three or four rooms. Similar to Anglo-Indian bungalows, the tin hut was permanently staffed by several Indian servants.²⁵² A visual comparison of the early settlements in the refinery and the Fields (Figures 3.3 and 3.4) reveals that the tin bungalow fulfilled at least two functions. As Figure 3.4 illustrates, the early structures in the oil fields, which were organized around a central open space, consisted of the tents, servants' quarters, dining hall/residence, and administrative offices. Assuming that the same model was applied at Abadan, it can be inferred that the tin bungalow was used, simultaneously, as a messing hall and a residence. Occupied by European senior staff, the tin bungalow overshadowed the adjacent tents and huts that were put up to house junior employees, including the British assistant engineers. In other words, Figure 3.3 could be viewed as a microcosm of the European quarter in the years to come. It represents the conscious engineering of residential space to forge industrial relations within the first-class personnel at the Abadan oil camp. It shows how colonial housing typologies were used both to accommodate different classes of labor and shape, maintain, and reinforce, the favored social hierarchy.

“Kutchā” and “Pucka” Bungalows

The technical-colonial order was further imprinted onto the spatial layout of the oil camp when the first two-storied *pucka* bungalow was erected on the refinery's foreshore (E-1 in Figure 3.1). In colonial India, *Pucka*— as opposed to *cutcha* (or *Kutchā*) — bungalow was

²⁵² Anthony D. King, *The Bungalow: The Production of a Global Culture*. (Oxford University Press, 1995), p.45

a masonry structure designed for long-term or permanent use and represented the phase of consolidation of power in the process of colonial domination. While *cutcha* bungalow was of temporary nature, usually built of sun-dried bricks and plastered with mud or mortar, *Pucka* bungalow was made of burnt bricks.²⁵³

Indeed, the first pucka bungalow at Abadan complemented the settlement pattern borrowed from the colonial housing model which had already begun by the construction of the tin hut which was a type of *kutcha* bungalow. The *pucka* bungalow, unlike the tin hut, drew from the local construction techniques and materials, and, similar to colonial buildings, was the product of cultural interaction.²⁵⁴ Similar to the buildings in Khorramshahr or Basra, it was made of sun-dried bricks with facing of burnt bricks. The roof was made of mat and *chandel*²⁵⁵, and was “constructed of [wooden] poles of small diameter placed close together and overlaid with mats made from date palm leaves and covered with earth.”²⁵⁶ The building's upper floor housed two senior staff members, including the refinery manager, and the ground floor served as the general office and the dispensary.²⁵⁷

As Margaret Crawford argues, change is an inherent feature of company town.²⁵⁸ Building, alteration, demolition, and rebuilding were among the activities that were

²⁵³ Anthony D. King, *The Bungalow: The Production of a Global Culture*. (Oxford University Press, 1995), p.30

²⁵⁴ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.46

²⁵⁵ Chandel or chandle was natural wooden pole about 12 to 14 feet long, 4 inches in diameter at the thickest part tapering to 2.5 inches, which was imported to South Iran by the date dhows returning from Mombasa, the port-city on the coast of present-day Kenya. “Housing in Persia” in *Abadan and Fields: Housing, Extensions, etc.* (1936), BP Archives, ArcRef 67525, p.2

²⁵⁶ *The Naft*, 7 (July 1931), p. 16

²⁵⁷ Henry Longhurst, *Adventure in Oil*. (London: Sidgwick and Jackson, 1959), p.46

²⁵⁸ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.5

prevalent in all industrial settlements. The Abadan oil camp was no exception. Perhaps due to structural or functional failure, the *pucka* bungalow had to be replaced with No.1 Bungalow, also known as “Ye Castle.” As the first permanent building in Abadan, No.1 Bungalow was completely constructed of local materials and embraced some architectural features of vernacular buildings in southwest Iran. In this sense, the castle signified the rationalization of construction and the evolution of meaning and form in bungalow design practices in the Abadan refinery. As Figure 3.5 illustrates, unlike Abadan’s first *kutchā* bungalow, No.1 Bungalow was not built on a raised podium. The plinth, on which the building was constructed, was designed to ensure protection against high tides and spring floods.

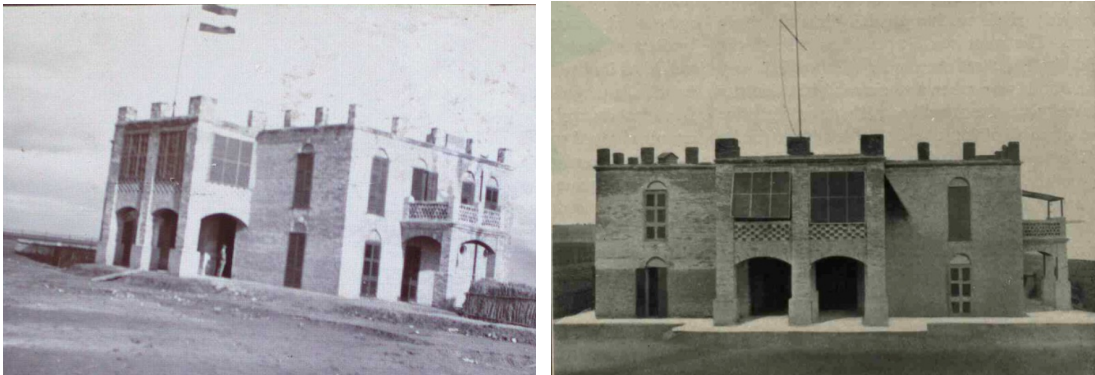


Figure 3.5 No.1 Bungalow, also known as the Castle, circa 1911. It functioned as the Works Manager’s residence and temporary Office.

Sources: BP Archives, (Left) ArcRef 36137, (Right) ArcRef 176326w

No.1 Bungalow served as the Works Manager’s temporary residence-office and was the only non-rectangular building in the oil camp. It was cruciform in plan, featuring a flat roof, thick walls, ceiling-to-roof windows, and window shutters—a set of design provisions aimed to protect internal space against extreme climate, facilitate cross-ventilation, and control the penetration of excessive sunlight into the building. No.1

bungalow was a two-storied structure, and unlike the tin hut, the verandah would not run around the building. In the Persian Gulf region, the second storey was a critical component of residential buildings, particularly in hot, moist summers when the ground floor, unless situated on a very high plinth, was practically uninhabitable.²⁵⁹ The building's location, character and form, in particular its fortress-like appearance, gave a symbolic dimension to the refinery. In other words, the Castle served as an architectural representation of the oil enterprise. Perhaps to appease the nationalist feelings, as Figure 3.5 shows, the Iranian flag began to appear on top of the building.

Technical Desiderata and Organization of Space

Not only was the physical-spatial form of the Bungalow Area influenced by the colonial settlement typologies, it was also affected by the technical necessities of oil production. Technical requirements, for instance, caused alterations in the layout of the neighborhood as well as the pattern of land use in the northwestern section of the refinery. In 1912, the neighborhood's linear shape, originally organized along the High Street paralleling the refinery's western enclosure, took a turn in the opposite direction and then extended along the foreshore towards the site of No.1 Bungalow. This shift came about for two reasons. First, as Figure 3.6 illustrates, the eight-inch pipe running from the crude oil tank farms (Section C) to No.1 jetty blocked the eastward extension of the Bungalow Area along the initial straight axis. This pipeline was laid to increase the production of crude oil and compensate for the delay in completion of the refinery— which was initially scheduled to

²⁵⁹ A. P. Trevor to P. Cox, 18th October 1913, 'File 3/2 Agency Buildings, from 1912' [57r] (128/484), British Library: India Office Records and Private Papers, IOR/R/15/2/53, in *Qatar Digital Library*

get completed by January 1912.²⁶⁰ Second, the idea of the expansion of the Bungalow Area towards the “Finished Oil Tanks” was considered a risky arrangement. Therefore, a technical barrier, which resulted from economic exigencies of the time combined with safety considerations led to the formation of an L-shaped neighborhood. As a result of these developments, the subdivisions at the western corner of the foreshore (E-2 & E-3 in Figure 3.1), which were reserved for future extensions, took up residential and entertainment functions.

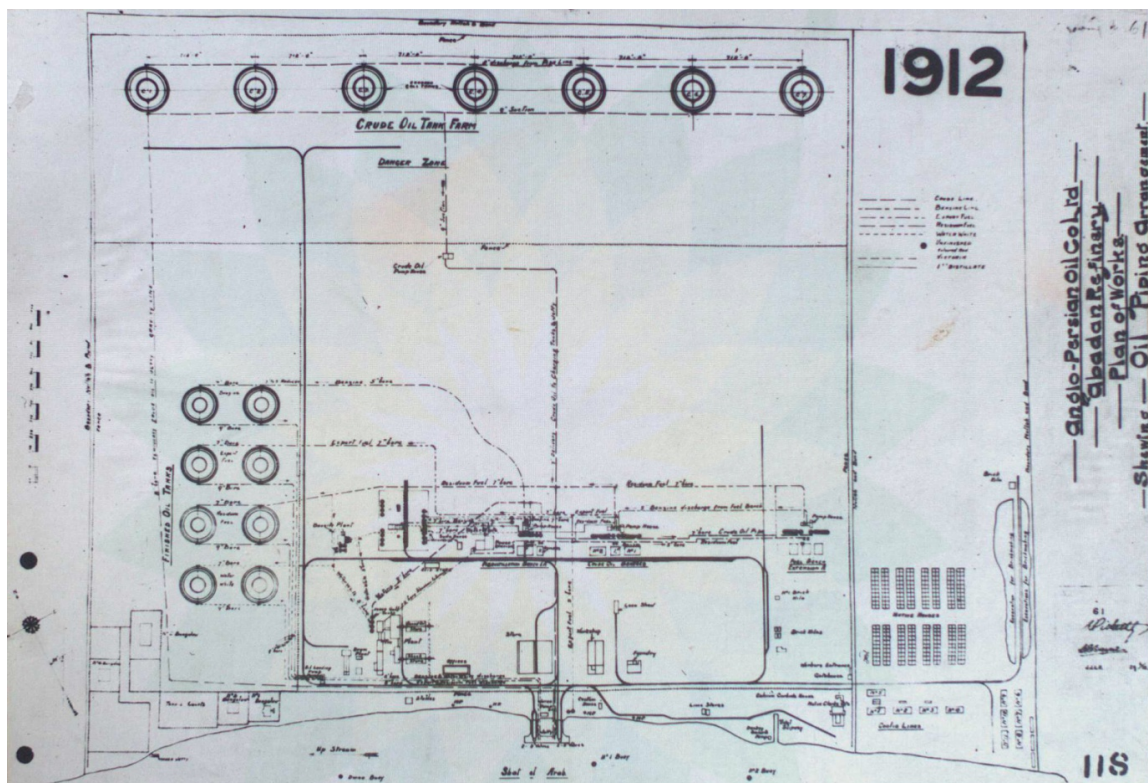


Figure 3.6 Plan of the Abadan Refinery, 1912.

Source: BP Archives, ArcRef 36509

²⁶⁰ “The second annual meeting report,” August 1911, *Anglo-Persian Oil Company, Ltd. Private Letter Book, Volume 1*. BP Archives, ArcRef 54484. p.386. Also: ‘Administration Report of the Persian Gulf Political Residency for the Years 1911-1914’ [42r] (88/488), British Library: India Office Records and Private Papers, IOR/R/15/1/711, in *Qatar Digital Library*. p.70.

The Bungalow Area's spatial structure was also engineered to reinforce the hierarchical social order that was initially forged as a result of the first settlement pattern. On the eve of WWI ten bungalows in total were constructed for the accommodation of forty-eight European personnel. The Refinery works manager and other senior staff resided in two-storied bungalows erected on ample plots on the foreshore. For instance, as Figure 3.7 shows, in 1912, No.3 Bungalow was erected on the parcel adjoining No.1 Bungalow (E-2 in Figure 3.1). No.5 Bungalow was built on a section of the parcel initially designated for the Works Manager's residence (E-4 in Figure 3.1). Mid-level British employees were accommodated in the medium-sized bungalows behind the front row. No.4 Bungalow, for example, was built on the subdivision opposite No.2 Bungalow (C-4 in Figure 3.1).



Figure 3.7 A view of the Bungalow Area near the foreshore looking east, 1912. No.3 Bungalow to the left and No.1 Bungalow (the Castle) in the center, both constructed in the “Country” Style and used for the accommodation of senior staff.

Source: BP Archives, ArcRef 28253

Junior employees were housed in smaller bungalows located at the northwestern corner of the Bungalow Area which were designed for a group of two, four, or six men. As Figure 3.8 illustrates, four small bungalows for junior bachelor employees were erected on the new subdivisions opposite No.2 Bungalow. In the light of the new land acquisition in December 1914, the Bungalow Area began to expand northward. During the War years, two junior bachelor bungalows (Nos. 11 and 12) were also built on the strip of land at the

northern enclosure of the refinery. In the postwar years, due to the shortage of housing, European employees of varied grades had to share accommodation. In 1920, for instance, there was no room to accommodate the three new marine superintending engineers. Junior employees had to share rooms with other peers and even sitting rooms in all small type bachelors' bungalows were converted into bedrooms. Moreover, some men had to go to other bungalows to dine.²⁶¹ As a result, in these years distinctions by the type of accommodation became less pronounced. This situation necessitated further land acquisition and led to the expansion of the housing program. In May 1922, 21 jareeb (acres) of land were acquired for a period of 60 years for a single payment of £500. As Figure 3.9 depicts, the new land was located adjacent to the Bungalow Area, immediately north of the ground acquired in December 1914.²⁶²



Figure 3.8 A view of Small Type Bachelors' Bungalows (No.7-12) seen from Bungalow No.6, circa 1920.

Source: BP Archives, ArcRef 36530

²⁶¹ R. G. Neilson to M. Greenwood, March 12th, 1920, *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

²⁶² "Lot No.4", *Article 4: Land Acquisition, Abadan, Lots 1-14*, BP Archives, ArcRef 100497

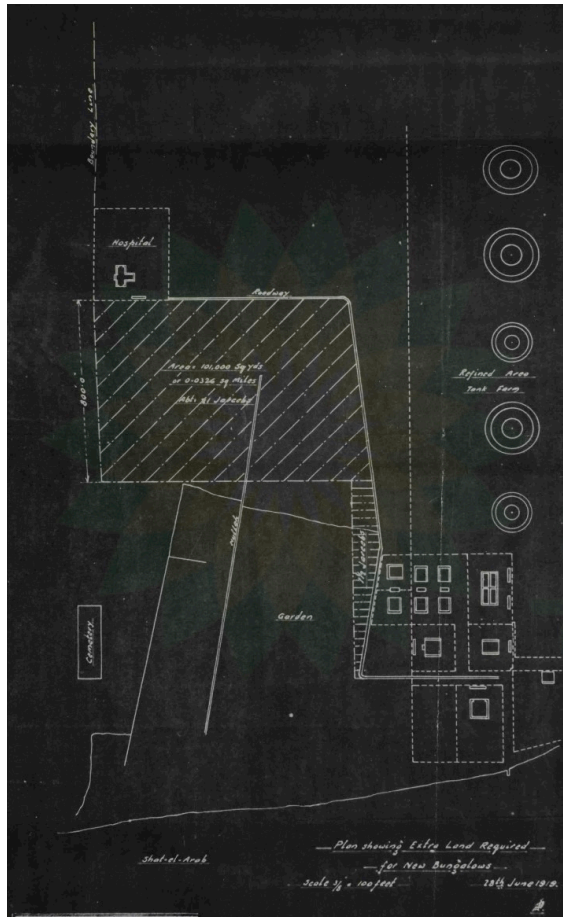


Figure 3.9 Site plan of the northern section of the Bungalow Area and the new land selected for Acquisition, June 1919.

Source: BP Archives, ArcRef 100497

The Bungalow-Compound Complex

A typical colonial bungalow was usually positioned within a two-to three-acre enclosed ground known as the “compound.” Constituting the building block of the European quarter in the Indian colonial city, the bungalow-compound complex consisted of several components, such as the garden, verandah, servants’ quarters, and drive— a private road to the house. The bungalow-compound complex, as Anthony King notes, crystalizes the cultural universe and the system of social behavior unique to the Anglo-Indian

community.²⁶³ The first series of detached bungalows at Abadan followed this colonial model. Each bungalow was staffed by several servants and a cook. In colonial bungalows, servants' quarters were located at the rear of the premises, "lying leeward at some distance from the bungalow."²⁶⁴ Following the colonial precedents, as Figures 3.10 illustrates, the servants' quarters in the senior-and mid-level staff bungalows were detached, single-storey structures erected on the periphery of each plot.²⁶⁵ Separation of servants' quarters from the main residence was also standard practice in the Victorian upper-middle-class homes, and facilitated the surveillance of servants.²⁶⁶



Figure 3.10 A view of the rear side of No.3 Bungalow Compound, circa 1921. As the photo shows, the Servants' Block was a single-story rectilinear structure located at the rear end of the premises.

Source: BP Archives, ArcRef 36530

²⁶³ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.92

²⁶⁴ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.91

²⁶⁵ In the junior bachelor bungalows built between 1913 and 1920, servants' quarters were located in the middle of each two the bungalows. This arrangement, which aimed to economize on building material and construction work, increased the level of surveillance of servants.

²⁶⁶ Andrew Herod, "Social Engineering through Spatial Engineering: Company Towns and the Geographical Imagination," in *Company Towns in the Americas: Landscape, Power, and Working-Class Communities*, ed. Oliver J. Dinius and Angela Vergara (Athens: The University of Georgia Press, 2011), p.32

Landscaping in residential estates was also viewed as a means of preserving the cultural identity of the British occupants. For instance, each bungalow was surrounded by a garden that functioned as a cultural link between the members of the expatriate community and the metropolitan society. As Gail Ching Liang Low notes, English gardens in colonial settings were a “sustained attempt to inscribe a leisured pastoral ideal of Englishness in a foreign land” and served as both a visual barricade against the undesirable outsiders and an element nullifying the adulterating effect of what was considered “foreign.”²⁶⁷ At Abadan, landscaping of bungalow compounds drew attention in the 1920s.²⁶⁸ For each bungalow a water pump was installed. In 1923, it was decided that the Company should take charge of the maintenance of all frontage gardens, because it was deemed “desirable for the sake of appearance that frontage gardens should be kept nice,” while employees had to cover the maintenance costs of the back yard and the side yards.²⁶⁹ Despite these efforts, in the beginning the quality of landscaping and gardens did not look impressive to some outsiders.²⁷⁰ However, following the appointment of the superintendent of gardens, and with the establishment of a nursey, where saplings and seeds of shrubs and hedges imported from Ceylon (present-day Sri Lanka) and India were cultivated, the

²⁶⁷ Gail Ching-Liang Low, *White Skins/Black Masks: Representation and colonialism*, (London and New York: Routledge, 1996), p.158-159

²⁶⁸ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.147

²⁶⁹ J. B. Lloyd, May 9th, 1923 “Gardens,” in *Abadan (Notes on a Visit)*. BP Archives, ArcRef 28604/003

²⁷⁰ The gardens surrounding bungalows did not look impressive in 1927 to the extent that a British observer argued that the beauty of a Persian Garden in Southern Iran is either a “literary fiction” or a “poet’s license.” See John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.147

quality of lawns and gardens considerably improved.²⁷¹ In the late 1920s, a British visitor characterized the Bungalow Area as an “English garden suburb.”²⁷²

Domestic Space and Furniture

Similarly, domestic space was organized to provide British oilmen with the culturally contained way of life. Since the first group of British staff had come from Burma and India, cultural preferences that governed the internal layout of domestic space were similar to those of the Anglo-Indian community or what Anthony King has characterized as the “colonial third culture.”²⁷³ In this sense, the bungalow served as a “cultural enclave,” offering the occupants with “solitude and familiar surroundings.”²⁷⁴ For instance, domestic space in colonial bungalows was divided, according to the upper-and middle-class norms in the metropolitan society, into separate, specialized rooms for sitting, relaxation, greeting guests, eating, bathing, and sleeping. Each specialized space was designed to fulfill certain functions and accommodated specialized, culture-specific equipment, such as cutlery, tableware, dining furniture and side boards.²⁷⁵

²⁷¹ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.147

²⁷² John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.146

²⁷³ Anthony King stipulates that the “colonial third culture” is the product of culture-contact situations in the colonized country between the cultures of the metropolitan society and the indigenous society. Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.65

²⁷⁴ Anthony D. King, *The Bungalow: The Production of a Global Culture*. (Oxford University Press, 1995), p.44

²⁷⁵ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.57



Figure 3.11 The Entrance Hall of the General Manager's Bungalow, circa 1926. The arrangement of furniture in this specialized space created a culture-specific environment resembling the domestic space either in a high-ranking official bungalow in the colonial setting or the upper-and middle-class residence in the metropole.

Source: BP Archives, ArcRef 36152

Until the late 1920s, all bungalows at Abadan were designed by engineers and draftsmen with Indian experience at the Managing Agents headquarters in Khorramshahr. In the early years, due to the lack of standardized plans, some personnel were able to alter the buildings' internal layout according to their own taste. In other words, the design of bungalows presented an opportunity to some British staff to display their occupational status and prestige within the oil enterprise. In one instance, two staff members changed their bungalow's original layout to surpass the size of their colleague's residence. This caused the actual capital outlay for the building to increase threefold and raised severe criticism from the Company Directors. The Directors even contemplated charging the respective employees with a rent calculated at ten percent of the total construction cost plus

the ground rent.²⁷⁶ In another case, the sitting and dining rooms in a bungalow were so disproportionately large that the occupant had to use partitions to make the spaces “habitable.” This situation made the Managing Director consider standardizing the domestic space “on the most economical basis.”²⁷⁷

Furnishing and decoration of European residences also recreated the domestic space of colonial bungalows in India or Burma. Some senior staff coming from the metropole expected to get the equivalent of a flat in London West End.²⁷⁸ As a general policy, the London management wished to keep the expenses down particularly in furnishing junior bachelors’ bungalows; however, the Company reluctantly followed the paternalistic practices of the Burmah Oil Company rather than the precedents set by British firms in India.²⁷⁹ In the beginning, furniture requirements were provided on a case-by-case basis. Sale indents were prepared by the Refinery works manager and then were sent through the Managing Agents to London for approval. Most of the articles were shipped from Karachi and London to Abadan. There were also some furniture items that were provided by local manufacturers. The quality of furniture imported from India was relatively poor and the articles provided from Britain turned out to be costly. Moreover, the Company had to pay fifteen-percent Iranian Customs Duty for imported furniture. All these factors made the company management consider manufacturing all the required

²⁷⁶ For instance, the construction cost of a bungalow for two junior married employees was estimated at £1,300. The total annual rent calculated for this bungalow was £150, which consisted of ten percent of the total construction cost (£130) plus £20 which was the annual rent of the plot. H.E. Nichols to C. A. Walpole, May 18th, 1916. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.131

²⁷⁷ H.E. Nichols to C. A. Walpole, July 6th, 1916. *Private Letter Book 3*, BP Archive ArcRef 78466, P.265

²⁷⁸ R. G. Nielson to C. A. Walpole to, May 17th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

²⁷⁹ In the Chairman's view, a bungalow for four junior assistants should not be provided with more than six sets of crockery, cutlery, linen, etc. C. Greenway to J. Hamilton, 6th September 1910, *Anglo-Persian Oil Company, Ltd. Private Letter Book, Volume 1*. BP Archives, ArcRef 54484. p.112

furniture in Iran. In 1920, plans were prepared to set up a woodworking plant at Abadan and make furniture for bungalows locally.²⁸⁰

Another strategy to economize on furniture expenses was to adopt a standard scale for different types of bungalows. Each bedroom was furnished with one washstand and a towel roll, but occupants were responsible for provision of their own face and bath towels. The bedroom also featured a single iron bedstead with M. Poles with mattress and two soft and hard pillows. One almirah (wardrobe), one chest of drawers with mirror, one toilet set, one *sleever* (sleeper) and one simple chair, and one *chota hazari* table were also provided. Before the Bungalow Area connected to the electric power network, each bedroom was lit by one kerosene-burning lamp. The bathroom usually included either a pucca bath with towel rail and water closet or a tin bath with one “thunder box” as well as one oil/electric lamp. Following the local practice in summer, employees would sleep on the roof in beds protected by mosquito curtains. Upon arrival, every employee was assigned one mosquito curtain, four pillowcases, four bed sheets, and two blankets. Employees were also charged for replacements.²⁸¹

²⁸⁰ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

²⁸¹ Strick Scott & Co. to Secretary Anglo-Persian Oil Company, July 30th, 1915. “Proposed Standard Furniture Schedule for Company’s Bungalow Fields and Refinery,” *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754



Figure 3.12 The Drawing Room in the General Manager’s Bungalow, circa 1926. As the residence of the highest-ranking Company official at Abadan, the Works Manager’s Bungalow was furnished with luxury items. For instance, Persian rugs rather than Indian durries adorned the drawing room.

Source: BP Archives, ArcRef 36152

The drawing room, which was a shared space, varied in size. In a typical bungalow, it usually featured a couch, two armchairs, four small chairs, one card table, and one Indian-style carpet known as *durrie* (dhurrie). Senior and junior bungalows were eligible to get an allowance up to £100 and £20, respectively, for extra amenities.²⁸² In senior officials’ bungalows, more items were used to furnish the interior and the furniture in general was of higher quality. For instance, in the residence of the General Manager, as shown in Figure 3.12, Persian rugs and upholstered armchairs decorated the drawing room. The number of oil/electric lamps corresponded to the size of the room.

²⁸² Strick Scott & Co. to Secretary Anglo-Persian Oil Company, July 30th, 1915. “Proposed Standard Furniture Schedule for Company’s Bungalow Fields and Refinery,” *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

The dimensions of the dining room were also proportionate to the number of occupants in each bungalow. This space included a Cambridge sideboard, a dinner wagon, one table with the required number of chairs, and a *durrie*. As with the drawing room, depending on the size of the room, sufficient lamps were provided to appropriately light up the space. Table linen and crockery also corresponded to the number of occupants. Kitchenware, however, was the same for different bungalows. Bungalows were supplied with crude oil and kerosene for water heating, light (before the electricity network was installed), and cooking, respectively. Each European employee had to recruit a servant at its own expense. In junior staff bungalows, a group of two, four, or six employees used to dine together.²⁸³ In the beginning, the Company provided four houseboys and one cook to each bungalow. In 1924, only one cook and one *farrash* was provided to each mess.²⁸⁴

Furniture, in general, fell into two categories: one group, including beds, tables, chairs, cutlery, and kitchen utensils for single employees, were repaired or replaced, if necessary, free of charge by the Company. The second group included the items that were replaced at employees' expense, such as crockery, mosquito nets, bed linen, and the like. Married employees were billed the cost of furnishing the extra bedroom and sitting room and had to provide their own crockery, cutlery and table linen.²⁸⁵

²⁸³ Strick Scott & Co. to Secretary Anglo-Persian Oil Company, July 30th, 1915. "Proposed Standard Furniture Schedule for Company's Bungalow Fields and Refinery," *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

²⁸⁴ "Refinery Staff Department," *The Anglo-Persian Oil Company Limited (APOC): Persian Compendium: Central Staff Department*, BP Archives, ArcRef 37034

²⁸⁵ Strick Scott & Co. to Secretary Anglo-Persian Oil Company, July 30th, 1915. "Proposed Standard Furniture Schedule for Company's Bungalow Fields and Refinery," *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

Prior to the formation of the Staff Department in February 1923, accommodation of British personnel was handled by different departments. For instance, allocation of employees to different bungalows was decided by the Refinery works manager. In July 1923, a Bungalow Warden was appointed who, under the supervision of the Chief Storekeeper, was in charge of the furniture store and was tasked with the smooth settling of the new personnel, ensuring the proper allocation of bungalow furniture, linen, and personal outfit based on the “sanctioned scale,” and returning all the personal items to the store upon the employee departure.²⁸⁶

Economic Pragmatism: From County-Style to Barrack-Type Bungalows

In order to build economical and enduring housing, the management experimented with different styles of construction. No.1 Bungalow, which was built based on the vernacular construction methods, accommodated only two seniors, while junior European staff continued to occupy the tin hut and canvas tents. In order to expedite the housing program, the management decided to build new bungalows on the lines of the so-called “European style” of construction. Between 1910 and 1911, five bungalows of European style were commenced. These buildings were made of steel frames with concrete slabs and were filled in with burnt bricks produced locally. Roofs were covered with cement plaster and insulated with puddled clay.²⁸⁷ One of the examples of this style was No.2 Bungalow (Figure 3.13; C-4 in Figure 3.1) which was a double-storied building designed for accommodation of eight men.²⁸⁸

²⁸⁶ *Anglo-Persian Oil Company Limited: Annual Report: April 1923 to March 1924, 1923*. November 1924, BP Archive ArcRef 54364, p.49

²⁸⁷ James Alexander Jameson, 1936, “Housing in Persia,” *Abadan and Fields: Housing, Extensions, etc.*, BP Archives, ArcRef 67525

²⁸⁸ Henry Longhurst, *Adventure in Oil*. (London: Sidgwick and Jackson, 1959), p.46

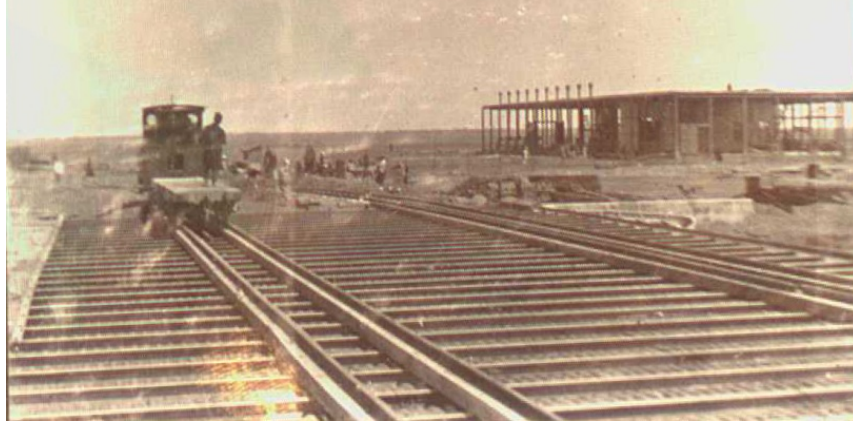


Figure 3.13 No.2 Bungalow under construction, 1911. It was constructed in the so-called “European Style.”

(Source: BP Archives, ArcRef 36137)

Since steel frames needed to be imported from Karachi or London, the total cost of this type of bungalow was relatively high. When Hamilton and Greenway, the Managing Directors of the APOC, visited Abadan in February 1911, it was decided to switch to the “country style” of construction in the next phase of staff housing. The Directors believed that the vernacular system would be “cheaper” and more “suitable” than the European style, and in the long run would largely “effect the economy.”²⁸⁹ The Works Manager’s bungalow and a semi-detached bungalow were built in the country style. These were double-storied structures made totally of kiln-burnt bricks. In general, the initial cost of the residences built in the local style was lower than those made with steel-framed structures. Nonetheless, due to the use of low-quality construction materials and weak foundations, the former deteriorated very quickly. Moreover, because of high maintenance costs, the

²⁸⁹ Report on Messrs Greenway and Hamilton's Visit to Persia, 28th April 1911, BP Archives, ArcRef 64689, p.5

management often chose to demolish and rebuild rather than refurbish the country-style buildings.²⁹⁰



Figure 3.14 Front views of the Works Manager’s Bungalow (No.5 Bungalow), circa 1920. Built in the “country style” on the Refinery foreshore, the Works Manager’s Bungalow also served as the architectural representation of the oil industry in the post-war era. In fact, the two-storied structure surrounded by a complete verandah turned into a prototype used extensively in the first-tier buildings constructed by the Company in the 1920s. Verandah, white gown, and helmet represented colonial-type environmental control strategies at the intermediate and micro levels, respectively.

Source: BP Archives, ArcRef 36164

Country-style bungalows were followed by small-type bachelors’ bungalows. As Figure 3.8 shows, these were single-story structures built with kiln-burnt bricks, featuring wide verandahs and chandelled roofs. Similar to their predecessors, these structures, built between 1913 and 1923, deteriorated quickly in the period of ten years.²⁹¹ Moreover, small-type bachelors’ bungalows faced a major technical problem. Because of the lack of top ventilation, pockets of warm air would accumulate under the ceiling which were blown

²⁹⁰ James Alexander Jameson, 1936, “Housing in Persia” *Abadan and Fields: Housing, Extensions, etc.*, BP Archives, ArcRef 67525

²⁹¹ James Alexander Jameson, 1936, “Housing in Persia” *Abadan and Fields: Housing, Extensions, etc.*, BP Archives, ArcRef 67525

onto the occupants by the ceiling fans.²⁹² This technical issue was addressed in the next generation of bungalows by employing the Anglo-Indian design practices. For instance, in the new bungalows clerestory ventilators were provided which were equipped with swinging glazed-and-wooden frames and protected by sunshade structures known as *chajja*.²⁹³ All these features were among the colonial design regulations of “tropical architecture,” or architecture for Europeans in the tropics, also known as Military Board style, provided by the Government of India in the second half of the nineteenth century.²⁹⁴

With the rapid increase in the number of European employees in the early 1920s, the Company embarked upon a housing program to accommodate the new junior bachelor staff. Once again, a colonial housing type, known as the *chummery*, served as a reference model. The *chummery* in British India was a type of accommodation providing rooms and a common kitchen to low-ranking bachelors or unaccompanied Europeans.²⁹⁵ At Abadan, this housing model evolved into a hybrid barrack-type bungalow which combined colonial precedents with vernacular construction techniques. Upon visiting the oil fields in the early 1920s, H. E. Nichols, the Managing Director, decided to draw inspiration from upcountry buildings which, in his view, were more economical and efficient than bungalows previously erected at Abadan. Built by the masons recruited from the cities of Shushtar and Isfahan, company-sponsored residences in the oil fields had embraced some elements of

²⁹² F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.10

²⁹³ F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.10

²⁹⁴ The bungalows designed on these lines included a central room with a flat roof which was higher than the verandah and featured 15-to 20-foot-high windows to facilitate ventilation and circulation of cool breezes. Anthony D. King, *The Bungalow: The Production of a Global Culture*. (Oxford University Press, 1995), p.45

²⁹⁵ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.45

the indigenous construction techniques. For instance, they featured arched ceilings made of local materials including stone and gypsum. Furthermore, the application of exposed gypsum plaster had made interiors look “brighter” and “cooler” than Abadan bungalows in which cement plaster and oil paint was used. Following the Managing Director’s visit, the Head Draftsman at Khorramshahr was tasked with preparation of design blueprints for a handful of new barrack-type bungalows at Abadan based on the housing models built at Masjid-i-Sulaiman.²⁹⁶ These bungalows which came to be known as Slide Valves provided one room per man and one bathroom for every three men and included a common kitchen (See Figure 3.15). The slide-valve type caused a great deal of discontent amongst occupants who always vilified this housing model due to its alleged congestion, shortage of bathing facilities, and lack of privacy.²⁹⁷

²⁹⁶ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

²⁹⁷ James Alexander Jameson, 1936, “Housing in Persia” *Abadan and Fields: Housing, Extensions, etc.*, BP Archives, ArcRef 67525

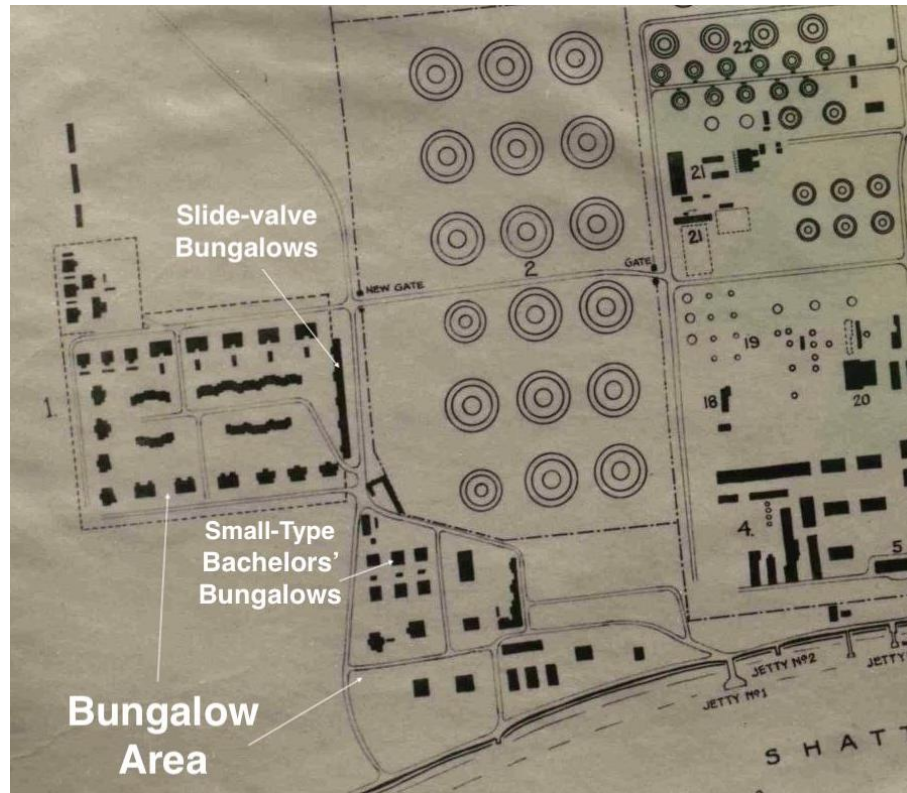


Figure 3.15 Site plan of the Bungalow Area, 1924.
Source: BP Archives, ArcRef 68331

The barrack-type bungalow was driven by economic pragmatism. Before the implementation of this housing scheme, the cost of a typical bungalow in Abadan was, on average, fifty percent higher than the residential buildings erected in other oil centers, such as Ahwaz and Masjid-i-Sulaiman. The management always believed that by improving the design quality and eliminating extravagant fixtures large sums of money would be saved and construction expenses would drop to a level close to other operation areas. For instance, the so-called “lavish” and “unnecessary” woodwork featuring older bungalows was removed from the new slide-valve type.²⁹⁸

²⁹⁸ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

Despite all the measures, construction expenses remained relatively high in Abadan. Several factors may explain this anomaly. First of all, given the island's extreme climatic conditions, thick walls and deep arcaded verandahs were required to counter the heat. Foundations also had to be stronger than buildings erected upcountry due to the salinity of soil and high levels of underground water. Moreover, bungalows at Abadan were made of kiln-burnt bricks with lime and sand mortar. A large share of construction materials had to be imported from outside. For instance, bricks in large proportions were supplied from Basra while some quantities were produced locally. Other building materials were provided through intermediaries or local suppliers on a five-percent commission basis.²⁹⁹ For instance, stone, sand, and gatch (gypsum) were brought in from Bushire through the intermediary of British Vice Consul in Bushire.³⁰⁰ Since building materials were not deemed ordinary articles of commerce, the prices varied throughout the year depending on various factors, such as seasonality, availability of boats, and political circumstances in districts.³⁰¹ In the postwar years, the monopoly for provision of building materials was granted to local authorities which further increased the rates.³⁰² From the constructional standpoint, due to the salinity of soil and high level of underground water in Abadan, which was within a depth of eighteen inches to six feet, heavy foundation was

²⁹⁹ Strick Scott & Co. to A. & T. J. Malcolm, September 11th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

³⁰⁰ Materials such as gatch, stone (small and large), and sand were sent to Abadan from the districts of Tangistan, Deyr, Dashti, and Ghuella Shur in the Province of Bushire. C. A. Walpole to H. G. Chick, 27th June 1912, BP Archives, ArcRef 104121, "All DO [Demi-Official Letters from except London and Glasgow]", p.49

³⁰¹ A. & T. J. Malcolm to Strick Scott & Co., August 26th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

³⁰² Lieutenant Arnold Wilson to More, January 26, 1923, '1/C III. Miscellaneous.' [174r] (356/632), *British Library: India Office Records and Private Papers, IOR/R/15/5/96, in Qatar Digital Library* <https://www.qdl.qa/archive/81055/vdc_100051556299.0x00009d> [accessed 11 November 2018]

required which consisted of a mixture of cement, broken bricks, and sand.³⁰³ Considering the geological properties of the island, engineers of the Associated Portland Cement Manufacturers Ltd. suggested that “slow-setting” cement should be used at Abadan which was more expensive than the conventional “very-quick-setting” type of cement.³⁰⁴ Increased exchange rate of Iranian currency in relation to Indian rupee and the inflated rates of construction labor in the postwar years could also account for the increased cost of bungalows. For instance, in 1919, the total cost of Bungalow No. 14 turned out to be sixty percent higher than the initial estimate.³⁰⁵

Individual buildings were contracted to local Arab headmen (maistry) or head masons from Khorramshahr or Basra. For instance, the construction of three plinths for a tent and store-huts which were among the first structures erected at the refinery was granted to a head mason (*ustad*) and four laborers who were recruited through a local merchant (Haji Nasir).³⁰⁶ The Managing Agents and the contractor would enter into an agreement, the terms of which were arranged in favor of the Company. For instance, the contract enabled the Company to oversee the progress and, if necessary, unilaterally interfere with or even take over construction work.³⁰⁷ It was also common practice to recruit contractors

³⁰³ “Housing in Persia” in *Abadan and Fields: Housing, Extensions, etc.* (1936), BP Archives, ArcRef 67525, p.8

³⁰⁴ C. Greenway to J. Hamilton, 10th May 1910, “Anglo-Persian Oil Company, Ltd.: Private Letter Book, Volume 1”, 1910-1911, BP Archives, ArcRef 54484, p.29

³⁰⁵ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

³⁰⁶ C. A. Walpole to A. T. Wilson, 3rd November 1909, “E. Relations with Sheikh Khazal, Labor at Abadan and other questions,” *The Anglo-Persian Oil Company 1908-1916*, FO 460/3. p.35

³⁰⁷ For instance, the company took over the construction of the office building and put chittagonians, artisans recruited from Chittagong region in India, present-day Bangladesh, who were primarily engaged in workshops and foundry, in charge of floor-cementing and other construction works. The company also allegedly engaged the masons brought by the head mason to Abadan at a higher pay rate. C. Walpole to C. Derby, 12th October 1912, BP Archives, ArcRef 104121, “All DO [Demi-Official Letters from except London and Glasgow”, p.323

through the intermediary of a guarantor who was usually a local notable or merchant and who would take the full responsibility for the satisfactory execution of the contract and completion of work by a fixed date. For instance, for the construction of the office building an Arab guarantor was hired through British firm Frank C. Strick & Co. which was the agent of the APOC in Basra. The commissions that the middlemen received also swelled the total construction costs.³⁰⁸

While economic pragmatism remained the major tenet of staff housing, in the 1920s environmental factors began to play an important role in the design of bungalows. As Figure 3.16 illustrates, the new section of the Bungalow Area took a new orientation to take advantage of the prevailing winds, including northerly and north-westerly winds in summer, and adapt to the climatic conditions of Abadan. Hence, the new bungalows were designed with wider southern facades and smaller windows on the eastern and western sides. The new bungalows also featured large clerestory windows, and older bungalows were retrofitted and equipped with non-glazed clerestory openings. The walls at the ground level were protected from the sun by verandahs designed to project shades on a horizontal distance of 8 feet in May, June, and July between the hours of 10:00 AM and 2:00 PM. To decrease heat conduction through the upper portions of the walls not protected by verandahs, cavity walls with six-inch still air were used.³⁰⁹

³⁰⁸ In case of disagreements, the guarantor acted as the arbitrator between the contractor and the Company. If the quarrel could not be resolved this way, the case would be presented to the British diplomatic representatives in Khuzestan for arbitration. C. Walpole to C. Derby, 12th October 1912, BP Archives, ArcRef 104121, "All DO [Demi-Official Letters from except London and Glasgow]", p.323

³⁰⁹ T. L. Jacks to the Director, London. August 3rd, 1926. "Abadan Township Reorganization Scheme. Report of Messrs. Temple and Wittet. Various Minor Recommendations," *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

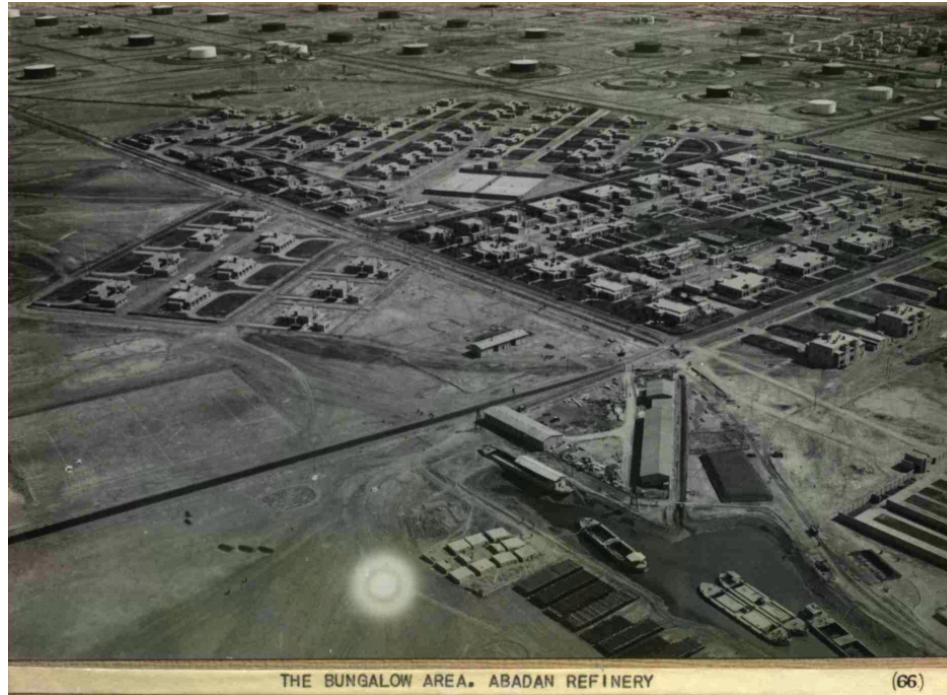


Figure 3.16 An Aerial View of the Bungalow Area, circa 1926. To better accommodate Abadan's climatic conditions, the new section of the Bungalow Area took a north-south orientation. Nevertheless, similar to the Anglo-Indian residential estates, bungalows were arranged *en echelon*. Moreover, ceremonial axialities, monumental symmetries, and wide setbacks were the characteristic features of the Bungalow Area.

Source: BP Archives, ArcRef 36529

3.2.1.2 Native Village: The Intermediary Zone. As mentioned earlier, the southern corner of zone D near the riverfront (D-2 in Figure 3.1) was initially earmarked for the accommodation of non-European employees. In this section of the oil camp a hybrid settlement known as the Company's Village emerged which constituted a second element of Abadan's triple urban space. Imbued with the colonial third culture, Company officials called this settlement the Native Village or the Native Lines. Until the early 1920s, the inhabitants of the Native Village were largely comprised of migrant workmen from India

who similar to the “intervening” groups³¹⁰ in the colonial city filled the intermediary ranks of the company town’s social hierarchy. While the refinery acted as a metal barricade separating the Bungalow Area from the Native Village, the village itself functioned as a buffer zone between the British expatriate community and the neighboring indigenous settlement that sprang up on the southeastern side of the refinery.³¹¹ The Native Village also served as the oil camp’s resource center. Not only did the neighborhood accommodate the second-class personnel, it was the site of production of large quantities of bricks, the major material used in the construction of the refinery. In the early years of operations, the soil extracted from the neighborhood was used for reclamation of the refinery site. The company also used part of this area as dumping ground and open store, where such construction material as bricks, firewood, building timber, poles, mats, and *bhoosa* (broken straw) were kept.³¹²

Coolie (Cooly) Lines and Native Houses

Before company officials began to build accommodation for “native” workmen, this group of employees lived in tents and other makeshift structures, similar to those shown in Figure 3.17, which were made of modest materials, such as mud, reed, corrugated iron, and thatch.³¹³ Eventually, arrays of mud huts, known as coolie lines, were built to house the

³¹⁰ I borrow this term from Ronald J. Horvath who defines the “intervening” group as a population imported to the “colonial city” from a third territory within the colonial system. See, Ronald J. Horvath, “In Search of a Theory of Urbanisation: Notes on the Colonial City,” *East Lakes Geographer*, 5, (1969): 69-82.

³¹¹ Rasmus Christian Elling, “On Lines and Fences: Labour, Community and Violence in an Oil City,” in *Urban Violence in the Middle East: Changing Cityscapes in the Transition from Empire to Nation State*, ed. Ulrike Freitag (Berghahn Books, Incorporated, 2015), p.207; Touraj Atabaki, “Far from Home, But at Home: Indian Migrant Workers in the Iranian Oil Industry,” *Studies in History* 31, no.1 (2015): 102

³¹² A Memorandum on Abadan, 1923 “Abadan (Notes on a Visit),” BP Archives, ArcRef 28604/003, p.3

³¹³ Henry Longhurst, *Adventure in Oil*. (London: Sidgwick and Jackson, 1959), p.47

first group of skilled and semi-skilled workmen who until 1922 were primarily composed of Indians. Coolie lines consisted of two words that both belonged to the language of the colonial third culture. The term *coolie*, prevalent both in the metropole and the colonies, was associated with exploitation and cheap labor and was a key element of the colonial economic system.³¹⁴ The word *lines* originated in the military terminology. Signifying a linear layout, the term denoted “the physical demarcations of ground indicating the relative location of the units of tented accommodation in a temporary camp.”³¹⁵ The term was also used to describe the area in the cantonment, the permanent military station in British India, where indigenous troops known as the “sepoy” and their families resided and constructed shelters made of “his own straw or bamboo and matting hut.”³¹⁶ The Coolie line was also a type of barrack housing prevalent in nineteenth-century all-male labor camps in Europe and North America which were built in isolated regions near extractive sites.³¹⁷ Barrack-like “shacks” were also used to accommodate unskilled workers in many American company towns in the early twentieth century.³¹⁸

³¹⁴ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.86

³¹⁵ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.85

³¹⁶ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.117

³¹⁷ Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.5

³¹⁸ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.44

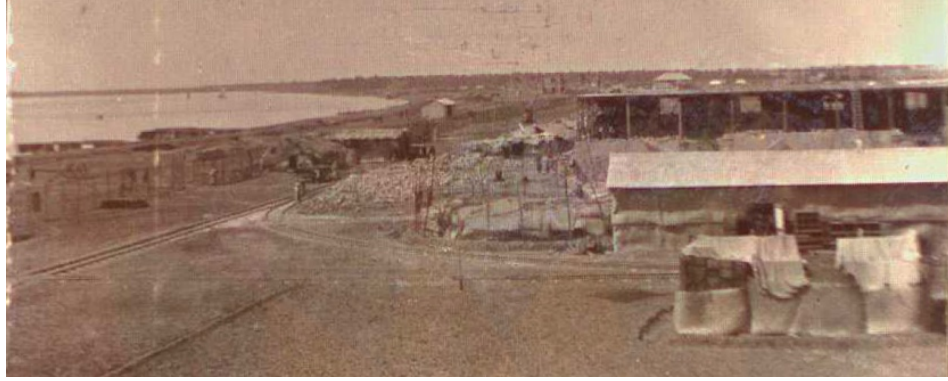


Figure 3.17 Abadan Refinery, a view of the western section of Zone D looking north, 1911. The photo provides a glimpse of makeshift or *kutchas* structures provided to the first group of skilled and semi-skilled laborers brought to Abadan from East Asia.

Source: BP Archives, ArcRef 36137

Like the bungalow, the coolie line also belonged to the toolkit of colonial agro-industrial architecture. The term was used to describe any planned or regulated accommodation provided for a service community. Providing the minimum level of shelter for workmen in plantation estates and manufacturing villages across colonial India, coolie lines followed a more or less prearranged layout: they were composed of one- to two-storied structures partitioned into back-to-back rooms opening onto a narrow verandah, five to six feet wide, which would run along either side of the building to protect rooms against excessive sun light and facilitate ventilation. The size of rooms ranged between ten and one hundred square feet. In plantation farms, usually two or more workmen of the same cast would occupy each room, and it was common practice to let laborers work out the arrangements among themselves.³¹⁹ Kitchen was provided at the end of the verandah, but usually cooking was done inside each room.³²⁰ In the colonial context, this industrial

³¹⁹ Edmund C. P. Hull, Robert Slater Mair, *Coffee Planting in Southern India and Ceylon* (E. & F. N. Spon, 1877), P.91

³²⁰ Shugan Chand Aggarwal, *Industrial Housing in India* (New Delhi: Roxy Press, 1952), P.142

housing prototype was provided for the lowest grade of unskilled laborers, or coolies.³²¹

In Abadan, however, coolie lines were designed to house the second-class personnel, including artisans, foremen, and clerks who were recruited from India, Burma, and China.

It seems that no specific plans or guidelines for the construction of coolie lines were provided by the London office. As a result, the Managing Agents who oversaw all the operations in Iran ordered the construction of ten coolie lines in the oil fields on the basis of the generic formula. Each “line” was composed of ten rooms, 100 square feet each—“big enough to hold a family,” in the words of a manager. The decisions regarding the selection of site, arrangement of the dwellings, and other construction specifications were relegated to the Fields works manager. Due to the scarcity of bricks in the oil fields area, coolie lines were to be built of stone and *gatch*, as gypsum was called in Farsi.³²²

³²¹ For an example of a quarter designed for coolies in a colonial coal station in Aden see: 'ADEN. ADMIRALTY OIL FUEL STORAGE' [22r] (1/2), British Library: India Office Records and Private Papers, IOR/L/PS/12/1491, f 22, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100032534612.0x00002c> [accessed 11 December 2018]

³²² J. Black to G. B. Reynolds, 30th May 1910, *Miscellaneous Papers Relating to Persia*. BP Archives, ArcRef 63984.



Figure 3.18 Abadan Refinery, Chittagonian Lines, circa 1920. As the photo vividly illustrates, each pair of coolie lines was comprised of two “lines” facing one another with a utility hut in the middle which contained the communal cooking and washing facilities. *Source: BP Archives, ArcRef 36179*

Evidence is scanty regarding the ways in which the first coolie lines were built at the Abadan Refinery. We may assume, however, that similar guidelines as those provided to the Fields must have been given to the Refinery works manager. It can be inferred that the first coolie lines were built of mud and sun-dried bricks because they were later referred to as “mud lines.” The map of the Refinery from 1910 sheds light on the initial layout of these structures (Figure 3.1; D2). The plan had envisioned three rows of housing organized in pairs running parallel to the Shatt. The open spaces provided among the lines aimed to facilitate ventilation and ensure social control. As Figure 3.18 shows, each pair was comprised of two “lines” facing one another with a utility hut in the middle which contained the communal cooking and washing facilities. Figure 3.18 also indicates that in order to “effect economy,” similar to the Fields, each coolie line was composed of double rows of ten rooms built back-to-back to save a wall in each two rooms. By August 1910, as Figure 3.1 shows, two units (No.1 & No.2) had been erected in Area D-2 on the Refinery’s foreshore.

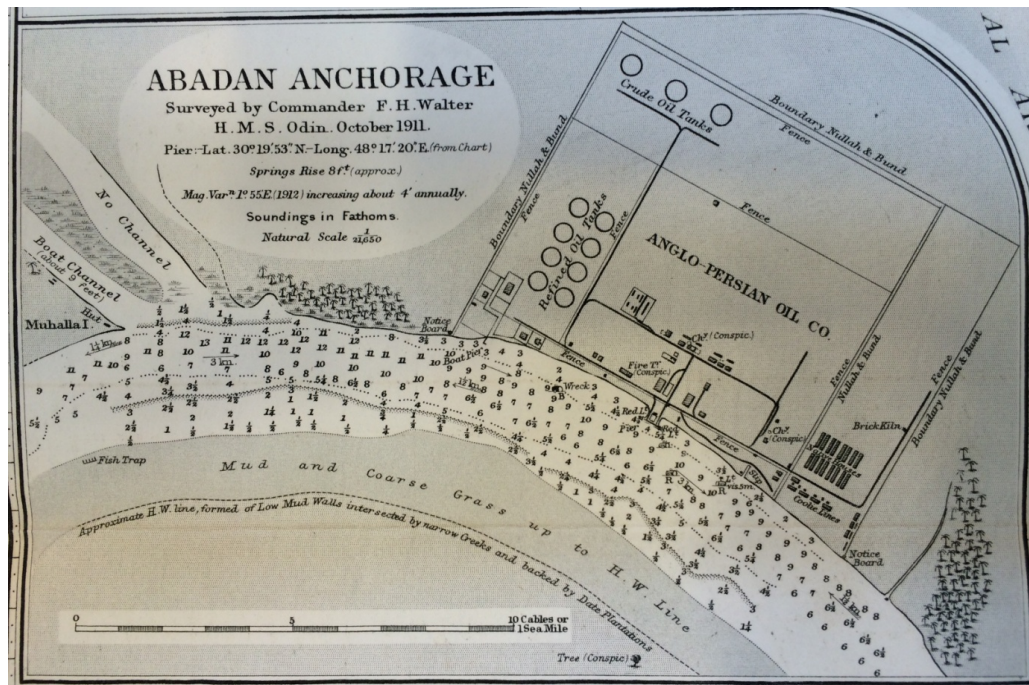


Figure 3.19 Map of the Abadan Refinery, October 1911.
 Source: FO 925/17051

The first residents of the coolie lines came from the Rangoon refineries. These men were Chittagonian Sunni Muslims with some experience in the Burmese oil industry who were sent to Abadan on a free-contract system through the intermediary of the Burmah Oil Company.³²³ The so-called Rangooni workmen formed the first cluster of skilled and semi-skilled workforce in Abadan, whose number steadily grew as additional migrant laborers were recruited from India and elsewhere.³²⁴ Since the beginning of operations, the employment of Indians in the Iranian oil industry met with strong protest from the Iranian Government. Per Article 12 of the D'Arcy Oil Concession, the Company was required to supply its workforce from Iranian subjects, except for “technical staff, such as the

³²³ Touraj Atabaki, “Far from Home, But at Home: Indian Migrant Workers in the Iranian Oil Industry”, *Studies in History* 31, no.1 (2015): p. 88

³²⁴ *The Naft*, 7 (July 1931), p. 15

Managers, Engineers, Borers, and Foremen.” The Iranian Government repetitively accused the Company of breaching the Concession and disapproved of recruiting large numbers of Indians and “Turkish subjects” – namely Arab and Armenian workmen employed from the present-day Iraq– in non-technical positions. Rejecting these charges, the Company always claimed that, “Indians are skilled mechanics or laborers of a class unobtainable in Persia.”³²⁵ Moreover, the Indian Emigration Act of 1883 restricted labor migration to specified regions, including Iran. The Company launched several rounds of negotiations with the British Raj to waive the restrictions on the employment of Indians in Iran.³²⁶

Indians were engaged through the offices of the British trading firm Shaw, Wallace and Co., which until 1926 acted as the agent of the Anglo-Persian Oil Company in India. The Company’s general policy was to shape an ethnically diverse pool of workforce composed of “antipathetic” sects, such as Hindoos, Sikhs, and Muslims, to prevent organization of labor and potential strikes.³²⁷ As a result, Shaw, Wallace and Co. and its subsidiaries opened offices in several provincial cities and industrial centers throughout the Indian sub-continent. For instance, for construction of tank farms, riveters were employed in Karachi and Bombay.³²⁸ To run the tinning department (tin-making plant) half a dozen solderers were recruited from other Indian installations.³²⁹ Clerks were recruited from the

³²⁵ F. Macindoe to Sadigh-es-Saltaneh, January 20th, 1915, *Correspondence with Persian Legation and Imperial Commission relating to Payments of Royalties and Legation Expenses*, BP Archives, ArcRef 69952

³²⁶ For a full account of negotiations between the Company and the Government of India regarding the employment of Indians in the Iranian oil industry and the subsequent changes in the Indian Emigration Act, see Touraj Atabaki, “Far from Home, But at Home: Indian Migrant Workers in the Iranian Oil Industry”, *Studies in History* 31, no.1 (2015): pp. 93-98

³²⁷ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

³²⁸ W. E. C. Greenwood to C. Greenway, 9th May 1914, “Busreh Fuel Oil Tank Depot” in *Persia: General Correspondence (Mainly Between London and Mohammerah)*, BP Archives, ArcRef 70284

³²⁹ C. A. Walpole to R. Pitkethly, 7th October 1912, BP Archives, ArcRef 104121, “All DO[Demi-Official Letters from except London and Glasgow”, p.306

Punjab area; servants for domestic services were supplied from Bombay; and, for process work Chittagonians were employed. However, for carpentry tasks and woodwork Chinese workmen were engaged.³³⁰ As it was standard practice at the Burmah Oil Company, and given the requirements of the Government of India, the indentured labor was brought to Abadan on a three-year contract. Transportation costs to Abadan (as well as return tickets to India) and accommodation were covered by the Company, while laborers had to take charge of their foodstuffs.³³¹ Political developments combined with labor activism made the company revise its labor recruitment policies. For instance, following the repatriation of large numbers of Indians in the early 1920s, skilled and semi-skilled workmen were recruited from Iranian, Armenian, Iraqi, and Bahraini nationals.

By 1912, 643 Indians and 36 Chinese were in the employ of the Company in Abadan,³³² and, as Figure 3.19 illustrates, in total eleven coolie lines had been constructed in the Native Village. Assuming that each coolie line was comprised of 20 rooms, then the rate of occupancy in the first series of coolie lines was, on average, three persons per room. Similar to the Bungalow Area, a piece of oil infrastructure influenced the layout of the neighborhood. As Figures 3.20 and 3.21 show, the extension of the light rail track for the brick-making project in Zone D blocked the eastward extension of the coolie lines. Rather than growing in parallel rows, as the initial plan had envisioned, the new wing of the lines

³³⁰ Touraj Atabaki, "Far from Home, But at Home: Indian Migrant Workers in the Iranian Oil Industry", *Studies in History* 31, no.1 (2015): p. 92

³³¹ R. G. Neilson to Strick, Scott & Co., 7th May 1914, *Persia: General Correspondence (Mainly between London and Mohammerah)*, BP Archives, ArcRef 70284

³³² 'Administration Report of the Persian Gulf Political Residency for the Years 1911-1914' [103v] (211/488), British Library: India Office Records and Private Papers, IOR/R/15/1/711, in *Qatar Digital Library*

was built perpendicular to Shatt. In the new section, the service units—containing cookhouse, water stands, and latrines—were placed at the back of each pair of coolie lines.

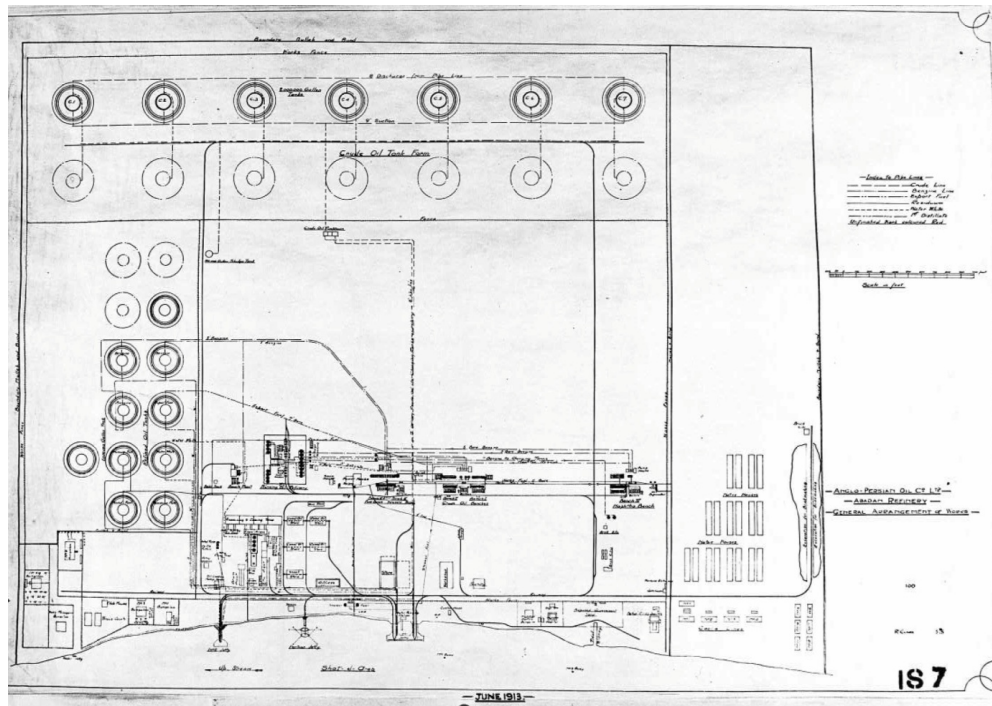


Figure 3.20 Site plan of the Abadan Refinery, June 1913.
Source: BP Archives, ArcRef 36509

The Native Village gradually grew eastward as the new rows of housing were built to accommodate the increasing population of workmen imported from abroad. Between 1912 and 1914, the number of Indian migrant laborers augmented from 643 to 900, of whom almost 400 were artisans (280 were fitters and 128 were rivetters) and the rest engaged in clerical positions.³³³ The new housing lines, called “native houses,” were planned on the eastern side of the brick kiln railway (D-3 in Figure 3.1). Maps of the Abadan refinery from 1913 and 1915 (Figures 3.20 and 3.21) show that native houses were

³³³ “Memorandum Regarding the Anglo-Persian Oil Company's refinery at Abadan, 20th January 1915, Works Manager, Abadan, to Strick, Scott & Co. Mohammerah, BP Archives, ArcRef 71754

envisioned as lines of barrack-type housing, organized in pairs. Native houses were morphologically similar to coolie lines but were longer and had larger rooms. In the select lines public water stands were provided.³³⁴

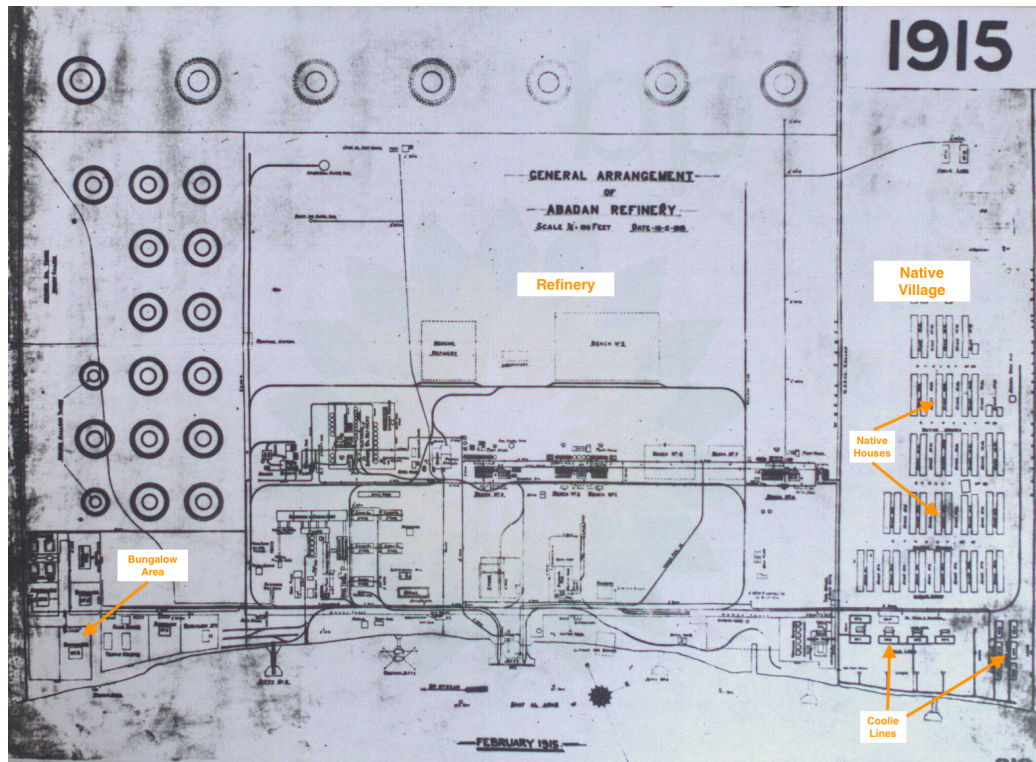


Figure 3.21 Site plan of Abadan Refinery, February 1915.
Source: BP Archives, ArcRef 36509

Spatial Engineering in the Native Village

Space in the Native Village was engineered at various scales to control labor and institutionalize the desired hierarchical order within the “native” workforce. At the level of residential units, coolie lines and native houses both were designed to create a regimented environment to shape the workers’ behavior and instill in their mind the sense of discipline

³³⁴ R. G. Nielson to C. A. Walpole., August 5th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General.* BP Archives, ArcRef 71754

and the rhythm of industrial work. In other words, coolie lines were used as an instrument not only to acclimate laborers to industrial life but also to turn them into an army of labor, eliminating the laborer's individual self in favor of a collective undertaking. Also, native houses and coolie lines were designed as rectangular structures to ease the visibility and control of the workers' movement. On the larger scale, the village's layout which was comprised of a network of intersecting streets and alleyways, was used to organize and divide workmen's housing and facilitate constant surveillance of the village and its occupants. No blind spots, enclosed open spaces, or dead ends were envisioned in the entire village. Furthermore, as Figure 3.22 shows, open spaces separated neighborhoods, such as the Inland Water Transport (I.W.T) camp and the New Coolie Lines, from the rest of the Village. Separation of quarters helped the Company provide varied paternalistic programs to different labor groups and minimized the risk of labor protest.

Designed to accommodate 2000 skilled and semi-skilled workmen on a supposedly clean geographical slate, the Native Village aimed to establish a hierarchical social order. To this end, the neighborhood was divided along ethnic and occupational lines. In the post-war years, for instance, it consisted of such sections as Old Process Lines, Mud Lines, Foremen's Quarters, Chinese Lines, Sikh Lines, New Process Lines, Punjabi Lines, Rangooni (Rangoony) Lines, Clerks' Quarters, Chittagonian Lines, Armenian Lines, among others.³³⁵ The hierarchical organization of the village determined the quality of housing. Coolie lines and native houses in Abadan, as in other industrial towns in India, were of *pucca* and *kutch*a types and, by and large, were made of low-quality and sometimes

³³⁵ L. F. Bayne to Strick, Scott & Co., March 30th, 1921, *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

recycled materials.³³⁶ In the Fields, for example, the doors and windows that were not deemed appropriate for bungalows were used in native houses.³³⁷ The construction of the newly built clerks' quarters in the oil fields was so poor that cook houses and latrines were demolished after a heavy storm of rain.³³⁸ As a general rule, the quality of each "line" corresponded to the occupational status of the occupants. Pucca buildings with better amenities were provided to higher-grade workmen, such as clerks, foremen, assistant engineers, maistries, and tindals. Moreover, fewer workmen were assigned to each room. For instance, every unit in the clerks' quarters consisted of a bedroom, which also served as the living room, with a bathroom for each clerk and a dining room for every two clerks. Latrines and cook houses were separated from the residential quarters by an alley.³³⁹ Clerical staff was entitled to free furnished quarters on three-year contracts. However, due to the shortage of accommodation, rooms were shared among a group of men. Moreover, most quarters were unfurnished, and employees had to bring their own furniture. Clerical staff was also granted allowances to recruit cooks and servants.³⁴⁰

³³⁶ In Indian jute mill quarters, for instance, pucca rooms were made of bricks with roofs of thatch. In some cases, reinforced concrete or asbestos corrugated panels were used for roofing. Kutcha rooms, however, were built of such modest materials as mud bricks or split bamboo with thatched or iron sheet roofing. Shugan Chand Aggarwal, *Industrial Housing in India* (New Delhi: Roxy Press, 1952), P.142

³³⁷ C. Greenway to J. Hamilton, 26th September 1910, *Anglo-Persian Oil Company, Ltd. Private Letter Book, Volume 1*. BP Archives, ArcRef 54484. p.124

³³⁸ R. G. Peel to the Hon'ble Political Resident in the Persian Gulf, March 4th, 1922, *A. P. Oil Company: Number and Treatment of Indian Employees*. British Library IOR/L/P.S/11/213

³³⁹ R. G. Peel to the Hon'ble Political Resident in the Persian Gulf, March 4th, 1922, *A. P. Oil Company: Number and Treatment of Indian Employees*. British Library IOR/L/P.S/11/213

³⁴⁰ R. G. Nielson to C. A. Walpole, May 29th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

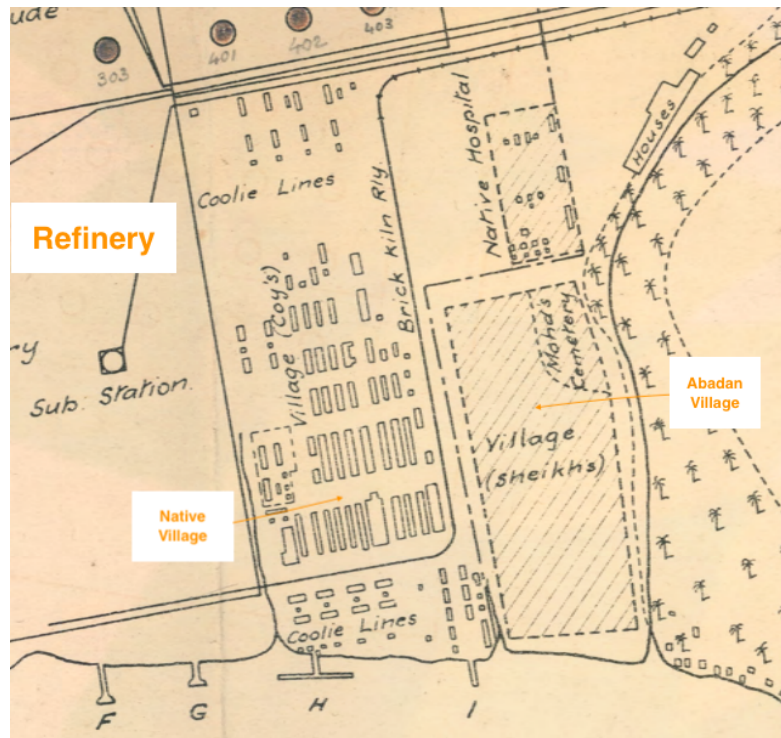


Figure 3.22 Site Plan of the Native Village, December 1919.
 Source: BP Archives, ArcRef 71403

Allocation of housing and amenities was not merely based on the occupational status of each “native” group. The Company favored certain elements of the workforce and provided them with better facilities. For instance, the most “habitable” quarters in the Native Village were provided to Chittagonians, who had a lengthy presence in Abadan and were considered one of the most loyal labor groups to the Company.³⁴¹ This group was also provided with a separate quarter below the brick kiln railway. Other company towns also created similar occupational, ethnic, and racial cleavages through manipulation of space both as a means of control and as a strategy to prevent organization of labor.³⁴²

³⁴¹ Jas Jameson, January 7th, 1924, “Abadan Refinery, Accommodation For Clerks and Artisans,” *Reports to the Board by Sir John Cadman, 1923 to 1924*, BP Archives, ArcRef 70209

³⁴² Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.21

Living Conditions in the Native Village

*“Most of the buildings are of a very temporary nature, and have in many cases been constructed of mud which has been excavated from the neighborhood...in addition to this, the buildings are huddled together much too closely...The only quarters which at present may be said to be really habitable are the Chittagonian Lines and even these require extensive repairs to the roofs, and are in any case hopelessly overcrowded at present.”*³⁴³

The juxtaposition of the gloomy picture of the Native Village rendered by the Company Manager and the map of Abadan from 1919 (Figure 3.22) shows that the Native Village was not constructed according to the preconceived plans. Native houses were erected in different sizes and shapes. The dimension and the number of rooms varied from one “line” to another. For instance, the Rangooni Lines consisted of 90 rooms, while Punjabi Lines included 50 rooms.³⁴⁴ Two major historic events may account for the chaotic development and high degree of overcrowding in the Native Village: the British Government takeover of the Anglo-Persian Oil Company and the outbreak of the Great War in Mesopotamia.

Up until 1914, the operations of the Company in Iran were largely affected by the uncertainties that encircled the incipient oil enterprise that was struggling in a competitive market dominated by colossal oil corporations. The threat of absorption by the Royal Dutch-Shell combined with the overwhelming financial hardships that the Company encountered after the refinery came into operation in 1912 compelled the Directors to look to the British Government for help. As discussed in the previous chapter, the A.P.O.C. enjoyed the government’s political support at various stages of its activity in Iran. For

³⁴³ Jas Jameson, January 7th, 1924, “Abadan Refinery, Accommodation For Clerks and Artisans,” *Reports to the Board by Sir John Cadman, 1923 to 1924*, BP Archives, ArcRef 70209

³⁴⁴ “Medical Department,” *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.88

British officials, however, the Anglo-Persian was merely a private firm whose undertakings were beyond the control of the British Government.³⁴⁵ Moreover, the concept of state aid to private industries was not yet an acceptable doctrine among British statesmen and policymakers who, by and large, had faith in the merits of *laissez faire* capitalism.

In these circumstances, an imperial vision changed the political atmosphere in favor of the Company. As early as 1904 the British Admiralty was considering the possibility of converting its fleets from coal-burning to oil-fired propulsion. The growth of marine engine technology and the rise of German naval power gave the project an increased urgency. A search began to spot resources with reliable supplies of fuel oil across the British territories and beyond. After it became evident that the Iranian oil fields were capable of serving the requirements of the Royal Navy on the long-term basis, the British Parliament in a radical break with tradition passed an act in June 1914, authorizing the British Government to purchase fifty-one percent shares of the Anglo-Persian Oil Company and appoint two ex officio directors with veto powers over all acts of the Company and its subsidiaries.³⁴⁶ The British Government takeover gave the Company enough financial means to expand its operations in Iran and abroad. Almost 30 percent of the two-million-pound government investment in the Company was designated for the refinery extensions and

³⁴⁵ Sir Edward Grey to Sir Richmond Ritchie, August 5th, 1909. File 1421/1908 Pt 4 'Persia: oil; Anglo-Persian Oil Co and Bakhtiari's' [197r] (251/292), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/2, in Qatar Digital Library

³⁴⁶ To read more on the preconditions and historical events that led to the British Government takeover of the Anglo-Persian Oil Company, see Ronald W. Ferrier, "Chapter 5: Fuel Oil and the Admiralty 1912-1914" in *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982); For a detailed account, see Marian Jack, "The Purchase of the British Government's Shares in the British Petroleum Company 1912-1914". *Past & Present*, no. 39 (1968): 139-68

improvements.³⁴⁷ Moreover, the Company signed a thirty-year contract with the Admiralty to provide the Royal Navy with a steady supply of fuel oil at a reduced fixed rate. All these developments not only caused the Iranian oil industry to boom, but also turned oil into a strategic commodity for the British Empire.³⁴⁸

The outbreak of the Great War in the region on November 5th, 1914, turned the Abadan Refinery into a “war center.” The oil infrastructure was used by the Government of India to support the Expeditionary Force against the Ottomans on the Mesopotamian front. The refinery also served as part of the British Empire’s communication infrastructure in the region. At the request of the India Office, a wireless station was erected at Abadan and a joint post and telegraph office was opened in 1916 on the Company’s premises.³⁴⁹ In return, the oil infrastructure in the entire province was protected by British forces. During the War years, the Refinery management was tasked with two projects: undertaking the Government War Programs³⁵⁰ and increasing the capacity of the Refinery to fulfill the Admiralty contract. To accomplish these assignments large supplies of skilled and unskilled labor were required.³⁵¹

³⁴⁷ To see the breakdown of the total government investment in the Company, see: Ronald W. Ferrier, *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982), p.262

³⁴⁸ Touraj Atabaki, “Far from Home, But at Home: Indian Migrant Workers in the Iranian Oil Industry”, *Studies in History* 31, no.1 (2015): 92

³⁴⁹ Captain A. T. Wilson to Strick, Scott & Co., “Captain A. T. Wilson,” October 21st, 1916. , BP Archives, ArcRef 68779.

³⁵⁰ For instance, the Refinery’s workshops were commissioned to carry out the India Office and Admiralty war supply programs, such as the assembly of China Gunboat Class and the repair of different types of tugs and barges, known as Tug and Barge Program, catering to the needs of the British Indian Expeditionary Force on the Tigris and Euphrates. Thomson to Lockhart, *Notes on Refinery Activities from 1909 to 1916*, BP Archives, ArcRef 71439, “Abadan Refinery, Historical Notes”

³⁵¹ Thomson to Lockhart, *Notes on Refinery Activities from 1909 to 1916*, BP Archives, ArcRef 71439, “Abadan Refinery, Historical Notes”

The Company leveraged its “special relations” with the British Government to persuade the Government of India to relax the restrictions on the emigration of Indian artisans and foremen to Iran. By May 1915, hundreds of Indian foremen and their families were brought to Abadan and accommodated in the middle section of the Native Village. New lines were also under construction to the north of the foremen’s quarters to house a group of Indian clerical staff.³⁵² However, provision of accommodation to the second-class personnel was not on the Company’s list of priorities, and housing production did not keep up with the increased populations of the workforce. Moreover, peculiar conditions created by the War also influenced the progress of construction work at Abadan. In these years, particularly after the fall of Basra on November 21st, 1914, not only did Abadan face labor shortage, it also experienced a rapid diminution in the supply of construction materials. Government projects in Basra offered more attractive employment opportunities than the Abadan Refinery, drawing large numbers of local and migrant workmen to the other side of the Shatt. Moreover, Abadan was required to supply construction materials, such as sand and rubble, for the Civil Commission works in Mesopotamia.³⁵³

Housing shortage was dire in these years to the degree that, for instance, in 1916 there was no room available in the Clerks’ Quarters to accommodate the Police Inspector.³⁵⁴ Also, the lack of proper accommodation caused the head of the Arab Guard, Sheikh Moose, to move to Khorramshahr.³⁵⁵ To provide rapid housing, the Company

³⁵² R. G. Neilson to E. G. Gregson, May 9th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

³⁵³ Strick, Scott and Co. Ltd. to A. T. Wilson, 6th April 1915, BP Archives, ArcRef 68779, “Captain A. T. Wilson”

³⁵⁴ R. G. Neilson to E. G. Gregson, May 9th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

³⁵⁵ R. G. Nielson to C. A. Walpole, May 28th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

adopted a vernacular housing prototype known as sarifa (also zareefa or sareefa), a prevalent form of shelter among “marsh Arabs,” which was constructed of mud and reed.³⁵⁶ For instance, several sarifas were erected to accommodate the Indian Force from 4th Rajput Detachment that was dispatched to Abadan to take charge of security at the Refinery. In another case, sarifas were put up to accommodate the construction staff who had come to Abadan in December 1914 to build a wireless tower.³⁵⁷ Housing shortage made the Inland Water Transport (I.W.T), a British Government agency, erect a compound for the accommodation of the I.W.T personnel, including the Persian Labour Corps. The so-called I.W.T Camp consisted of 27 mud huts and was located at the southeastern corner of the Native Village.³⁵⁸

Housing shortage also caused most “lines” to become overcrowded. In 1916, the British Consul for Khuzestan was shocked at the quarters’ state of overcrowding after learning that the Company would accommodate 60 people in a 60-by-12 foot shed.³⁵⁹ The

³⁵⁶ 'Military Report on Iraq - Volume II (Routes)' [220r] (454/473), British Library: India Office Records and Private Papers, IOR/L/MIL/17/15/47, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100038749712.0x000037> [accessed 15 January 2019]

³⁵⁷ Strick Scott & Co. to R. G. Nielson, December 28th, 1914. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

³⁵⁸ The I.W.T was a British Government agency that oversaw administration of vessels and barges in Mesopotamia’s waterways. The I.W.T first appointed a representative at Abadan whose main duty was to ensure that the needs for every product of oil in Mesopotamia during the War were promptly executed. When Abadan was struggling with the shortage of labor during the War, the I.W.T sent a gang of coolies to Abadan. Its Marine Engineering Department also took over the operation of the tin-making sheds when Abadan refinery failed to meet the increased needs for cased kerosene. As a result, Abadan become one of the I.W.T’s bases in the region during the Great War. The I.W.T Construction Department also laid out a camp on a piece of land on the southern corner of the Native Village for the accommodation of the I.W.T personnel. Similar to other labor corps in Mesopotamia during the War, Labor corps at Abadan were provided with food rations, accommodation and clothing. “The Chinese Labour Corps (CLC) in Basra,” *Collection Items*, British Library, <https://www.bl.uk/collection-items/map-of-shatt-al-arab-at-margil-near-basra-mesopotamia-showing-a-chinese-labour-corps-cemetery>

³⁵⁹ R. L. Kennion British Consul for Khuzestan, “Judgement,” February 12th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

Medical Advisor made similar observations: "...There are large rooms built, as far as I can make out, to accommodate no fixed number of men, with at one time twenty and at another time forty men in occupation."³⁶⁰ In 1921, as a result of a labor strike and the continued pressure from the Government of India, the Company launched a housing program for the second-class personnel and sanctioned the construction of eight blocks for married workmen, two houses for head maistries, eight houses for tail tindals, three new lines, and one block for married maistries.³⁶¹

Despite all these efforts, the housing situation did not improve in the Native Village. The Anglo-Persian Oil Company Annual Report in 1924 rendered the living conditions of artisans "deplorable." The Report claimed that at the Armenian Line which was among the best structures in the Native Village, fourteen families "herded together" in a 750-square-foot shed. Even several artisans and their families were living "under canvas" in the bazaar area. The shortage of housing made the Refinery works manager reject the applications of some Indian artisans to get permission to bring their families to Abadan.³⁶² Clerical staff also lived under similar circumstances. In the words of an Indian clerk, "...large numbers of people were huddled together in small rooms incompletely furnished, by way of furniture and lights, nothing to say anything of cook houses and latrines."³⁶³

³⁶⁰ Dr. Jamieson, August 23rd, 1922, "Sanitary Conditions at Abadan and Schemes for Improvement," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

³⁶¹ Blocks for married workmen and the lines took precedence over other housing projects and the total cost was estimated at £20,000. H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

³⁶² "Department of Labour," *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.61

³⁶³ A. T. Mudliar to the Fields Manager, January 10th, 1922. "Indians in Persia," Advertisement in Bombay Chronicle, *A. P. Oil Company: Number and Treatment of Indian Employees*. British Library IOR/L.P.S/11/213

The Company had adopted a standard scale of furniture exclusively for the higher ranks of the second-class employees. In the clerks' quarters, every bedroom/living room featured one bedstead, one chest of drawers, one deck chair, one bentwood chair, one teapoy, and one jug. The bathroom included one wash-stand with towel and one basin. By this standard, every clerk was to be provided with one mattress, two pillows, two pillowcases, four bed sheets, two blankets, one *lahaf*, one mosquito net, two bath towels, and four face towels. The dining room also featured one dinner wagon, one bentwood chair, one meat safe, one dining table and one ice chest. In practice, however, the full list of furniture was not provided to all clerks. Company officials acknowledged that such articles as ice chests, dinner wagons, and chests of drawers were not provided in sufficient quantities.³⁶⁴ As an Indian clerk noted, "People got to go without even bedsteads necessitating to sleep on the floor. [I]f there are chairs, tables are not available and if available not issued, reserving to the British." As a result, most furniture articles had to be acquired either from the company stores or from the bazaar on the workmen's own initiative.³⁶⁵ For instance, charpoy, the traditional Indian woven bed, was a very popular article among Indians and was selling at the Abadan bazaar.

Insanitary environmental conditions in the Native Village were conducive to the spread of diseases among the workmen. Not only were coolie lines and native houses congested, they were dark and damp. Drinking and bathing taps and latrine seats were disproportionately provided. Similar patterns were recorded in most agro-industrial

³⁶⁴ R. G. Peel to the Hon'ble Political Resident in the Persian Gulf, March 4th, 1922, *A. P. Oil Company: Number and Treatment of Indian Employees*. British Library IOR/L.P.S/11/213

³⁶⁵ A. T. Mudliar to the Fields Manager, January 10th, 1922. "Indians in Persia," Advertisement in Bombay Chronicle, *A. P. Oil Company: Number and Treatment of Indian Employees*. British Library IOR/L.P.S/11/213

company towns throughout colonial India.³⁶⁶ In the words of the Medical Advisor at Abadan: "...with a single case of smallpox in one of these rooms, 39 people are off work for a fortnight." Moreover, the rooms had no openings to the outside other than a door. As such, ventilation was poor or nonexistent.³⁶⁷ Given the climatic characteristics of Abadan, particularly in summer when the temperature would reach as high as 120 degrees Fahrenheit, living in these quarters must have been extremely tough. The "lines" were also crowded together, another factor that was believed to be contributing to the spread of disease and epidemics. Only Armenian lines were built with "sufficient" space between the buildings.³⁶⁸ Furthermore, only two nullahs on either side of the village collected water run-offs and effluents and an effective drainage system was nonexistent. Unlike the Bungalow Area, where structures and roads were built on raised platforms, no measure was taken to protect the village against flooding. Moreover, as a result of the high level of subsoil water, the nature of soil, and the numerous pitfalls and excavations made for the brick-making project in the neighborhood, stagnant pools were created after rains which became the breeding ground for Anopheles mosquitoes and the spread of malaria.

The Company's Bazaar

To address housing shortage and generate revenue out of land, the Company rented ground to locals. While the Company had built and owned three marketplaces in the oil fields, it adopted the policy of minimizing capital expenditure at Abadan which involved engaging local investors and merchants in the construction of houses and shops. By 1924, more than

³⁶⁶ Shugan Chand Aggarwal, *Industrial Housing in India* (New Delhi: Roxy Press, 1952), P.142

³⁶⁷ Dr. Jamieson, August 23rd, 1922, "Sanitary Conditions at Abadan and Schemes for Improvement," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

³⁶⁸ Dr. Jamieson, November 23rd, 1922, "Sanitary Conditions at Abadan and Schemes for Improvement," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

500 huts and shops were erected by private parties in different sections of the Native Village. As a result of these developments, an indigenous built form grew up along the brick kiln railway. In this area, the village's main street and marketplace emerged—which came to be known as the Company's bazaar—and served as the main road to the Refinery's Southern Gate and Time Office. The Company's bazaar consisted of an agglomeration of more than 100 shops and hundreds of residential compounds densely packed together. These structures were made of a wide range of building materials, such as burnt bricks, mud and sun-dried blocks, timber, and mat. The rapid growth of the bazaar could partially be attributed to the need to supply foodstuffs and goods to oil workmen and other residents of the Company's Village. Indeed, the provision stores run by the Company could not meet the expectations and proved to be a money-losing venture. The scarcity of certain staples made some residents raise livestock, such as cows, sheep and goats, on their compounds.³⁶⁹

The bazaar gradually became an established economic and social institution in the Native Village. Three types of tenants resided in the bazaar quarters: individuals leasing houses and shops owned by the Company; landlords owning shops and houses built on the Company's land; and, tenants living in houses and shops owned by private landlords.³⁷⁰ While the majority of residents in the village were Company employees, large numbers of businessowners and contract laborers as well as peddlers resided in the bazaar quarters, too. Based on the estimate provided by Company officials, the total population of the Native Village in 1923 was around 2700, of whom 2000 lived in coolie lines and native

³⁶⁹ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

³⁷⁰ Jas Jameson (General Manager Fields and Refinery) to T. L. Jacks (General Manager), October 15th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

houses and the rest resided in the huts and houses built by locals in the bazaar.³⁷¹ In fact, the density of population in the Native Village was estimated, quite optimistically, at 150 persons per acre. Even this figure was 50% higher than the maximum threshold set for a typical colonial industrial settlement.³⁷² Given the total number of privately-owned houses in the Native Village, the informal population of the village must have been at least twice the estimated official figure.³⁷³ This situation led the Chief Medical Advisor to suggest that the overflowing population should be removed from the village and resettled somewhere else.³⁷⁴

3.2.1.3 Indigenous Settlements. Until the 1930s, no provision was made to accommodate third-class employees and unskilled laborers. The Company also assumed no responsibility to house people who indirectly served the oil works, such as contractors, contracting labor, and shopkeepers. The following remarks by a Company official encapsulate the rationale behind this policy: "...bringing Europeans or Indians into a country, we had to provide accommodation for them, but it was not clear that we should provide accommodation for Persians in their own country."³⁷⁵ The housing situation was different in the Fields. Thanks to labor activism and political agility of local tribal leaders

³⁷¹ Dr. Young, December 31st, 1923, "Dr. Young's Sanitation Report," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

³⁷² F. C. Temple and G. Wittett, 1924, "Abadan Town Planning Report," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211

³⁷³ According to the Anglo-Persian Oil Company's 1924-1925 Annual Report, at least 488 privately-owned houses and huts existed in the Native Village. Assuming that on average three persons lived in each hut, then the total number of people residing in the privately-owned huts was 1400. "Security Department," *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.81

³⁷⁴ Dr. Young, December 31st, 1923, "Dr. Young's Sanitation Report," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

³⁷⁵ "Accommodation," 26th February 1931, *Visit to Persia, February to March 1931*, BP Archives, ArcRef 71853

(Bakhtiari Khans), the Company was forced to provide both indentured and local laborers and even the contract-based workforce with free accommodation. Only shopkeepers who worked on the Company's premises had to pay rent. The Company's housing policy at the Abadan refinery was extremely radical even by the colonial standards of the time. Most industrial centers located in remote areas or far from major urban centers in British India would provide different classes of workforce with rental or rent-free accommodation. Company officials usually justified the inequitable treatment of local labor on the pretext of large populations of indentured laborers or the "peculiar" conditions in Abadan.³⁷⁶

From the onset of operations, Iranian artisans and unskilled laborers had to fend for themselves in the agricultural settlements around the oil camp. Simultaneously, oil development drew hundreds of villagers and nomadic populations of southwest Iran to Abadan Island in the hope of finding wage-earning jobs at the Refinery. As a result, several indigenous settlements mushroomed around the oil camp. It should be noted that migration of settled and semi-settled rural populations to towns and villages has been a historical phenomenon in southwest Iran.³⁷⁷ Some of the first encampments that emerged immediately adjoining the oil works were suspiciously burnt down by fire.³⁷⁸ The most notable agricultural settlement that witnessed considerable growth in the early years was the village of Arusiyeh, also known as *Saiyid Muhammad*, to the south of the refinery

³⁷⁶ H. E. Nichols to The General Manager, Messrs. Anglo-Persian oil Company, January 26^h 1925, *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

³⁷⁷ Shahbaz Shahnava, *Britain and the opening up of South-West Persia 1880–1914: A study in imperialism and economic dependence* (Routledge Curzon, 2005), p.129

³⁷⁸ F. Macindoe to Sadigh-es-Saltaneh, August 11th, 1911, *Anglo-Persian oil Company, Ltd. Private Letter Book, Foreign Office, etc. No.1*, BP Archives, ArcRef 54500

whose population by 1911 had reached 1200.³⁷⁹ One of the reasons for the rapid growth of Arusiyeh compared to other agricultural settlements was its proximity to the Native Village. As I will show in what follows, Arusiyeh evolved into Abadan's third and largest residential quarter which was home to the third-class employees and other subaltern groups.

Abadan Village

In 1909, Arusiyeh consisted of 12 mud and date stick huts. The first inhabitants of the village were Arab date cultivators from the *Baghlaniyeh* sub-division of the *Muhaisin* tribe.³⁸⁰ As Figure 2.9 in the previous chapter shows, Arusiyeh and its surrounding date groves had initially grown along a tidal-irrigation canal, named after the village. It was three feet deep and three feet wide and cut across the island from the Shatt-al-Arab to the Bahminshir River.³⁸¹ This agricultural settlement shaped the nucleus of what soon came to be known as the Abadan Village or the Sheikh's Village. Unlike the Native Village, this settlement was outside the Company's jurisdiction and was administered by the Sheikh's representative who also acted as the village's headman. As a result, the Company had no control over the village's spatial structure and built form.

There is little information about the village's early layout. It can be assumed that the Abadan Village followed the prevalent vernacular order that underlay all pre-industrial indigenous settlements in southern Khuzestan. It was comprised of an organic collection

³⁷⁹ 'Administration Report of the Persian Gulf Political Residency for the Years 1911-1914' [42r] (88/488), British Library: India Office Records and Private Papers, IOR/R/15/1/711, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100023277423.0x000059> [accessed 15 December 2018]

³⁸⁰ J G Lorimer, 1908, p.6

³⁸¹ A. T. Wilson, "Report on Abadan Island," 23rd March 1909, *Letterbook: GB Reynolds in Persia to The Concessions Syndicate, Ltd. in Glasgow*, BP Archives, ArcRef 177165, p. 202

of residential quarters or wards, known as *mahalleh*, which was occupied by a specific ethnic or tribal group. As the village grew bigger each *mahalleh* was divided into smaller wards, each characterized by a particular language, or religious affiliation or the geographical origin of its inhabitants.³⁸² However, unlike the Native Village, Abadan Village did not have a socio-spatial hierarchy. It can be inferred from the archival documents that most buildings were erected on the vernacular systems of reed huts and huts-in-compound. The average plot size was 40 X 40 feet. Due to the shortage of housing in the postwar years, there was a tendency towards subdivision of larger plots with several households living side-by-side in the same compound. Reed huts were mostly erected near the Arusiyeh canal and constituted a distinctive neighborhood known as the Sarifa Area. It was also common practice that people would erect mud houses out of the earth excavated from their own enclosure.³⁸³

Viewing the Abadan village through the colonial bifocal lens, Company officials perceived the village as a congested “native” settlement characterized by a system of values, ideas, and social behavior that were not congruent with the norms and notions of aesthetic and order underlying both the colonial and metropolitan middle-and upper-middle class cultures. For instance, from the perspective of the Company’s architect, the Abadan Village had grown in a typical “haphazard manner of an Eastern Village.”³⁸⁴ Colonial town planners once described the village as an exemplar of the human settlement where people were left to themselves: “The huts are built irregularly. Though there are lanes among the

³⁸² Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.23

³⁸³ F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, pp.15-16

³⁸⁴ James Morrison Wilson, 27th April 1936, “Existing Conditions and Proposed Development,” *Abadan Town Planning*, BP Archives, ArcRef 49675

huts that run comparatively straight, they are too far apart, and very serious insanitary congestion has occurred between them, some huts being completely surrounded by others except for a tortuous gulley which forms the only means for approach.”³⁸⁵

The first oil workers who settled in the Abadan Village were from the poor rural areas of southern Khuzestan and Turkish Arabia (Present-day Iraq). As mentioned earlier, the D'Arcy Oil Concession required that the concessionaire procure its non-technical workforce from Iranians. On the other hand, under Article 12 of the Abadan Agreement, the Company agreed to recruit locals only with the Sheikh's warrant. In the beginning, Arab labor was engaged through either the Sheikh himself or through his associates. Nevertheless, the pool of workforce would vacillate throughout the year.³⁸⁶ The total number of Arab laborers never exceeded 1000. Imbued with colonial and orientalist stereotypes, Company officials and British military officers associated particular ethnic groups with certain types of work.³⁸⁷ For instance, local Arabs were believed to be “too well off to be under the necessity of working with a spade at 2 krans a day” and were deemed unsuitable for “regular and strenuous work.” Similarly, Bakhtiaris from the central part of the province were considered more reliable than local Arabs and flexible in using European tools.³⁸⁸ Moreover, as in the case of Indian labor, the Company did not intend to

³⁸⁵ F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.15

³⁸⁶ As a general rule, the Sheikh relied on his tribespeople during harvest seasons and in times of military expeditions. Every tribe under the Sheikh's jurisdiction had to attain its assigned quotas of Retainers in the Sheikh's service. Therefore, in spring and autumn, in particular during the dates harvest season, labor in the Khorramshahr district was scarce. A. T. Wilson to P. Cox, 13th September 1910, in *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal. Labor at Abadan and other questions”, FO 460/3. p.79

³⁸⁷ Rasmus Christian Elling, “On Lines and Fences: Labour, Community and Violence in an Oil City,” in *Urban Violence in the Middle East: Changing Cityscapes in the Transition from Empire to Nation State*, ed. Ulrike Freitag (Berghahn Books, Incorporated, 2015), p.199

³⁸⁸ 2 krans equaled 8 annas. File 1702/1910 Pt 1 'Railways: Persia; Khoremabad-Dizful-Mohammerah Railway' [394r] (535/546), British Library: India Office Records and Private Papers, IOR/L/PS/10/177/1, in

deal with an ethnically homogenous Iranian workforce. The scarcity and seasonality of the local Arab labor provided the Company with a solid excuse to extend its recruitment net beyond the Khorramshahr district.³⁸⁹

The population of the unskilled labor force soon began to diversify. In November 1909, after “giving [Khorramshahr] labor every chance,” thirty coolies were recruited from Bushire for work at Abadan.³⁹⁰ Bushire, the principle seaport of southern Iran, was the region’s major market for coolies. Manual laborers usually worked in gangs under their own chief, known as *Tindal* or head maistry.³⁹¹ Furthermore, *ballamchis*, as the sailors of local passenger and cargo boats (known as ballam or bellum) were named, were taken from Basra and day watchmen and errand-runners, known as *farrash* (alternatively, *ferrash*), were employed from the Kurdish population of northwest Iran.³⁹² Furthermore, large

Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100038748856.0x0000c7> [accessed 30 December 2018]. The greater degree of prosperity of the Arab population of Southern Khuzestan compared to the Lur, Bakhtiari and Persian communities of the province has been attributed to the economic conditions that the Karun concession and sedentarization of nomadic communities had brought to the region. Several reasons may explain why Arab tribesmen of southern Khuzestan chose to work for the oil company. First of all, to Arab cultivators, engagement with the oil industry was viewed as a means of achieving a greater degree of financial independence from the Sheikh and a potential breakout from the existing feudal system. Furthermore, the cash-crop agriculture made most Arab cultivators susceptible to market fluctuations of prices and to seasonal drops in the quality and quantity of harvests, which both were among the outcomes of integration of the region into the world economy. Shahbaz Shahnava, *Britain and the opening up of South-West Persia 1880–1914: A study in imperialism and economic dependence* (RoutledgeCurzon, 2005), p.140

³⁸⁹ Per the Abadan Agreement, the APOC was not allowed to recruit from tribespeople who had hostile relations with the Sheikh, including, among other tribes, the Bakhtiari. For political reasons, the Sheikh preferred that laborers for works at Abadan, if not obtainable locally, be taken from the Arabs of Iraq rather than from the Persian communities of Khuzestan. Given his independence ambitions, the Sheikh's overarching strategy was to retain the existing ethnic structure of Abadan and Khorramshahr, which, as mentioned earlier, was predominantly comprised of the Arab tribes of Ka’ab and Muhaisin. A. T. Wilson to Lloyd, Strick & Co., 8th November 1909, in *The Anglo-Persian Oil Company 1908-1916*, “D. Correspondence re Abadan and Manikh Site”, FO 460/3

³⁹⁰ C. A. Walpole to A. T. Wilson, 3rd November 1909, in *The Anglo-Persian Oil Company 1908-1916*, “D. Correspondence re Abadan and Manikh Site”, FO 460/3

³⁹¹ John Green. *Dues and Charges on Shipping in Foreign Ports: A Manual of Reference for the Use of Shipowners, Shipbrokers, and Shipmasters* (George Philip & son, Limited, 1908), p.958

³⁹² A. T. Wilson to Lloyd, Strick & Co., 4th July 1910, in *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal. Labor at Abadan and other questions”, FO 460/3. p.61

numbers of men were employed through contractors.³⁹³ Labor was also drawn from the impoverished artisans from the distressed handicrafts industries and the poor populations of the urban centers of Khuzestan and Central Iran, including Shushtar, Dizful, and Ram Hormuz.³⁹⁴ In March 1911, 573 Iranians, of whom the great majority were local Arabs, were in the employ of the Company at Abadan.

As the number of oil workers increased, so did the size and population of the Abadan Village. On the eve of the Great War, the number of Iranian and Arab manual workmen was 3055, the great majority of whom (2977) were employed as coolies.³⁹⁵ It was estimated that, like other industrial towns in India, the population of Abadan was roughly three times the number of workmen.³⁹⁶ Considering this formula, the population of the Abadan Village would have been around 9000 in 1914. Besides poor peasants and nomads, large numbers of emigrants displaced by political upheavals, wars, famines, and epidemics flocked to Abadan. For instance, in the wake of the Great War, many tribespeople, including 50 relatives of the village's headman (Saiyid Muhammad), crossed the Turco-Iranian border and settled in the Abadan Village.³⁹⁷ In 1921, due to the rampant scarcity of food in the central parts of Khuzestan, Abadan saw a massive influx of "destitute people."³⁹⁸ It should be noted, however, that urbanization, sedentarization, and migration

³⁹³ Laurence Paul Elwell-Sutton, *Persian oil: a study in power politics*. (Lawrence and Wishart, 1955), p.89

³⁹⁴ Stephanie Cronin, "Popular Politics, the New State and the Birth of the Iranian Working Class: The 1929 Abadan Oil Refinery Strike," *Middle Eastern Studies*, (2010) 46:5, p.706

³⁹⁵ In 1914, European staff numbered 48 and there were 40 Chinese employed as carpenters at Abadan. "Memorandum Regarding the Anglo-Persian Oil Company's refinery at Abadan, 20th January 1915, Works Manager, Abadan, to Strick, Scott & Co. Mohammerah, BP Archives, ArcRef 71754

³⁹⁶ F. C. Temple and G. Wittett, 1924, "Abadan Town Planning Report," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211

³⁹⁷ R. G. Nielson to G. O. C. Expeditionary Force, November 11th, 1914. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

³⁹⁸ J. B. Lloyd to General Manager, Strick, Scott & Co., May 19th, 1921. *Strick, Scott and Co. London to Mohammerah, Date order Correspondence*. BP Archives, ArcRef 72135

of population towards the southern centers of population had already begun in Khuzestan prior to the development of the oil industry on Abadan Island.³⁹⁹

During the war and postwar years, the Abadan Village expanded in different directions. By 1920, it consisted of 564 mat huts. Other than coolies and manual laborers, more than 1400 Iranian skilled and semi-skilled workmen, who constituted thirty percent of the total population of indentured labor, also resided in the Abadan Village.⁴⁰⁰ The village rapidly grew bigger in the following years. By 1924, it had extended 2300 feet along the river and roughly 2000 feet inland and accommodated more than 90% of Abadan's population which was estimated at 30,000.⁴⁰¹ In this year, the village was home to more than 7000 oil employees, who could not get Company housing in the Native Village, and 6000 contract-based laborers and their dependents. Given the size of the two contiguous settlements (the Native Village and Abadan Village), which together occupied some 200 acres, the average population density was estimated at 150 persons per acre.⁴⁰² Rapid population growth combined with the lack of provision of sufficient public services by the Company or by the Sheikh administration caused a myriad of problems in the village.

³⁹⁹ Shahbaz Shahnavaz attributes these trends to the opening of the Karun to international trade and the subsequent economic development in the river port towns of Khorramshahr and Ahwaz as well as better security in the southern urban centers as compared to the traditional commercial centers of Khuzestan. Shahbaz Shahnavaz, *Britain and the opening up of South-West Persia 1880–1914: A study in imperialism and economic dependence* (Routledge Curzon, 2005), p.127

⁴⁰⁰ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

⁴⁰¹ F. C. Temple and G. Wittett, 1924, "Abadan Town Planning Report," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.6

⁴⁰² F. C. Temple and G. Wittett, 1924, "Abadan Town Planning Report," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211

The Abadan Bazaar

The Abadan Village was separated from the Native Village by an earthen canal and a wire metal fence. What connected the two neighboring settlements was the natural line of approach to and from the Refinery that overlapped the main street in the Native Village. As Figure 3.23 illustrates, along this pathway, that led oil workers to the refinery's Southern Gate, indigenous shops were established and the Abadan Village's major social and economic institution and public space, namely the bazaar, emerged. While there existed a few brick structures in the bazaar, the majority of shops were made of mud, timber, and reed. The bazaar's largest building was situated next to the Arusiyeh canal and included a café. The bazaar also featured butchery and poultry markets and a slaughterhouse.⁴⁰³



Figure 3.23 Abadan's Bazaar and Main Street Looking South, circa 1920. The bazaar was lined with masonry and local cabin shops.

Source: BP Archives, ArcRef 36179

⁴⁰³ F. C. Temple and G. Wittett, 1924, "Abadan Town Planning Report," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.16

For the Western observer, the place of residence and the place of production were undifferentiated in “native” settlements. That is why the whole village came to be known as the Sheikh’s Bazaar. The bazaar even overshadowed the residential quarters in the cartographic representation of Abadan prepared by the British Admiralty. As Figure 3.24 shows, both the Native Village and the Abadan Village were represented by their respective bazaars shown as a corridor lined with blocks of shops which extended in parallel to the river from the Refinery’s southern Gate (Point A shown on the map) towards the Company’s new tank farm near the Bawarda Village.

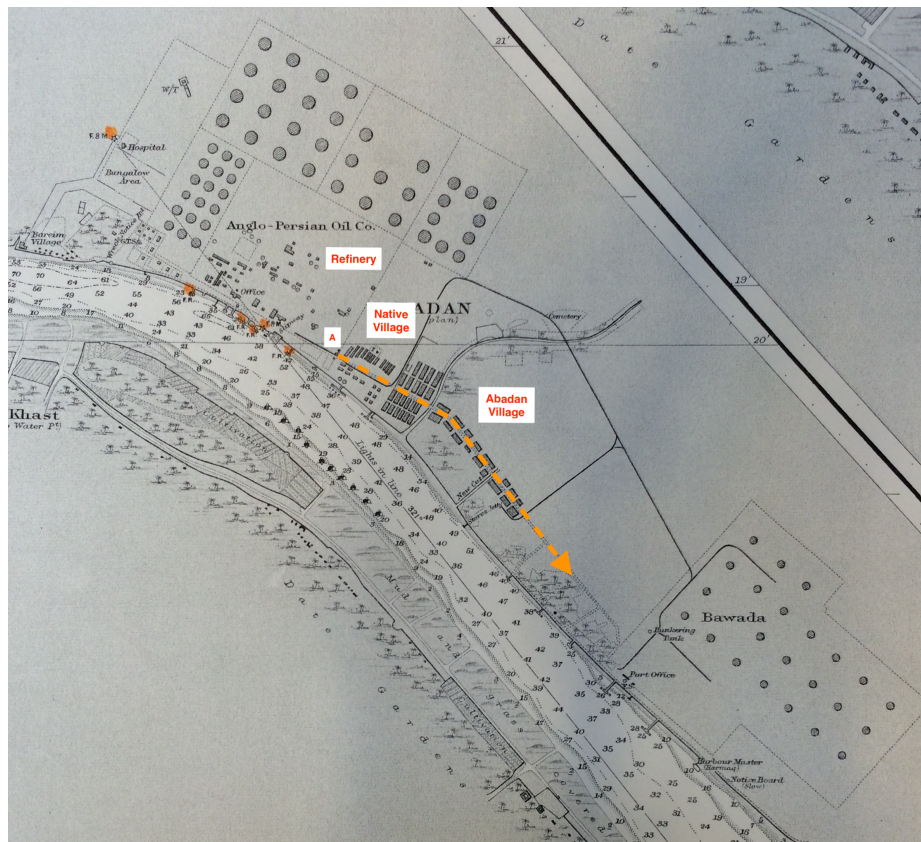


Figure 3.24 Map of the Abadan Refinery, circa 1924. The orange dashed line represents Abadan’s bazaar and main street.

Source: British Library

Before the development of a full-fledged marketplace, however, oil workers used to go to the bazaars of Khorramshahr and Basra to fulfill part of daily and “special” needs.⁴⁰⁴ One of the first historical accounts of the Abadan Bazaar has been recorded on the eve of the Great War, when Turkish troops who had set up encampments on the western side of the Shatt-al-Arab directly opposite the Refinery would cross the river in “bellums” to purchase foodstuffs at the Abadan shops.⁴⁰⁵ Gradually, Iranian, Arab and Indian shopkeepers and merchants opened businesses at Abadan. Indian rupee and Iranian kran were the major currencies circulating in both bazaars. The British employees of the oil company also patronized the shops.⁴⁰⁶

As mentioned earlier, the Company had no direct authority over the Abadan Village, where Iranian employees in great numbers resided. Company officials made several attempts to take over the Abadan Village and Bazaar during the War years; however, negotiations with the Sheikh of Khorramshahr never came to a fruition. Indeed, the Sheikh was generating large revenues through rents and taxation out of the Abadan Village and Bazaar. While the rent of shops and houses was on the rise in the postwar years, Company officials showed interest in the acquisition of some 38 jareeb (acres) of land along the main street but, once again, their request was declined.⁴⁰⁷ Company officials

⁴⁰⁴ There are numerous accounts of patronizing brothels in Khorramshahr and Basra by Company employees. For instance, the story of a Bahreini fitter, by the name Salman, who gets drunk and engaged in a quarrel at a brothel in Khorramshahr is a case in point. C. A. Walpole to Abadan Works Manager, 19th September 1912, *All DO[Demi-Official Letters from except London and Glasgow]*, BP Archives, ArcRef 104121, p.231

⁴⁰⁵ Thomson to Lockhart, “Notes on Refinery Activities from 1909 to 1916”, *Abadan Refinery, Historical Notes*, BP Archives, ArcRef 71439

⁴⁰⁶ The use of credit gradually became prevalent at the bazaar. However, in 1916 because of multiple cases of malpractice by two British employees, the application of credit was discontinued. G. Thomson Assistant Works Manager, “Notice,” February 14th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁴⁰⁷ H. E. Nichols to C. A. Walpole, April 6th, 1920, “Sheikh’s Bazaar and Village,” *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

stressed the nuisances that the village could present to the refinery, including the imminent threats of disease or fire outbreaks, as the main reasons for the Company's interest in taking over the Abadan Village.⁴⁰⁸ However, the major objectives were to contain the growth of the village, extend control over the bazaar, and prevent a potential labor unrest. The management also believed that by dominating the shops, the Company could better regulate the price of foodstuffs, manage currency exchange rates, and control the increased cost of living at Abadan.

Living Conditions

General living conditions at Abadan were extremely harsh for local workmen. As mentioned earlier, the Company did not provide any form of housing for Iranian artisans and unskilled laborers, let alone any kind of welfare services. The struggle for accommodation remained Abadan's chronic social issue throughout the presence of the British oil company in Iran. Even in 1924, when housing was provided to senior Iranian clerks and artisans, only one-sixth of local workmen were assigned company-sponsored houses.⁴⁰⁹ As a result, most people had to erect vernacular mud huts, sarifas, and tents to accommodate their families. Some chose to rent ramshackle hovels from private landlords in either the Abadan Village or the Native Village. At the Abadan Village, the Sheikh's representative sanctioned building permits and determined the location of new

⁴⁰⁸ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

⁴⁰⁹ Laurence Paul Elwell-Sutton, "The Company's Civilizing Mission," *Persian oil: a study in power politics*. (Lawrence and Wishart, 1955), p.88

constructions. The areas allocated to reed huts were reportedly in the most insalubrious part of the village. Even some huts were erected in the middle of cemeteries.⁴¹⁰

The general level of wages for unskilled laborers was always at a bare minimum and disproportionate to the ever-increasing cost of living and the chronic inflation at Abadan.⁴¹¹ For instance, between 1910 and 1925, the standard daily pay rate for an adult coolie increased from 2 krans to 3-4 krans.⁴¹² In general, the scale of pay for Iranian skilled workmen was much lower than the scale used for Indians engaged in similar occupation, on the grounds that the latter in general were more skillful than the former. Moreover, labor turnover was high, and job insecurity overshadowed daily lives of wage-earners. The Refinery's demand for coolies varied widely and unpredictably on a daily basis. As a result, no notice of discharge was issued in advance. Workmen were informed that their employment has been suspended or terminated when showing up in the morning to drop tickets at the Time Office. Suspension was also utilized by the Company as a means of control and labor discipline.⁴¹³

The cost of living for unskilled workforce recruited from outside the region tended to be greater than living expenses of locals. This explains why the management in the early years preferred to supply unskilled workforce from Khuzestan. For instance, in 1911 the living expenses of each Kurdish watchman was 10 tomans (100 krans) per month, almost

⁴¹⁰ "The Report prepared by Ahmad Akhgar for the Parliament," June 1924 (Saratani, 1303), *Complaints from Abadan Residents about Destroying their Houses and Shops by the Anglo-Persian Oil Company*, IRA:240-15694

⁴¹¹ Laurence Paul Elwell-Sutton, *Persian oil: a study in power politics*. (Lawrence and Wishart, 1955), p.102

⁴¹² The daily pay rate was increased to 3 krans during the War in 1917 and remained the same until the early 1920s when it was raised to 4 krans. In 1924 the rate for a "boy" laborer was 2.5 krans per day. Department of Mines to the Minister of Public Works, 30 April 1925 (10/Ordibehesht/1304); *Complaints from Abadan Residents about Destroying their Houses and Shops by the Anglo-Persian Oil Company*, IRA:240-15694

⁴¹³ Laurence Paul Elwell-Sutton, "The Company's Civilizing Mission," *Persian oil: a study in power politics*. (Lawrence and Wishart, 1955), p.90

twice the rate paid to a local Arab guard. The Company was ready to tolerate this “abnormal rate” for a handful of *farrashes*; however, it was not willing to overpay hundreds of daily wage-earners.⁴¹⁴ By the same token, the Company was very discreet in its local recruitment practices. For instance, in 1911, when the need arose to recruit 400 coolies for a pipe-laying project at the refinery, the London management decided to dispatch only half this number to avoid a sudden inflation of coolie rates.⁴¹⁵

In the postwar years, the exorbitant taxes levied by the Sheikh of Khorramshahr contributed to a rapid increase in the cost of living in Abadan. Until January 1925, the village was administered by the Sheikh’s representative. As discussed in the previous chapter, the Arab chieftain considered himself the sole proprietor of the island and collected a wide range of rents and taxes. As a general rule, the Sheikh took half the produce of all date trees.⁴¹⁶ However, the crop taxation rates collected from Iranian and foreign cultivators were 90% and 10%, respectively. The inequitable treatment of Iranian peasants even motivated some locals to take on British nationality to pay less tax.⁴¹⁷ In addition to ground rent, the Sheikh levied municipal (*Baladiyah*) and property

⁴¹⁴ W. Lamb to Captain L. B. Haworth, 29th March 1911, in *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal. Labor at Abadan and other questions”, FO 460/3. p.89.

⁴¹⁵ Anglo-Persian Oil Company Ltd. to Strick, Scott & Co., 4th November 1911, *London Copies of Persia Correspondence between Manager, Strick, Scott and Company, Mohammerah, and Charles Ritchie, Agent, Strick, Scott and Company, Ahwaz*. BP Archives, ArcRef 71449

⁴¹⁶ The Sheikh paid the Iranian Government 40,000 tomans yearly as the tax farming revenue for his territory. However, he would collect at least five to six times that amount from local people. The sheikh would collect from Arab farmers two-fifths of their crops. He would also collect an extra one-fifth from the peasants working on his lands as land tax. Ahmad kasravi, *The 500 Year History of Khuzestan*. (Unknown, 1312 [1933]), p.163. Also see *Administration Report on the Persian Gulf Political Residency for 1905-1906* (Calcutta: Office of the Superintendent of Government Printing, 1907), p.31

⁴¹⁷ Extract from the Newspaper Junub, December 24th, 1910. 'File II. IRAQ (3) Vol. 1 Shaikh of Kuwait's Date Gardens on the Shatt-al Arab. (Kuwait's relations with Turkish Govt. and Turkish demand that Kuwaitis should take out Turkish Nationality Certificates)' [268r] (553/636), British Library: India Office Records and Private Papers, IOR/R/15/5/5, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100050944618.0x00009a> [accessed 4 October 2018]

(*Mustaghelat*) taxes in the Abadan Village, and collected arbitrary fees for different activities, including permit issuance for new buildings or maintenance of existing huts and shops.⁴¹⁸ The Sheikh also devised a contracting system for all major staples, commodities and services in Abadan, Khorramshahr and Ahwaz.⁴¹⁹ Under this system, which was unprecedented in the rest of the country, the monopoly of the supplies of major foodstuffs— such as bread, meat, and dairy products— as well as transportation, hospitality, and entertainment services were contracted out on a yearly basis to the highest “bidders.”⁴²⁰ In 1924, the Sheikh’s gross income from all taxes at Abadan was estimated at £38,000.⁴²¹ In exchange for such heavy taxes, no particular services, other than collection of night soil, were provided to the inhabitants of Abadan. Monopolies were not limited to food stuffs and services. Arab agents with close ties to the Sheikh and his associates were awarded the monopoly of the supply of building materials at Abadan.⁴²²

⁴¹⁸ Despite all these revenues, the Sheikh’s extravagant lifestyle and extended administration required more funding. In the early 1920s, similar to the Bakhtiari Khans, the Sheikh was also under pressure to settle tax arrears with the Iranian Government and to pay off the cumulative interest on the loans he had borrowed from the Anglo-Persian Oil Company since 1909. Stephanie Cronin, “The Politics of Debt,” in *Tribal Politics in Iran: Rural conflict and the new state, 1921–1941*, by S. Cronin, (Routledge, 2007), p.135

⁴¹⁹ “Report to the Ministry of Finance on Sheikh Khaz’al,” 1924, *Correspondence between the Majlis and Ministry of Finance: Complaints from Residents of Abadan about Mistreatment by the Sheikh and the South Oil Company*, IRA:230-3737

⁴²⁰ According to Ahmad Kasravi, most of the contracts were awarded to Arab merchants from the Iraqi cities of Basra, Baghdad and Karbala who would pay considerable bribes to the Sheikh’s sons and associates. See Ahmad Kasravi, *The 500 Year History of Khuzestan*. (Unknown, 1312 [1933]), p.263. Also, see “The List of Contracts and Monopolies of Public Staples at Abadan by Sardar Aghdas,” 1924, *Correspondence between the Majlis and Ministry of Finance: Complaints from Residents of Abadan about Mistreatment by the Sheikh and the South Oil Company*, IRA:230-3737.

⁴²¹ H.E. Nichols to the General Managers APOC, September 10th, 1924. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.912

⁴²² For instance, the monopoly of supply of sand and stone to the Island belonged to Dawoud Suleiman who shared profits with the Sheikh’s representative in Abadan, Sheikh Moosa. Arnold Wilson to More, January 26, 1923, ‘1/C III. Miscellaneous.’ [174r] (356/632), *British Library: India Office Records and Private Papers, IOR/R/15/5/96*, in *Qatar Digital Library* <https://www.qdl.qa/archive/81055/vdc_100051556299.0x00009d> [accessed 11 November 2018]

Residents of Abadan lodged complaints to the Iranian Government and to the Parliament (Majlis) regarding the Sheikh's taxation on major food staples and other services.⁴²³ Believing that increased taxes would have adverse effects on the Company's wage bill and would raise living expenses at Abadan, Company officials also rendered the Sheikh's taxation "obnoxious" and "outdated."⁴²⁴ In July 1924, the Iranian Government asked the Sheikh to withdraw all "illegal taxation" in Abadan, Khorramshahr, and Ahwaz, and threatened that the Government would otherwise intervene.⁴²⁵ To put more pressure on the Sheikh, the Iranian Government threatened to send an agent to Abadan.⁴²⁶ As a result of the increased tensions with the Iranian Government, the Sheikh withdrew the tax on bread.⁴²⁷

Casual Labor, Industrial Discipline, and Tribal-Agrarian Life

*"... We had come straight out of the wilds into a circle dependent entirely upon the horrible resources of modern ingenuity. The contrast was so great as to produce an almost physical shock. Those days in the mountains had stretched themselves out into a complete lifetime, -twelve days? twelve years, rather;--the mind had adapted itself to those conditions; now it had to be slewed round in the space of half an hour... From constant contact with life reduced to its simplest elements, we walked straight into a hell of civilisation."*⁴²⁸

⁴²³ H.E. Nichols to the General Managers APOC., August 6th, 1924. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.875

⁴²⁴ H.E. Nichols to the General Manager APOC, October 2nd, 1924. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.912

⁴²⁵ T. L. Jacks, July 19th, 1924, "Note on an Interview between His Excellency Governor-General of Khuzestan and Myself Following the Former's Visit to Abadan on 21st of July 1924," *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁴²⁶ This raised protest from the Company, the British Minsters, and the Sheikh. It seems that the plan was revoked after a while. H.E. Nichols to the General Manager Strick Scott & Co., March 5th, 1924. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.764

⁴²⁷ H.E. Nichols to the General Managers APOC, September 10th, 1924. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.912

⁴²⁸ Victoria Sackville-West, *Twelve Days in Persia*, (London: Hogarth Press, 1928), Project Gutenberg Canada Ebook #1200. Date first posted: 6 September 2014. <https://gutenberg.ca/ebooks/sackvillewestv-twelvedays/sackvillewestv-twelvedays-00-h-dir/sackvillewestv-twelvedays-00-h.html>

If the encounter with “modern” life in the oil company town, following a short-term trek across the Bakhtiari country, had created such a strong “physical shock” to the English poet and novelist, then the contradiction between the cyclical pattern of agricultural and nomadic life and the linear rhythm of industrial work must have had a profound psychological impact on the local labor. No doubt, the unfamiliar industrial discipline was not compatible with the free spirit of pastoral life. Iranian and Arab peasants and tribesmen found it hard, if not impossible, to adapt to modern factory conditions and moved back and forth from industrial work to agricultural and nomadic modes of life. Clothing of workmen in these years was also indicative of their “transitional status.”⁴²⁹ Bakhtiari nomads, accustomed to spending summer in cool highlands upcountry, could hardly work in hot and humid weather of lowlands of southern Khuzestan, where temperature would reach 120 degrees Fahrenheit. Timekeeping was also a new practice for new local workmen. Iranian laborers were required to drop tickets at the Time Office every morning.

In the oil fields, Company officials attributed the fluidity of labor to the tribesmen’s “roving spirit”⁴³⁰ and “call of the wild.”⁴³¹ Similarly, Arab laborers’ periodic desertions from the Refinery work and their gravitation to the agricultural way of life was pejoratively viewed as an indication of their “invincible distaste” for a steady and serious industrial work.⁴³² Like other company towns, prior to the establishment of the industrialized social

⁴²⁹ The Arabs wore blue boiler suits with a Keffiyeh around their heads, while Bakhtiari nomads put on wide black trousers with a European Jacket. Stephanie Cronin, “Popular Politics, the New State and the Birth of the Iranian Working Class: The 1929 Abadan Oil Refinery Strike,” *Middle Eastern Studies*, (2010) 46:5, p.706

⁴³⁰ “Staff Department,” *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.60

⁴³¹ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.154

⁴³² Arnold Wilson to the Secretary to the Indian Government, October 25th, 1920. ‘Letter from Lt-Col Sir A.T. Wilson, K.C.I.E., C.S.I., C.M.G., D.S.O., Officiating Political Resident in the Persian Gulf, to the Secretary to the Government of India, Foreign and Political Department, Simla.’ [2r] (3/4),

order and working-class culture, the rhythm of agricultural year made its presence felt at Abadan.⁴³³ In the 1920s, as part of the policy of “Persianization” of the workforce, the Company employed different strategies to alter the nomadic spirit of the local labor force. For instance, in the Fields the culture of consumption was publicized through “model markets” to encourage Bakhtiari nomads to give up the pastoral life for a “modern” and sedentary way of living.⁴³⁴

3.2.2 Selective Paternalism and Public Services

From the early years of operations through 1924, by and large, economic rationality and colonial practices governed the Company’s paternalistic policies and programs. As with housing arrangements, segregation was central to these paternalistic endeavors. For instance, Indian clerks were barred from using the library built for the Europeans and were encouraged to set up their own library. Likewise, local Arabs and Iranians were not allowed to use the Indian library.⁴³⁵ Sanitation facilities at the Refinery were segregated along ethno-occupational lines. For instance, European lavatories were provided for Shift Engineers, while “native-type” dry latrines were built for “colored” employees.⁴³⁶ In general, first-class employees were the major beneficiary of Company paternalism. For instance, the Company set up a provision store and a dairy farm in the Bungalow Area to

British Library: India Office Records and Private Papers, IOR/L/PS/18/B364, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100023463704.0x000004> [accessed 6 October 2018]

⁴³³ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.21

⁴³⁴ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.148-149

⁴³⁵ Touraj Atabaki, “Far from Home, But at Home: Indian Migrant Workers in the Iranian Oil Industry”, *Studies in History* 31, no.1 (2015): 105

⁴³⁶ “Sanitary Construction, Refinery,” *Anglo-Persian Oil Company Limited: Annual Report for Year Ending 1928*, BP Archive ArcRef 54372

serve the European personnel.⁴³⁷ Skilled and semi-skilled workmen were selectively and partially benefited from welfare services. For instance, the Company provision store in the Native Village catered only for Indians and provided some basic staples, such as rice, flour, sugar, dahl, and ghee.⁴³⁸ In what follows I will discuss how the British metropolitan and colonial third cultures, industrial requirements, and the dynamics of relationship between the Company and different groups of employees drove the planning and design of the company-sponsored social and healthcare services and public utilities in Abadan.

3.2.2.1 Social and Entertainment Spaces. Major social amenities were geared towards British employees and were erected behind the fences in the Bungalow Area. As mentioned earlier, such services were not envisioned in the initial plan of the oil camp and were considered subordinate to the major undertakings, namely completion of the production zone and provision of housing. After the Refinery became fully operative in July 1912, the first group of social facilities were built in the oil camp. A cement-plastered tennis court and a guest house were put up in the British quarter (E-3 in Figure 3.1; Figure 3.25) and “when heat would permit tennis was played during the summer evenings.”⁴³⁹ In providing these services the Company draw inspiration from the socially and functionally specialized amenities that characterized the gentlemanly lifestyle of the British middle and upper-middle-class in the metropolitan society. These services encompassed a wide range of social, sports, and entertainment activities representing the institutionalized forms of non-work or “leisure” associated with particular times— “the summer evenings” in the case of

⁴³⁷ F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.17

⁴³⁸ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

⁴³⁹ *The Naft*, 7 (July 1931), p. 17

British employees in Abadan.⁴⁴⁰ A network of social and entertainment amenities governed by similar recreational expectations were also provided to the Anglo-Indian community. For instance, the hill station was designed as a place of resort for the colonial community. Drawing on this model, the Company designated Khorramshahr as “the local health resort for Abadan community.”⁴⁴¹

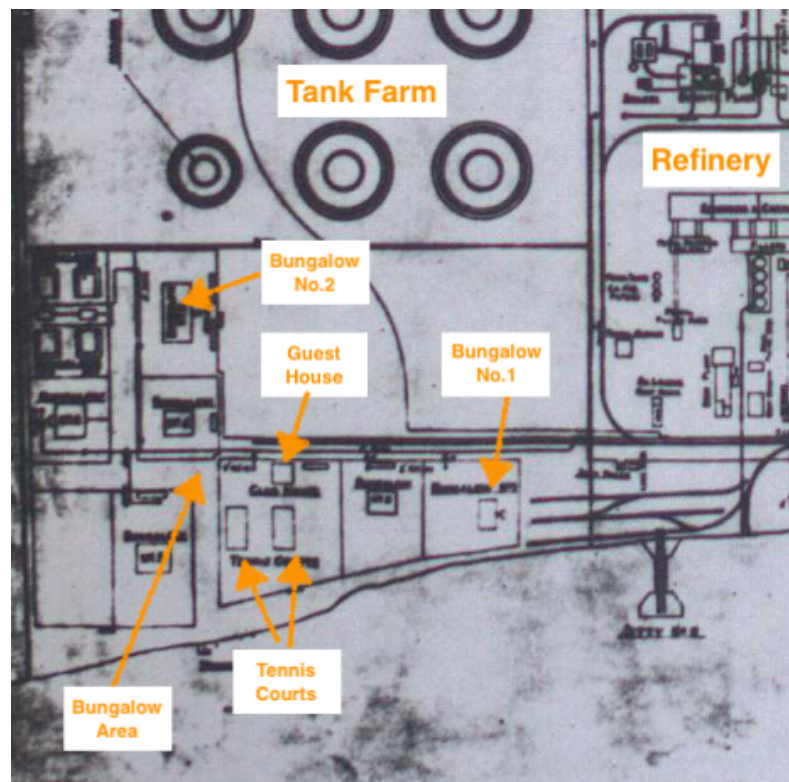


Figure 3.25 Site plan of the Bungalow Area showing the location of the Guest House and Tennis Courts, circa 1915.

Source: BP Archives, ArcRef 36509

In the postwar years, as Figure 3.25 illustrates, a second tennis court was added to the resort center in the Bungalow Area. Consistent with the country-style of construction

⁴⁴⁰ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.160

⁴⁴¹ Sir John Cadman, January 1925, “Persia Visit: Secret Diary,” 1924. BP Archives, ArcRef 72549, p.52

adopted in the European quarter, the new tennis court was made of an indigenous type of plasterwork which was a mixture of mud and tibbin (chopped straw). Moreover, the guest house was replaced with an English Club known as Gymkhana. Similar to the housing arrangements, the Company inspired from the previously established colonial models to build this social institution. In the colonial city the club served as the main center for social interaction and information exchange as well as the place of resort and entertainment for British community. In particular, the Gymkhana Club was an elite social organization prototype built for the exclusive use, and according to the cultural preferences, of the upper echelons of the Anglo-Indian community.⁴⁴² The Imperial Gymkhana in New Delhi, for instance, consisted of a broad spectrum of entertainment spaces, including, “a swimming pool, extensive gardens, bars, billiard rooms, library, reading room, dining and dancing facilities.”⁴⁴³ Like other expressions adopted by the colonial third culture, gymkhana was a hybrid term and a product of fusion of words originating from both the indigenous and metropolitan cultures. The term *gym* was derived from the word *gymnasium* which was in common use in the metropolitan society, and the term *khana* was an indigenous word with Persian roots, meaning the place of residence.⁴⁴⁴

⁴⁴² Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.88

⁴⁴³ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.237

⁴⁴⁴ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.88



Figure 3.26 A front view of the Abadan Gymkhana Club, circa 1926. The Club was a single-storied structure surrounded by an arched verandah. With manicured landscaping and entertainment facilities, such as tennis courts, the Club aimed to make the industrial setting unrecognizable and to recreate the entertainment spaces of the colonial third culture.

Source: BP Archives, ArcRef 36529

Unlike the colonial elite clubs, the Abadan Gymkhana club (See Figure 3.26) was not used as a means of reinforcing distinctions within the British workforce. To the contrary, the Company envisioned the British community as a “homogeneous unit” and prohibited any activities that could have led to atomization of the staff. Sports and other social and entertainment activities were deemed critical in bridging social gaps among different classes of the British staff.⁴⁴⁵ Therefore, Gymkhana was open, with a monthly subscription fee, to all European employees regardless of grade and seniority on the condition that they were “generally accepted into polite society.”⁴⁴⁶ In other words, the

⁴⁴⁵ Colonel H. Medicott, *Kittermaster's Report*, 7th February 1928, BP Archives, ArcRef 68934, “Persia: Miscellaneous”

⁴⁴⁶ M. Greenwood to H. E. Nichols, June 7th, 1920, *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

English Club provided an opportunity to the low-ranking staff to mingle with senior members of the community, provided the junior staff conformed to the latter group's cultural norms and behavioral codes. However, in reality, the hierarchy that existed within the European personnel found its way into the social space of the Gymkhana Club. A glimpse of social life in the club in 1923 on a cool summer evening can be visualized through an account of an ex-employee: "By 6 o'clock, the club was filling up....Perspiring tennis players were collecting in ranks in front of the bar or in groups on the verandah, around huge jugs of shandygaff; from the billiards-room the clicking of balls found its way through the buzzing conversation; white-coated Genoese barmen filled glasses in preparation for the ritual peg at sundown."⁴⁴⁷

The club was also used by the Company as an instrument of control. The administration of the club was in the hands of the Refinery management on the pretext of maintaining the quality of services. The Abadan Gymkhana consisted of two committees: The House Committee and the Sports Committee, both appointed by the Refinery works manager. The House Committee organized entertainments — such as dances, concerts, billiards, and parties— and the Sports Committee was responsible for running sports programs— such as association football, rugby football, cricket, tennis, golf, squash racquets, and swimming. The company exercised ultimate control over the programs and activities to the extent that even the books for the library were chosen directly by the Company Director. Informal lectures and debates were the only activities that members were allowed to organize independently.⁴⁴⁸

⁴⁴⁷ William Stanley, November 16th, 1936, "Persian Interlude," *Mr. E. H. O. Elkington, Miscellaneous Persian Papers*. BP Archives, ArcRef 72631

⁴⁴⁸ John Cadman, January 1925, "Refinery Minutes: Item 14. Social Matters," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, pp.1-2

Social amenities were also designed to extend control over employees beyond work hours and to ward off potential disturbances. As the Refinery works manager once noted, “It is our aim to encourage the men to come about the club, in order to take them out of their bungalows and incidentally to reduce tendency to moping and grouching.”⁴⁴⁹ Moreover, social entertainment and sports facilities were also viewed as a deterrent against activities with potential adverse impacts on the well-being of the staff. In the colonial context, two risky activities were identified in military stations: excessive consumption of alcohol and sexual relationship with female members of the indigenous society.⁴⁵⁰ At Abadan, drinking habits and visiting the “dentist” in Basra was prevalent among junior ranks and bachelor employees.⁴⁵¹ One of the explanations for the latter was believed to be the sparsity of female companionship in the oil camp. At the outset of operations, similar to other oil enclaves, Abadan was a gendered settlement. As a general rule, employees were barred from bringing their family to Abadan, for the management viewed the presence of spouses as a source of distraction and detrimental to the process of work. Moreover, the married accommodation was considered uneconomical.⁴⁵² British junior staff was even prohibited from considering the question of marriage in the early years.⁴⁵³ Although the company relaxed the prohibition in 1913 for senior employees, the policy did not change

⁴⁴⁹ R. G. Neilson to M. Greenwood, April 16th, 1920, *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

⁴⁵⁰ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.113

⁴⁵¹ R.W. Ferrier, p.268

⁴⁵² C. Greenway to J. Hamilton, 8th November 1910, *Anglo-Persian Oil Company, Ltd. Private Letter Book, Volume 1*. BP Archives, ArcRef 54484. p.155

⁴⁵³ Charles More, *Black Gold: Britain and Oil in the Twentieth Century* (Continuum, 2009), p.57

for juniors.⁴⁵⁴ Therefore, the management believed that making the staff busy at the club would keep them “out of trouble in the bazaar.”⁴⁵⁵

Entertainment Services Revisited

In the early 1920s, the Company’s paternalistic policies underwent changes. The London management approved the proposal to add new extensions to the Gymkhana Club and sanctioned the provision of a new tennis court and additional billiard tables.⁴⁵⁶ This new approach to paternalism came about for several reasons. First of all, it was the direct result of the demands of the growing population of junior and mid-level British employees in the postwar years. The new recruits, who were mostly from the City of Dumbarton in Scotland, served as shift engineers, chemists, and office men and played a critical role in the efficient operation of the Refinery. These men, in the words of the Refinery works manager, were filled with “modern, ultra-democratic spirit” and demanded better social welfare services from the government and employers alike and did not necessarily conform to the colonial norms that gave social privileges to senior personnel— who were formerly called men sahibs.⁴⁵⁷

The second factor that accounts for the Company’s new paternalism was the restructuring of the oil industry in the post-war years. Industrial restructuring refers to the large-scale changes that take place in an industrial sector in reaction to external or internal

⁴⁵⁴ J. B. Lloyd, 1923 “Mohammerah- Suggestions for Consideration,” *Abadan (Notes on a Visit)*. BP Archives, ArcRef 28604/003, p.1. See also, Henry Longhurst, *Adventure in Oil* (London: Sidgwick and Jackson, 1959), p.48

⁴⁵⁵ John Cadman, January 1925, “Refinery Minutes: Item 14. Social Matters,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, pp.1-2

⁴⁵⁶ H. E. Nichols to M. Greenwood, June 3rd, 1920, *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

⁴⁵⁷ R. G. Neilson to M. Greenwood, April 21st, 1920, *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

variables— such as introduction of new technologies, reorganization of industrial production, changes in labor processes— to ensure its competitiveness and economic growth. The form of industrial restructuring is determined not only by the demands of capital for the reorganization of production but also by the changes in class relations and social organization.⁴⁵⁸ The transformation in the organization of production in the oil industry followed the industrial restructuring that took place in other global industries during WWI as part of a transition from the second to the third period of capitalism. This represented a shift from the period of extensive accumulation of wealth based on competitive capitalism to the regime of Fordism characterized by mass production and mass consumption.⁴⁵⁹ As a result of the military needs of the war and the concomitant technological developments, the global demand for petroleum spiked and, consequently, the oil industry boomed in the post-war years. This development led to the growth of the Anglo-Persian Oil Company inside Iran and abroad. After the War, the Company had its own distributing and tanker subsidiaries— the British Petroleum Company and the British Tanker Company— and was moving towards the Chairman’s grand vision: creation of an integrated oil company.⁴⁶⁰ The A.P.O.C. enjoyed tremendous growth after the War and well into the 1920s. Crude oil throughput doubled between 1919 and 1921 by commissioning five new benches.⁴⁶¹ The Abadan Refinery, which was originally designed to handle two million gallons of oil per month, began to gear up to deal with a monthly rate

⁴⁵⁸ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.6

⁴⁵⁹ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.6

⁴⁶⁰ Ronald W. Ferrier, *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982), p.263

⁴⁶¹ Laurence Lockhart, *Abadan 1919-1922*, BP Archives, ArcRef 71439, “Abadan Refinery, Historical Notes”

of 100 million gallons.⁴⁶² Moreover, the expiry of the contract with the Asiatic oil Company in 1922 opened up a new chapter in the history of the Company. The Company began to transport and sell its products through its own subsidiaries worldwide. The Company also expanded its geographical outreach by erecting new oil infrastructure across the world. For instance, a new refinery was built at LLandarcy near Swansea in June 1922.⁴⁶³

The Company's rapid growth and subsequent prosperity changed the dynamics of its relations with different groups of employees. Besides selectively accommodating the increased demands of labor for better amenities, the management began to rethink the Company's earlier paternalistic policies which were driven by pure economic rationality. Influenced by American and European model company towns, the Refinery works manager felt the need to devise a new welfare program and formulated a scheme to turn Abadan into a "model city."⁴⁶⁴ The new welfare scheme did not envision a comprehensive plan for the entire company town; rather, it conjured up the incorporation of several new institutions, including "a small church, school, concert and dancing hall, masonic lodge, Foremen's club, Clerks' club, Roman Catholic chapel for Goanese clerks, etc.," into Abadan's spatial structure.⁴⁶⁵ Rather than seeking social harmony, the Refinery works manager's plan would reinforce the company town's social hierarchy by adopting some hand-picked elements of the model company town that would cater only for the European employees and high-

⁴⁶² F. C. Temple and G. Wittett, 1924, "Abadan Town Planning Report," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.1

⁴⁶³ Laurence Paul Elwell-Sutton, *Persian oil: a study in power politics*. (Lawrence and Wishart, 1955), p.90

⁴⁶⁴ M. Greenwood to H. E. Nichols, June 7th, 1920, *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

⁴⁶⁵ R. G. Neilson to M. Greenwood, April 21st, 1920, *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

ranking groups of the second-class personnel. The Directors acknowledged the increased need for new social services in Abadan, yet stressed the necessity of addressing housing shortage “before churches, schools, etc. are taken in hand.”⁴⁶⁶ As a result, due to the need to finish more urgent works, the model village program never materialized.⁴⁶⁷

The Company’s paternalistic policies towards the second-class personnel aimed not only to increase labor control, but also to widen socio-occupational cleavages amongst different groups of “native” employees. Obviously, the main objective was to weaken solidarity within the workforce and avoid potential labor militancy. As mentioned earlier, only the higher ranks of the second-tier staff benefited from Company paternalism. The first series of social services were provided to Indian foremen out of necessity. The Great War caused a massive migration of skilled workforce from Abadan to Basra—because of higher wages that British Government-sponsored projects on the other side of the Shatt were paying. The shortage of labor in Abadan in January 1917 had adverse impacts on the operations of the tin-making plants and consequently disrupted production of tined kerosene to the extent that the Company began scrambling for the skilled workforce in Rangoon, Burma.⁴⁶⁸ With a view to retaining the services of Indian foremen at Abadan, a tennis court was built in the Foremen’s quarters in the Native Village. Moreover, plans were laid down to add a small club to this neighborhood to make sure that foremen have “a lively existence in their spare hours.”⁴⁶⁹ By the same token, the necessity of provision

⁴⁶⁶ M. Greenwood to H. E. Nichols, June 7th, 1920, *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

⁴⁶⁷ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

⁴⁶⁸ Strick, Scott & Co. to A. T. Wilson, December 20th, 1916, BP Archives, ArcRef 68779. “Captain A. T. Wilson,”

⁴⁶⁹ R. G. Nielson to C. A. Walpole, May 29th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

of clubs to the clerical staff was noted by a manager in 1920: “It is becoming increasingly difficult to keep up a good standard of office clerks. Club buildings, giving facilities for indoor and outdoor games, would do wonders towards making the men contented, and to bring other good men into our employ.” However, clerks, like foremen, were not entitled to all the entertainment amenities that were provided to British employees. For instance, the billiard room was eliminated from the program of the Clerks’ Club in the Fields.⁴⁷⁰ In 1920, plans were approved to build a club for Indian clerks at Abadan on the lines of the Unity Club at the Field.⁴⁷¹

Like housing, social facilities planned for the second-class employees were segregated by occupation and ethnic origins. The clerks’ club known as Abadan Athletic Club was designed for the Indian clerical staff and Abadan Recreation Club was provided to the Indian foremen. Both clubs were accommodated in separate huts in the Native Bazaar. To exercise control over social and entertainment activities, club secretaries were appointed by the Company.⁴⁷² As a general rule, clerks were entitled to better amenities among “native” skilled workmen. They were the only group that could get access to the medical facilities provided to the first-class personnel and, on certain occasions, were allowed to mingle with the British staff. As Figure 3.27 shows, the Indian clerks’ club created a space for crossing the racial boundaries in a highly segregated company town. Moreover, the Company had engineered the welfare programs to increase control and efficiency of clerks. For instance, clerks and office assistants were given “free office tiffin.”

⁴⁷⁰ M. Greenwood to H. E. Nichols, June 7th, 1920, *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

⁴⁷¹ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

⁴⁷² F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.19

This type of allowance was not designed with the welfare of employees in mind; rather, it was intended to enhance *spirit de corps* amongst the staff, avoid wastage of time during lunch break, and promote “temperance, both in eating and drinking,” as employees were under the eyes of the “burra sahib” (supervisor). Furthermore, the clerical staff was required to lunch in the office in order to qualify for the allowance.⁴⁷³



Figure 3.27 An official admission ceremony held for high-ranking Indian staff in the Indian Clerks’ Club, circa 1925.

Source: Atabaki, 2015

The Company also encouraged sectarian religious practices and granted permission to select groups of workmen to build religious institutions on their own initiative. For instance, one half of the Armenian Line was converted into an orthodox church for the use of the Armenian community.⁴⁷⁴ Rangooni Muslims were also allowed to erect their own mosque in the Coolie Lines neighborhood. The only public entertainment facility provided

⁴⁷³ Charles Greenway to C. A. Walpole, July 12th, 1915, *General Correspondence*, BP Archives, ArcRef 70014

⁴⁷⁴ “Department of Labour,” *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.61

to all classes of “native” employees was the Cinema Theater built in 1919 in the Company’s Bazaar at a cost of £6000. As Figure 3.28 illustrates, this edifice was erected next to the Refinery’s Main Gate and adjacent to other public buildings, such as the Police Station and the Sanitation Office.



Figure 3.28 A view of the Company’s Bazaar near the Main Gate, circa 1920. From left to right: Police Station, Cinema Theatre, and Sanitation Office. These buildings, erected based on the second-tier colonial architecture, collectively shaped a distinctive industrial vernacular style in Abadan in the post-war years.

Source: BP Archives, ArcRef 36179

The Company viewed the Cinema as a self-supporting enterprise. Its management was contracted to a Parsee businessman for a monthly rental of ₹400.⁴⁷⁵ The Cinema was used as an instrument to avert the increased labor discontent and the mounting criticism about the inadequate housing and welfare amenities in the Native Village. It was also intended to signify oil modernity and show how the new forms of entertainment technology were used by the Company to extend the scope of employee’s recreational pursuits. The

⁴⁷⁵ *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1922*. April 1923, BP Archive ArcRef 54365, P.80

new institution, however, did not meet any of these objectives. It was not a successful venture and the lessee could not fulfill his financial obligations. Moreover, as I will show later, while the tensions between the Company and workmen escalated, the Cinema was used as a venue for organization of labor and execution of a major strike.

3.2.2.2 Healthcare Spaces. Disparities in allocation of Company paternalism was most evident in the provision of healthcare spaces. Similar to housing and social services, the first-class employees were entitled to better medical services than were other labor groups. For instance, in May 1916, in the midst of a cholera outbreak, only the Europeans and high-ranking clerks were inoculated against the epidemic.⁴⁷⁶ Following the colonial practices, “Native” and local employees were not admitted to the medical facilities put up for Europeans. In the early years of operations, medical arrangements at Abadan and the Fields were under two separate managerial regimes. The Company’s healthcare system, which was comprised of dispensaries, hospitals, quarantine hospitals and isolation camps, underwent a transformation in 1920, when, in the light of all postwar developments, the Company appointed Dr. Young, the Chief Medical Officer and Political Agent in the Fields, to the head of the medical work at Abadan.⁴⁷⁷ As I will discuss in what follows, Dr. Young and the team of medical staff assumed a pivotal role in the planning and design of major healthcare buildings at Abadan.

⁴⁷⁶ Vaccine for inoculation of the staff (170 injections) was ordered from the British authorities in Basra. C. A. Walpole to R. G. Neilson, May 31st, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁴⁷⁷ In the oil fields Dr. Young had successfully used medical services as a means of political leverage to increase the Company’s influence amongst Bakhtiari nomads in Central Khuzestan. Under his supervision, a full-fledged hospital was developed in Masjid-i-Sulaiman.

Staff Dispensaries and Hospital

Prior to the construction of the first staff hospital, medical services were attended to at a dispensary located on the ground floor of No.1 Bungalow.⁴⁷⁸ In 1915, a hospital was erected at the northwestern corner of the Refinery proper behind the Bungalow Area on the piece of land acquired in 1914 (See Figure 3.29). The hospital catered for the staff, the workforce category that in the context of healthcare services included both Europeans and high-ranking Indian clerks. Like the club, the hospital was one of the major institutions of the urban third culture.⁴⁷⁹ Colonial examples and prevalent hospital design guidelines determined the location of the new healthcare institution. For instance, following the recognized practice in the colonial tropics, it was decided that staff and “native” patients be treated in separate establishments.⁴⁸⁰ Moreover, concerns with the environmental causes of disease, which were predicated upon zymotic theories,⁴⁸¹ resulted in positioning the building at the most salubrious location within the oil enclave. As Figure 3.29 reveals, the hospital was situated on a dry spot near the center of the island. It was surrounded by grounds designated for sports activity, with ample day light and air flow at a safe distance from indigenous settlements as well as moist, date gardens, and stagnant waters. Given the direction of the prevailing winds, the staff hospital was also protected from the noise, odor, and polluting effects of the Refinery.

⁴⁷⁸ Henry Longhurst, *Adventure in Oil*. (London: Sidgwick and Jackson, 1959), p.46

⁴⁷⁹ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.226

⁴⁸⁰ Dr. M. Young, 18th July 1930, *The Re-organization of the Company's Medical Services in Persia by M Y Young*, BP Archives, ArcRef 68938, p.16

⁴⁸¹ Zymotic theory was a medical theory of disease developed in the mid-nineteenth. Zymotic theory held that disease is caused by a process similar to fermentation and that environmental factors play major roles in the spread of infectious diseases. Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.105

The evidence is scanty on the architecture of the first hospital; nevertheless, historical documents indicate that its design was a fusion of the pavilion system and the Fordist concept of mass production. Inspired by the premise of the healing effects of the natural environment and clean air — or, conversely, by the assumption that disease is caused and spread by “bad air” — pavilion-ward hospitals proliferated in Europe and then in North America in the nineteenth and early twentieth century. Conceptualized as instruments of cure, these healthcare institutions were designed on the basis of personal air space and noninfective pattern of air flow and were surrounded by spacious green compounds.⁴⁸² The pavilion-style hospitals featured long, narrow wards that included dozens of beds and incorporated multiple windows on opposing sides to facilitate cross-ventilation. While this approach to hospital design was rethought by the adoption of the germ theory and other developments in the late nineteenth century, pavilion plan remained an established and accepted model of hospital design well into the 1930s.⁴⁸³

⁴⁸² Cor Wagenaar, “Five Revolutions: A Short History of Hospital Architecture,” in *Architecture of Hospitals*. Ed. By Cor Wagenaar (NAi Publishers, 2006), p.28; Jeanne Kisacky, *Rise of the Modern Hospital: An Architectural History of Health and Healing, 1870–1940* (University of Pittsburgh Press, 2017), p.107

⁴⁸³ Annmarie Adams, *Medicine by Design: The Architect and the Modern Hospital, 1893–1943* (University of Minnesota Press, 2006), p. xviii

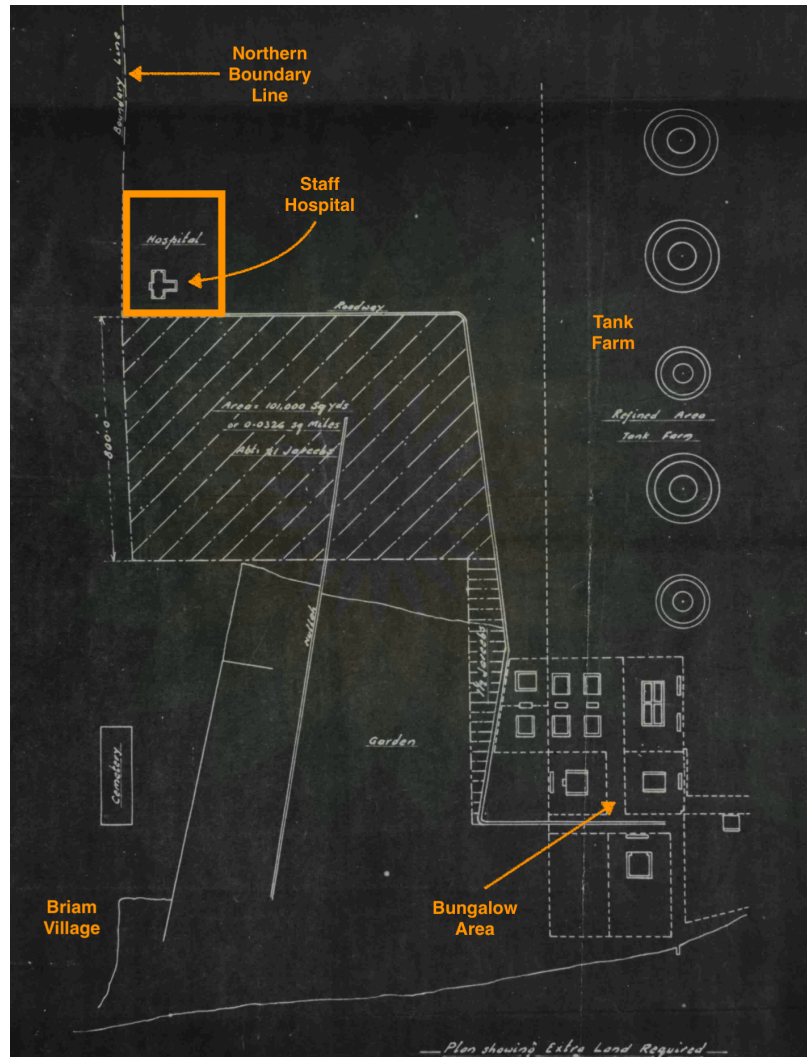


Figure 3.29 Site plan of the northern section of the Refinery, showing the location of the staff hospital, known as the Tin Tabernacle, circa 1919.

Source: BP Archives, ArcRef 100497

The staff hospital at Abadan was a standardized pavilion type made of prefabricated galvanized iron and timber components which along with its medical equipment was shipped from Britain and assembled on-site. The Tin Tabernacle, as the hospital was called by the staff, provided accommodation for 16 European and clerical patients.⁴⁸⁴ The

⁴⁸⁴ Dr. M. Young, 18th July 1930, *The Re-organization of the Company's Medical Services in Persia* by M Y Young, BP Archives, ArcRef 68938, p.9

application of metal and wood and other impermeable materials with no cracks or projections made the prefabricated hospital a good example of aseptic designs of the early twentieth century. As Figure 3.29 illustrates, the hospital had a symmetrical, cruciform plan with two separate wings for European and clerical patients. This arrangement became a prototypical form for the staff hospital over the following two decades. The Tin Tabernacle was perhaps a type of military hospital and a product of war exigencies which was sent to Abadan to address the dire needs for medical services. Around the same time, similar portable hospital units on pavilion-plan were mass-produced by the U.S. Army for application in WWI.⁴⁸⁵

As a result of the rapid dissemination of the germ theory, medical officials expressed interest to incorporate the latest medical technology of the day — such as the surgical theatre, bacteriological and industrial disease laboratories, and X-Ray plant— into the layout of the staff hospital. During the war years, the Refinery works manager rejected the proposals put forth by the medical staff to build a new hospital equipped with modern medical technology. The works manager believed that until Abadan was completely settled down there was no need for new hospitals for Europeans. In the interim, he believed, adding a small “pucca” operation room, electricity, and extra fittings would enhance the performance of the existing hospital.⁴⁸⁶

In 1921, under the new medical management, plans were developed for the improvement of the healthcare system at Abadan. Proposals for a new permanent staff hospital with specialized spaces and standard medical amenities resurfaced. To the

⁴⁸⁵ Jeanne Kisacky, *Rise of the Modern Hospital: An Architectural History of Health and Healing, 1870–1940* (University of Pittsburgh Press, 2017), p.236

⁴⁸⁶ R. G. Nielson to C. A. Walpole, May 17th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

Refinery medical officers, the Tin Tabernacle was dysfunctional given the climatic conditions of Abadan. Not only did it lack appropriate fittings and furnishings, the Tin Tabernacle was also deemed unsuitable for hospital use with respect to its size, internal layout, and structure. It was reportedly a “hot house in the summer and ice house in the winter,” with no sound insulation or a proper drainage system. The accommodation for the nursing staff was also insufficient.⁴⁸⁷ The medical staff envisioned a new hospital to provide accommodation for 16 Europeans and 10 clerks. While meeting the new medical requirements, space in the staff hospital was engineered to reinforce the existing social order. In other words, Europeans and Indian clerks were treated in the same building but accommodated in separate wards and provided with different levels of medical care. The new hospital would also include 2 beds for women and 2 beds for serious cases in a small special ward as well as operation theatre, consultation rooms, with separate blocks for servants and nursing staff. The site of the golf course at the back of the Bungalow Area was tentatively selected for the new hospital. It was also suggested that as the construction of the new building was underway, No.5 Bungalow be rehabilitated and converted into a temporary hospital and nursing quarters.⁴⁸⁸ As in other company towns, adaptive reuse was a prevailing policy at Abadan. Upon the construction of the new staff hospital, the Tin Tabernacle was converted into a Sports Club.⁴⁸⁹

⁴⁸⁷ The nursing staff consisted of one matron and three sisters. The staff hospital epitomizes the gendered nature of hospital design in this period. For instance, the sisters' rooms were reportedly very small, little larger than the bathroom provided in the staff bungalows. Dr. Young, *Memorandum on Abadan*, 11th February 1921, BP Archives, ArcRef 63984, “Miscellaneous Papers Relating to Persia”, p.201

⁴⁸⁸ The cost of the proposed hospital was estimated at £22,000, and it was to be built in the course of 18-24 months. Dr. Young to Messrs. Strick, Scott & Co., March 3rd, 1921, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁴⁸⁹ John Cadman, Spring 1926, “Visit to Persia and Iraq,” BP Archives, ArcRef 71403, p.27

Native Dispensaries and Hospital

At the outset of operations, only two small out-patient huts, the Village Dispensary and the Works Dispensary, were provided to the “native” employees. The dispensaries were rudimentary structures with no appropriate medical facilities. The Works Dispensary, characterized as a “castor oil shop” by a Company manager, consisted of a main reception room for all classes of non-European workmen and a special room for clerks in addition to an examination room for the medical officer.⁴⁹⁰ The lack of basic medical tools was to the extent that once an injured workman brought from the Refinery was anesthetized and operated on a bare table.⁴⁹¹ During the war years, despite frequent outbreaks of epidemics and the mounting criticism regarding the unsatisfactory medical and sanitary conditions in the Abadan company town, the Refinery management refused to build a hospital for Indian and Iranian employees. The daily fines collected from non-European workers for illegitimate absenteeism or loss of pay were deposited into the so-called Hospital Fund Account and utilized for a range of bonuses for the first-class employees.⁴⁹² During the war years, it was the official view of the Company that provision of a permanent hospital to local employees was contingent upon the acquisition of Abadan Island by the British Government as spoils of the Great War. This imperial outlook led Company officials to believe that it was the responsibility of the Government of India, rather than that of the Anglo-Persian Oil Company, to fund the construction and upkeep of such a healthcare

⁴⁹⁰ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

⁴⁹¹ Dr. Young, “Memorandum on Abadan,” 11th February 1921, BP Archives, ArcRef 63984, *Miscellaneous Papers Relating to Persia*, p.201

⁴⁹² H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

institution.⁴⁹³ After the cessation of the War, as Figure 3.30 illustrates, the old huts in the former labor camp, known as the I.W.T camp, which was built during the War by the Inland Water Transport agency on the southern side of the Native Village, were used to accommodate the medical needs of skilled workmen.⁴⁹⁴

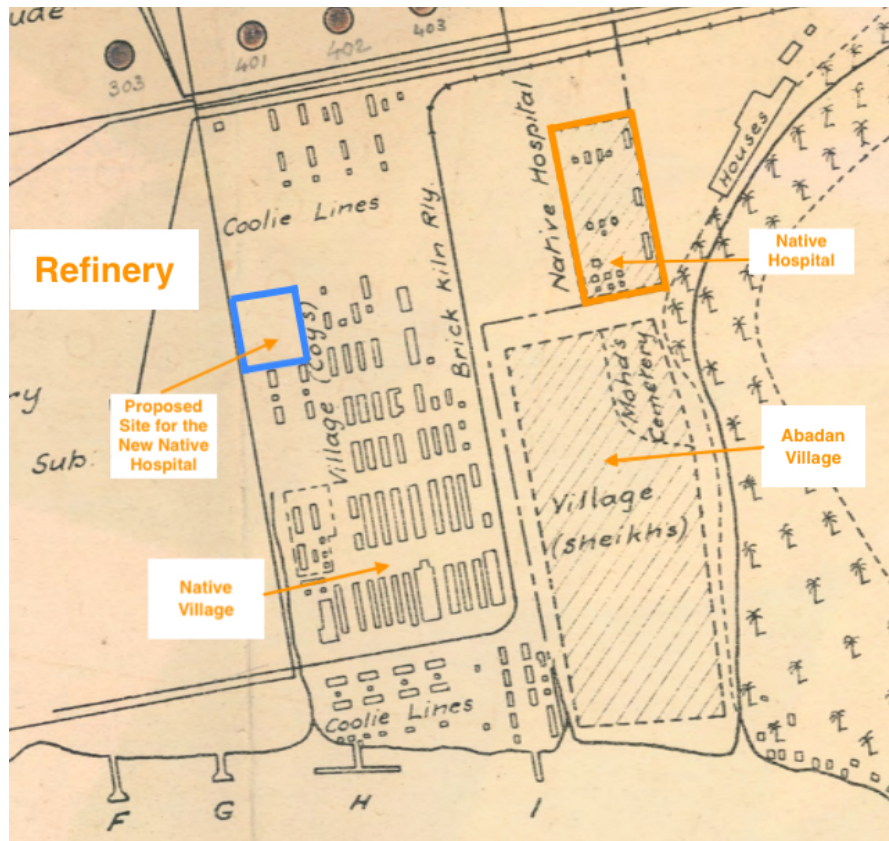


Figure 3.30 Site plan of the non-European quarters, showing the location of the Native Hospital, circa 1919.

Source: BP Archives, ArcRef 71403

⁴⁹³ R. G. Nielson to C. A. Walpole, May 17th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754. This was the official view of the Company until 1920. The Directors of the APOC frequently appealed to British authorities about the necessity of acquisition of Abadan and Kishm islands during and after the Great War. For instance, see: Charles Greenway to the Under Secretary of State, *Persian Gulf: Abadan and Kishm, Anglo-Persian Oil Company*. January 17th, 1919, POWE 33/62 (10261707)

⁴⁹⁴ Dr. M. Young, *The Re-organization of the Company's Medical Services in Persia by M Y Young*, 18th July 1930, BP Archives, ArcRef 68938, p.9

As indicated earlier, until the 1920s, sanitary conditions and medical services at Abadan had not received enough attention. Upon his visit to Iran in 1920, H. E. Nichols, the Managing Director, was shocked at the state of insanitary conditions at Abadan. He noted that the Native Village was “dirty” and “huddled up against the refinery fence.” Poor medical services also drew his attention. Nichols pointed out that, “apart from humanitarian aspect, we have entered into a contractual obligation in over 5000 agreements, Indian as well as British, to provide free medical attention.” He also warned that if epidemics broke out in Abadan, the deficient medical arrangements would provide the Indian newspapers with substantial evidence to make more allegations against the company regarding ill-treatment of the Indian migrant labor.⁴⁹⁵

In 1921, as part of the medical re-organization plans, the status of healthcare services in the Company’s Village and the Abadan Village was thoroughly examined. This assessment indicated that the medical arrangements for non-Europeans were “inefficient” and “hopelessly inadequate.” In the postwar era, social rationality gradually appeared as a new criterion along with the factor of economic logic in making a case for revising the Company’s paternalistic policies. For instance, the Chief Medical Officer called for urgent action to prevent the increased sick list and the risk of epidemics and noted, “I cannot make this appeal stronger than by stating that it would be as much an act of humanity as an act of duty to do so, in the light of existing conditions.”⁴⁹⁶

The team of medical officers stressed the urgency of building a hospital for different classes of the second-and third-class workforce. Similar to other medical professionals of

⁴⁹⁵ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

⁴⁹⁶ Dr. Young to Messrs. Strick, Scott & Co., March 3rd, 1921, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

the time, Dr. Young and his colleagues subscribed to what Jeanne Kisacky terms the post-germ theory. This thesis concerned itself with controlling pathogenic micro-organisms and helped shift the medical practice from hygienic approach to experimental science. Gradually, within medical circles, physical contact rather than airborne germs was perceived as the major means of transmission of infectious diseases.⁴⁹⁷ However, the Company's medical officers until the late 1920s looked to the air to explain some cases of disease causation. This view was reinforced by colonial mindset that offered convenient pathological lenses through which medical officers examined the hygienic situation at Abadan. For instance, the "native" populations were viewed as the crux of sanitary problems. In the words of the Chief Medical Officer, "it is the Natives that spread disease, and by providing proper aid for them, we shall help all concerned in the place." Dr. Young also stressed the removal of the I.W.T huts and called for the erection of a proper hospital on "healthy soil" with ample room for future extensions.⁴⁹⁸ Two sites in the Native Village were examined as potential locations for the new hospital: a piece of land close to the coolie lines on the riverfront and a vacant area behind the native houses. As Figure 3.30 shows, eventually, the latter site was chosen by medical officers on account of its central location.⁴⁹⁹

⁴⁹⁷ Jeanne Kisacky, *Rise of the Modern Hospital: An Architectural History of Health and Healing, 1870–1940* (University of Pittsburgh Press, 2017), p.105-108

⁴⁹⁸ Dr. Young, "Memorandum on Abadan," 11th February 1921, BP Archives, ArcRef 63984, *Miscellaneous Papers Relating to Persia*, p.201

⁴⁹⁹ "Medical Services, Abadan General Hospital and Attached Dispensary," 1928, *The Anglo-Persian Oil Company Limited: Persian Compendium*. BP Archives, ArcRef 37027, p.1



Figure 3.31 Site plan of the Abadan General Hospital, circa 1928. “air space,” a design concept widely used in the colonial setting, governed the design of the General Hospital. Buildings were dispersed across the compound to ensure circulation of air and penetration of sun light. The plan reveals the stark differences between the design criteria adopted for the staff and labor wards. While the staff hospital was a sealed, pavilion-type building, covered breezeways ran across the “native” hospital.

Source: BP Archives, ArcRef 37027

The planning and design of the so-called “native” hospital echoes the broader transition in hospital design practices in the era of the post-germ theory. In this period, as Jeanne Kisacky notes, the pavilion-ward layout was modified to meet the requirements of the emerging medical science and technology.⁵⁰⁰ This meant that hospitals created spaces for the new medical technology and yet provided “a sea of air” within and between the wards to prevent disease transfer. Moreover, unlike the traditional pavilion hospital,

⁵⁰⁰ Jeanne Kisacky, *Rise of the Modern Hospital: An Architectural History of Health and Healing, 1870–1940* (University of Pittsburgh Press, 2017), p.107

external factors including the natural environment ceased to play a major role in the design of the new generation of hospitals.⁵⁰¹ The new healthcare building at Abadan was affected by the new approach to hospital design. Unlike the old staff hospital, the selected ground for the new hospital was located within the Native Village immediately to the south of the Refinery. In the words of the Chief Medical Officer, "...like a railroad, a hospital should be constructed as near as possible to the population center that it is supposed to serve...and this applies with even greater force in the East where the transport of the native sick and their relatives is a serious problem."⁵⁰²

The new hospital was designed on the post-germ theory pavilion plan principles. It was accessed by one of the two major roads in the Native Village that connected the Refinery to the Bawarda Tank Farm. As Figure 3.31 illustrates, the hospital compound was comprised of individual buildings which were separated by open spaces yet connected by covered walkways. This layout aimed to maximize circulation of air amongst the buildings and to reduce direct physical contact and the potential risk of disease transfer. The new hospital also was intended to centralize all medical services for the non-European workmen. The medical officers believed that the centralized organization would enhance the efficiency of healthcare services, a strategy that echoed the Company's broader policy in the 1920s. The hospital was to be built with no ornamentations but with adequate equipment and medical personnel.⁵⁰³ As the Chief Medical Officer suggested, the hospital was to be constructed with iron pipes and concrete floors, white-washed walls, and roofing

⁵⁰¹ Cor Wagenaar, "Five Revolutions: A Short History of Hospital Architecture," in *Architecture of Hospitals*. Ed. By Cor Wagenaar (NAi Publishers, 2006), p.32

⁵⁰² Dr. M. Young, *The Re-organization of the Company's Medical Services in Persia by M Y Young*, 18th July 1930, BP Archives, ArcRef 68938, p.9

⁵⁰³ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

similar to the bungalow roofs, and was to feature all customary fittings— such as electric lights, fans, water, and drain pipes.⁵⁰⁴

The initial spatial program consisted of three major sections: in-patient wards, outdoor block, and residential quarters for medical and nursing staff. The in-patient section was divided into separate wards with respect to patients' ethnic and occupational characteristics. For instance, the plan earmarked two wards for Chittagonians and other Indian Muslims, one ward for Hindoos, one ward for Sikhs, one ward for Iranians and sweepers, one ward for maistries, and one ward for Chinese and Armenian workmen.⁵⁰⁵ In other words, the spatial structure of the wards was engineered to reinforce the existing stratification within the lower strata of the labor force. The aseptic requirements of hospital design, which intended to create a germ-free environment, were expressed through separation of space inside and outside the wards.⁵⁰⁶ When built in 1922, as Figure 3.31 reveals, the in-patient section, or the Labor Block as it was called, consisted of three parallel blocks of single-storied wards separated by covered walkways. Each block was divided into three separate special wards, providing 60 beds in total.⁵⁰⁷

⁵⁰⁴ Dr. Young, "Memorandum on Abadan," 11th February 1921, BP Archives, ArcRef 63984, *Miscellaneous Papers Relating to Persia*, p.201

⁵⁰⁵ Dr. Young, "Memorandum on Abadan," 11th February 1921, BP Archives, ArcRef 63984, *Miscellaneous Papers Relating to Persia*, p.201

⁵⁰⁶ Jeanne Kisacky, *Rise of the Modern Hospital: An Architectural History of Health and Healing, 1870–1940* (University of Pittsburgh Press, 2017), p.109

⁵⁰⁷ "Medical Services, Abadan General Hospital and Attached Dispensary," 1928, *The Anglo-Persian Oil Company Limited: Persian Compendium*. BP Archives, ArcRef 37027, p.2



Figure 3.32 A View of the Abadan General Hospital from the Refinery looking south, circa 1924. The white-washed, two-storied Administrative Block (the first building on the right) came to symbolize the new healthcare institution and served as the main gateway to the compound. The photo also shows the Staff Block (the building on the left) and the Resident Doctors' Bungalow (the building in the middle).
Source: BP Archives, ArcRef 229351

As in other hospitals built in the era of the post-germ theory, asepsis was manifested in the choice of construction materials and in the application of the state-of-the-art medical apparatus. For instance, bath and washing facilities covered with enameled lead glaze were installed throughout the hospital. Asepsis was also expressed through architectural symbolism. Several buildings were covered with distempered white paint to create a pristine visual effect.⁵⁰⁸ One of the buildings with white-washed appearance was the Administrative Block which served as the main gateway to the hospital. As Figure 3.33 shows, it was a double-storied structure surrounded by an arched verandah. Medical technology was also deemed key to enhancing worker performance and boosting the relationship between the Company and the workforce.⁵⁰⁹ To this end, the Administrative Block was designed to include not only a dispensary, but also a range of specialized

⁵⁰⁸ Dr. Rennie to Dr. M. Young, June 1924. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

⁵⁰⁹ Dr. M. Young, *The Re-organization of the Company's Medical Services in Persia by M Y Young*, 18th July 1930, BP Archives, ArcRef 68938, p.9

medical spaces, such as operation theatre, sterilizing room, laboratory, X-Ray room, and sanitation office.⁵¹⁰ Pathological laboratory was specially provided to study and diagnose diseases by the use of the latest technology of the day, such as sigmoidoscope and laryngoscope, among others.⁵¹¹



Figure 3.33 A view of the Administrative Block and the adjoining roundabout that served as the main entrance to the Abadan General Hospital, circa 1924. The nursing staff was housed on the second floor and, symbolically, served as the gatekeepers to the healthcare institution.

Source: BP Archives, ArcRef 36152

The new hospital also provided accommodation for the resident medical officers and the nursing staff, as well as a group of hospital administrative staff. The hierarchy within the medical personnel was manifested through the housing type built for each group. For instance, the nursing staff, including one matron and seven sisters, were accommodated

⁵¹⁰ Dr. Young to Messrs. Strick, Scott & Co., March 3rd, 1921, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁵¹¹ Dr. E. Jamieson to Dr. M. Young, February 7th, 1930. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

on the second floor of the Administrative Block on the lines of the Slide Valve model, while the resident medical officers were housed in a typical European-style bungalow to the north of the Administrative Block (See Figure 3.32). A group of administrative staff, including assistant surgeons, hospital quarter master, and compounders, were housed in barrack-type quarters, known as the Servants' Quarters, to the north of the Labor wards. Other non-European personnel, such as dressers, ward orderlies, clerks, *darzies* (tailors), *dhobies* (cloth washers), carpenters, cooks, and sweepers, lived in quarters outside the hospital compound.⁵¹²

Simmering nationalist sentiments coupled with the mounting pressure from the Iranian Government and the changed labor conditions in the early 1920s made the Refinery management rethink the medical plans for Abadan. In September 1924, it was decided to combine the staff hospital and the medical center built for Indian and Iranian workmen. The pavilion layout made possible the incorporation of a new block for Europeans and clerks. As Figures 3.31 and 3.32 show, the "Staff Block" was positioned to the north of the Administrative Block and connected to other buildings via a covered walkway. Aseptic requirements governed the design of the staff hospital. It was a single-storied structure surrounded by an arched verandah and consisted of two wings and a central hall, providing, in total, 40 beds for European and Indian clerical patients. Each wing was assigned to one group and was divided into a main ward and a smaller ward, also known as "special ward." The latter was used to provide medical services to senior staff, high-profile figures, and female patients. For instance, in September 1924, a Member of British Parliament was

⁵¹² "Medical Services, Abadan General Hospital and Attached Dispensary," 1928, *The Anglo-Persian Oil Company Limited: Persian Compendium*. BP Archives, ArcRef 37027, p.4

accommodated in one of the special wards after suffering a renal colic attack.⁵¹³ The main hall also included such spaces as the matron's office, sisters' duty room, darzie's room, and three special wards.⁵¹⁴ While the Labor Block was designed as open wards, the Staff Block was a sealed building. Furthermore, the latter was designed as a convalescent home—a place for “treatment, and restoration” — and included some features of ward hospital design of the past. It faced an open ground laid to the north of the hospital compound. Two tennis courts were also provided for the exclusive use of the European and clerical patients as well as the hospital medical staff. The third-class personnel, however, were required to spend the recovery period at their quarters.

The Refinery General Hospital officially opened in September 1924. All the medical staff moved from No.5 Bungalow to the new building. The new hospital became Abadan's medical center, providing services to all the three tiers of the workforce as well as locals. However, it represented concealed segregation by building separate wards and enforcing distinctions in the class of patients and in the quality of medical treatment. Micro-segregation manifested itself in the quality of construction materials and the structure of different sections of the General Hospital. After several years, when the deficiencies of the General Hospital became known to medical officers and the idea of relocating the Hospital was raised, Company officials considered that the Administrative Block and the Staff Block could be converted into the Sanitation Department and a public school, respectively; however, they unanimously believed that the “Native” wards had to be condemned due to the inferior structure. Regardless of differences in the environment and in the quality of

⁵¹³ Dr. Rennie to Dr. M. Young, September 30th, 1924. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

⁵¹⁴ “*Medical Services, Abadan General Hospital and Attached Dispensary*,” 1928, *The Anglo-Persian Oil Company Limited: Persian Compendium*. BP Archives, ArcRef 37027, p.3

services, accommodation of Europeans and locals on one single site was an unprecedented phenomenon. This radical shift in provision of healthcare services even shocked London-based Company officials. During his visit to Abadan in October 1924, a Company Director was struck upon learning that Europeans and locals were treated in the same compound adjacent to the refinery. Indeed, the location of the general hospital, which was considered suitable for the indigenous workmen, was deemed unhealthy for the European patients and the clerical staff.⁵¹⁵ As I will show in the next chapter, in the ensuing decade several plans were devised to reorganize the general hospital and relocate the staff hospital to a more salubrious place with better environmental conditions.

Quarantine Hospital and Isolation Camp

A third component of the medical system at Abadan was the quarantine hospital and the isolation camp. In quarantine facilities run by the Company, it was standard practice to accommodate Europeans and clerks in roomed buildings and to provide other patients with tent camps. Moreover, separate spaces were dedicated to infected patients and “contacts.”⁵¹⁶ At Abadan, the isolation camp was initially sited at the northern corner of the Native Village and consisted of a series of mud huts erected to accommodate the workmen inflicted with or suspicious of infectious diseases. It served as a counterpart to the quarantine hospital at Khorramshahr. The latter institution was administered by the Iranian quarantine authorities and was used to accommodate immigrants and passengers coming from the districts where there were cases of epidemics or infectious diseases. The

⁵¹⁵ Sir John Cadman, “Persia Visit: Secret Diary,” 1924. BP Archives, ArcRef 72549, p.50

⁵¹⁶ Dr. E. Jamieson to Dr. M. Young, “D/O Medical,” December 11th, 1924. *Demi-Official Letters from Dr. E. Jamieson, Principal Medical Officer, Persia to Dr. M. Young, Chief Medical Officer*, BP Archives, ArcRef 112928

so-called infectious diseases huts at Abadan were makeshift structures with no flooring or utilities. During the epidemic outbreaks, patients along with their families, belongings, and furniture were transferred to the fenced isolation compound for at least ten days. However, due to religious and cast differences, certain groups of Iranians and Indians did not easily succumb to the quarantine rules laid down by the Company. In several instances, public resistance was so severe that the Company sanitary staff had to solicit assistance from the Sheikh's guards to implement quarantine measures. Moreover, dozens of guards had to be posted around the isolation compound to keep people from talking except at a specified distance.⁵¹⁷

In the postwar years, due to the rapid growth of the Native Village in every direction, the isolation compound gradually became surrounded by huts and sarifas.⁵¹⁸ Moreover, its ramshackle conditions made it unfit for effective quarantine services. In the early 1920s, as part of the healthcare re-organization plans, medical officials devised a scheme to build a new isolation hospital some 4 miles downstream from the Refinery on a site located at the corner of the land acquired in 1918. As Figure 3.34 shows, the proposed site was at the southern edge of the Bawarda Tank Farm, the farthest available point within the Company's territory at the time.

⁵¹⁷ Dr. Rennie to Dr. M. Young, "Anti-Plague Measures at Abadan," 1924. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

⁵¹⁸ Dr. Young, December 31st, 1923, "Dr. Young's Sanitation Report," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

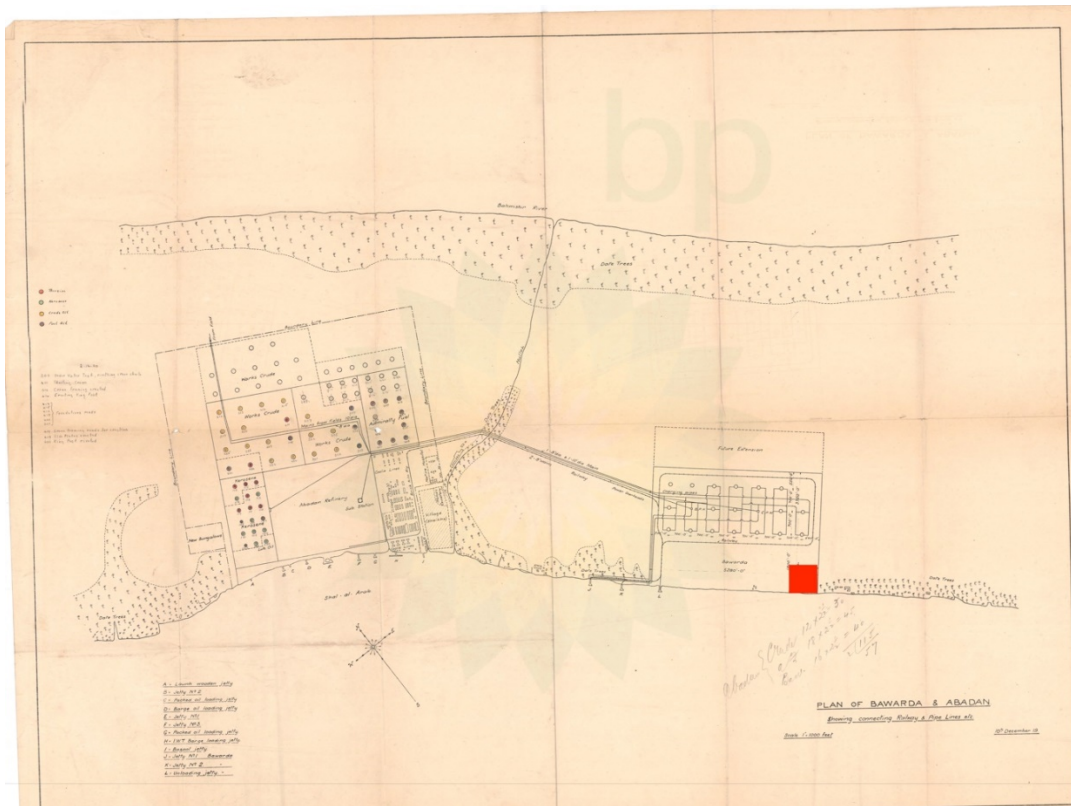


Figure 3.34 Map of the Abadan Refinery (left) and the Bawarda Tank Farm (right), December 1919. The red square indicates the location of the proposed Isolation Hospital. *Source:* BP Archives, ArcRef 71403

Like the General Hospital, the proposed Isolation facility was planned to “accommodate all classes of patients, as well as nursing staff, dressers, etc.”⁵¹⁹ The Company Directors, however, had a different view on the new quarantine facilities. They recommended setting up an encampment rather than a new permanent structure. In London’s view, not only would tents effect economy, they could better meet the fluctuation in the number of patients compared to brick-and-mortar structures.⁵²⁰ However, the Chief Medical Officer believed that, given the low-lying nature of Abadan, tents could not be

⁵¹⁹ Dr. Jamieson, August 23rd, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁵²⁰ Refineries Department to Persia, September 20th, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

considered a feasible option, particularly in winter when they would technically go “under water.”⁵²¹ Dr. Young also called for removing the existing infectious diseases huts and erecting a new hospital “on a system of huts.”⁵²²

The initial plan developed for the Isolation Hospital consisted of two separate blocks for accommodation of two classes of patients: one for Europeans and clerks, and one for “natives.” The European Block provided for twenty-two beds and consisted of two large wards, two smaller wards, and two rooms. The Native Block provided for forty-four beds and included two large and two smaller wards. Moreover, the Chief Medical Officer suggested that a separate ward in the Native Block should be earmarked for smallpox which in these years had become endemic to Abadan.⁵²³ The scheme to build a permanent quarantine hospital was suspended when two hospital ships, H.P.5 and H.P.3, were purchased from the Inland Water Transport agency on a post-war sale market. The paddle boats were then reconditioned and moored at Bawarda as quarantine facilities.⁵²⁴ The floating quarantine hospitals, as the ships came to be known, provided for 120 beds and saved the Company approximately £15,000 in capital expenditure. Plans were also developed to build an on-shore brick-and-mortar “smallpox wing.”⁵²⁵ As Figure 3.35 shows, two standard steel frame sheds were also put up near the river opposite the ships to accommodate contact cases.

⁵²¹ Dr. Young, October 1st, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁵²² Dr. Young, December 31st, 1923, “Dr. Young’s Sanitation Report,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁵²³ Dr. M. Young to Dr. E. Jamieson, July 17th, 1924. *Correspondence between Dr. E. Jamieson, Principal Medical Officer, Iran, and Dr. M. Y. Young, Chief Medical Officer: June to December 1924*, BP Archives, ArcRef 112975

⁵²⁴ John Cadman, Autumn 1924, “Visit to Persia,” BP Archives, ArcRef 71403, p.49

⁵²⁵ Dr. M. Young to Dr. E. Jamieson, November 19th, 1924. *Correspondence between Dr. E. Jamieson, Principal Medical Officer, Iran, and Dr. M. Y. Young, Chief Medical Officer: June to December 1924*, BP Archives, ArcRef 112975

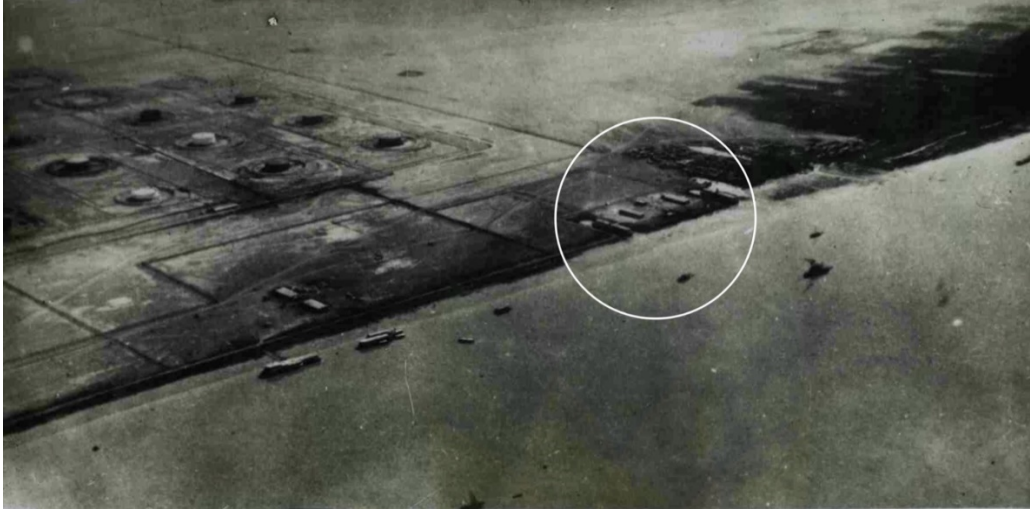


Figure 3.35 Aerial View of the Abadan Isolation Hospital, circa 1926. It was located at the southernmost corner of the Bawarda Tank Farm, some four miles downstream from the Refinery. It consisted of two hospital ships and two standard steel framed sheds for the accommodation of two classes of patients: European and clerical staff, and local workmen.

Source: BP Archives, ArcRef 36152

3.2.2.3 Sanitation and Public Utilities. Similar to healthcare services, the first-class personnel were the main beneficiary of the Company-sponsored public utilities. The provision of modern amenities to European employees was a recognized element in the framework of Company paternalism. As early as 1916, the frequent outbreaks of epidemics in Abadan were attributed to the insufficient medical and sanitary infrastructure in the Indian and Iranian quarters.⁵²⁶ As part of the medical re-organization plans in the early 1920s, along with healthcare arrangements, water supply and disposal of sewerage were examined in a fresh light.

⁵²⁶ Colonel Perry, "Extract from Sanitary Report on Abadan," June 4th, 1916. *His Britannic Majesty's Consul, Mohammerah to Strick, Scott and Company*. BP Archives, ArcRef 68790.

Water Supply System

The provision of clean water supplies and efficient systems of drainage and waste disposal were among the key factors in the development of colonial settlements.⁵²⁷ Following the colonial examples and the prevailing antiseptic procedures, the Company, early on, put up a purification system, including chlorination tanks, pumps, and distribution pipes, in the Bungalow Area. For the Native Village, however, only a water pipe was provided that delivered untreated water from the Shatt to multiple standpipes in select quarters.⁵²⁸ The Company used this service both as a means of labor control and to widen racial and ethnic cleavages amongst the employees. There are records of clashes between different ethnic groups over the accessibility to standpipes in the Native Village.⁵²⁹ Unlike the Bungalow Area, manual labor rather than technology was utilized to deliver water to workmen. In the village water carriers known as *Bhishti* were on the Company's payroll and were tasked with the delivery of drinking water to houses and shops.⁵³⁰

The water intake point for the Bungalow Area, the Refinery, and the Native Village was near No.1 Jetty, where oil tankers called on the Abadan Port on a daily basis.⁵³¹ As operations and industrial activities associated with the Refinery intensified, the quality of water in the Shatt near Abadan deteriorated to the extent that in 1923 the Refinery medical officer warned that drawing water from the river for domestic purposes would be highly

⁵²⁷ Gail Ching-Liang Low, *White Skins/Black Masks: Representation and colonialism*, (London and New York: Routledge, 1996), p.153

⁵²⁸ Colonel Perry, "Extract from Sanitary Report on Abadan," June 4th, 1916. *His Britannic Majesty's Consul*, Mohammerah to Strick, Scott and Company. BP Archives, ArcRef 68790.

⁵²⁹ For instance, tensions between Hindoos and Muslim Indians over a water tap has been recorded in 1915. R. G. Nielson to C. A. Walpole., August 5th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁵³⁰ "Department of Labour," *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.62

⁵³¹ Colonel Perry, "Extract from Sanitary Report on Abadan," June 4th, 1916. *His Britannic Majesty's Consul*, Mohammerah to Strick, Scott and Company. BP Archives, ArcRef 68790.

undesirable and could cause and contribute to the spread of water-borne epidemics, such as cholera. In the medical officer's view, the increased rate of pollution in the Shatt was the product of several factors, such as the daily discharge of chemical pollutants from the Refinery into the river, the increase in the rate of shipping and the floating populations, and the rapid growth of riparian villages Above Abadan.⁵³²

Until the 1920s no particular water supply arrangements were contemplated for the Abadan Village which by this date had a population of more than 7000.⁵³³ The salinity and static nature of the sub-soil water made the local inhabitants rely on the Shatt's water for domestic and cleaning purposes. In fact, the river, historically, was the major source of drinking water and irrigation for the region's villages and date groves.⁵³⁴ Given the location of the Abadan Village, it was greatly affected by the increased rate of pollution upstream. The drinking water of the village was getting contaminated not only by the effluents from the works and oil tankers but also by the sewer discharged from the Native Village into the foreshore. The lack of access to clean drinking water and the insufficient medical services were regarded as major reasons for the high rates of mortality in the Abadan Village in 1923 when a series of epidemics hit Abadan.

⁵³² It is interesting to note that the role of the refinery as the main cause of deterioration of the quality of water was intentionally eliminated in Sir John Cadman's account of pollution in the Shatt which was presented to the Board of Directors in February 1924. The Director of the newly established Refineries Department constructed his story based on Refinery medical officer's Report but surprisingly accused the Cities of Khorramshahr and Basrah and of course all the indigenous villages along the Shatt of discharging pollutants into the River. Dr. Jamieson, August 23rd, 1923, "Dr. Jamieson's General Report," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁵³³ T. L. Jacks, "Statement Showing Relative Proportion of Indian and Persian Labor Employed by the A. P. O. C. As on January 1st, 1921," 1921. *Persia, Staff Matters*, BP Archives, ArcRef 72610

⁵³⁴ An estuary formed by the combined waters of the Euphrates, Tigris and Karun rivers, the Shatt-al-Arab was a key element of the natural irrigation and fertilization network that fed the date-growing region. By the action of the tides the Shatt and its distributaries would carry, twice a day, fresh water, silt and mud across the date groves. John Gordon Lorimer, *The Gazetteer of the Persian Gulf, Vol. II, Geographical and Statistical* (Calcutta: India Office Press, 1908), p. 97.

In 1921, as part of the health and sanitation reorganization plans and in the light of the increased contamination near the Refinery reach of the river, a water supply sterilization scheme was proposed for the Bungalow Area. This scheme, the most economical alternative among the three options proposed by the medical officers, was based on the latest water supply practices on the Tigris River in Iraq. The plan called for the addition of two extra settling tanks—for removal of silt, bacteria, and other impurities from water—and one clean water tank—for chlorination and eventual distribution of water—to the existing water purification system. The two other options recommended new sources for water supply: the first suggested Abadan water should be drawn from the Bahmanshir River as it had purer water and the second recommended relocating the intake pipe to a point upstream from the Refinery.⁵³⁵ While both proposals were rejected on the grounds of procedure costs, they were later revisited in the wake of the epidemics in 1923.

The Chief Medical Officer suggested that the same water sterilization plan should be implemented in the two “native” villages to prevent the outbreak of epidemics among Indians and Iranians and to check the spread of infectious diseases to the Europeans. The Refinery works manager prepared a plan for the installation of a water sterilization system in the Native Village and the Abadan Village. The water distribution scheme included a piping network that would carry water from the clear water tanks to five distribution centers across the Native Village. From each center water would be pumped to multiple standpipes in different areas. The plan also envisioned a main pipeline in the Abadan Village, from which several lines with standpipes would branch.⁵³⁶ The latter program, however, never

⁵³⁵ Dr. Young to Messrs. Strick, Scott & Co., March 3rd, 1921, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁵³⁶ L. F. Bayne to Messrs. Strick, Scott & Co., March 30st, 1921, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

materialized. The British military base in Iraq provided the tools to materialize the water scheme. In March 1922, the Company acquired Filtration and Chlorination plants from the Disposals Board in Basra.⁵³⁷

Drainage and Disposal of Sewage

In the early years of operations, the sewage disposal systems provided to the British employees were of primitive nature and seemed anachronistic considering the prevailing practices in the colonial community. For instance, in the oil fields, depending on the topography of land on which European residences were erected, stationary and mobile privies on the model of the so-called “village closets”⁵³⁸ were built. For the quarters on the hill, fixed latrines were erected at the back of each house. Lacking cesspits, such privies were preferably placed at the edge of the hill to allow for a “natural drop” onto a low level. This method, in which ground surface acted as a natural receptacle, was open-air and displayed unpleasant scenes, particularly, in rainy seasons. For the staff quarters located on flat terrains a portable latrine was provided which was looked after by an Indian sweeper. It was an iron-framed structure covered with mats and positioned over a cesspit in the form of a hole dug out in the ground. The shelter would be removed to a fresh location on a regular basis, with the waste buried.⁵³⁹

It is reasonable to assume that at the early stages of work similar *kutchas* provisions were made at the Abadan oil camp. Archival records show that the Company Directors had

⁵³⁷ Dr. Young to Messrs. Strick, Scott & Co., April 16th, 1922, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁵³⁸ “Village Closets” were the traditional system of privies prevalent in British rural areas which were predicated upon cesspits.

⁵³⁹ Dr. M. Young, 4th February 1910, “Special Report on the Disposal of Sewage at the Camp,” *Miscellaneous Papers Relating to Persia*. BP Archives, ArcRef 63984

divergent views on the type of operation seats and the sewage disposal system to be adopted in the first group of bungalows. James Hamilton called for the provision of “water closets,” whereas Charles Greenway favored “commodes.” Commodes were regarded as economical options, in terms of both the initial cost and maintenance, particularly in areas where sewerage systems were dysfunctional or nonexistent. Perhaps these advantageous qualities led Greenway to believe that commodes were “much safer” than water closets and would pose “no evil consequences.” The Company first experimented with both systems. However, eventually, a sewerage system was adopted for Abadan bungalows. In addition to water closets, every bedroom was supplied with a “native-made” private bathroom.⁵⁴⁰

Therefore, each bungalow compound was equipped with a water flush sewerage system which consisted of soil pipes and a septic tank built of bricks and cement mortar. In the bungalows on the riverbank, this system allowed for a natural gravitation of sewage into the Shatt. To handle the sewage of the bungalows located away from the river, several 20-foot deep concrete pits, known as sullage pits, were built across the Bungalow Area that collected the waste from septic tanks as well as the graywater from hand basins, baths, and kitchens. The septicized effluent was discharged periodically into the river by automatic pumps.⁵⁴¹ This system, however, proved inefficient over time. The far distances of septic tanks from the bungalows, in combination with user malpractices, gradually got sewers choked up. In 1921, it was decided to replace old septic tanks with cast iron tanks and shorten the distance between receptacles and water closets.⁵⁴² This had implications for the

⁵⁴⁰ C. Greenway to J. Cargill, 2nd January 1911, “Anglo-Persian Oil Company, Ltd.: Private Letter Book, Volume 1”, 1910-1911, BP Archives, ArcRef 54484, p.217

⁵⁴¹ L. F. Bayne to Messrs. Strick, Scott & Co., March 30st, 1921, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁵⁴² L. F. Bayne to Messrs. Strick, Scott & Co., March 30st, 1921, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

spatial layout of bungalows. In older bungalows bathrooms had to be relocated from the center of the buildings to the enclosure to avoid the passage of drainage pipes the whole length of the ceiling of the lower rooms— a provision which had proved to be both uncomfortable and insanitary. Drainage connections also were fitted on the outside wall.⁵⁴³

In 1923, in the wake of the frequent epidemics that swept Abadan several sanitation improvement measures were implemented in the Bungalow Area. It was realized that, due to the low-lying nature of the ground and the high levels of sub-soil water, sewerage lifts and effluent purification plants were required. For instance, the Company filled in the concrete pits and built a sunken cast iron plate tank to collect all the waste water from septic tanks. Furthermore, an incinerator was also built for the treatment of ordinary house and kitchen refuse.

In the Refinery and the Native Village, a public latrine model based on the “pail system” was adopted. It originated from a colonial prototype known as the “Crawford's Latrine,” which was a dry-pattern type used in colonial India by the Bombay Municipality when Arthur Crawford served as the municipal commissioner between 1867 and 1871. No earth or water was used in the Crawford's latrine, nor any connection to a cesspool or sewerage network was required; rather, the solid and fluid matters were collected in one bucket and emptied by sweepers daily or more frequently, if necessary.⁵⁴⁴ The Company had already experimented with this type of latrine in the oil fields.⁵⁴⁵

⁵⁴³ L. F. Bayne to Messrs. Strick, Scott & Co., March 13st, 1922, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁵⁴⁴ To read more on this type of latrine, see C. Carkeet James, *Drainage Problems of the East, Volume 1*. (Bombay: Times of Indian, 1906), p.107

⁵⁴⁵ The Chief Medical Advisor recommended the purchase of six of such latrines for the indigenous quarters. Dr. M. Young, 4th February 1910, “Special Report on the Disposal of Sewage at the Camp,” *Miscellaneous Papers Relating to Persia*. BP Archives, ArcRef 63984

The first single-pan iron latrines were positioned in a row at right angles to the line of the foreshore south of the coolie lines. These public latrines were connected to an open masonry drain which was regularly flushed by a standpipe, whereby discharging sewage to the foreshore right above the Abadan Village.⁵⁴⁶ As the population of workmen increased, additional public latrines were provided on the same model in different sections of the Native Village. Moreover, a mixture of incinerators and pits were also utilized to handle excreta and urine, respectively. This waste disposal system required a large pool of sweepers. In the early 1920s, the Refinery medical officer rendered this system uneconomical and “primitive” and called for the adoption of a centralized system of public latrines built of “pucca bricks” and equipped with “automatic flushing arrangements” and a septic tank model similar to the Bungalow Area. To rationalize his proposal, the medical officer suggested that the considerable cost of the new system would be saved in the long run on the wage of sweepers.⁵⁴⁷

Until the early 1920s the company did not concern itself with waste disposal arrangements in the Abadan Village. In the Iranian quarters each residential compound had its own cesspit and dry closet which was in the form of an outbuilding located at the corner of each compound. More than 30 sweepers were in charge of handling the night soil. In 1921, the Refinery works manager rendered this system insanitary and called for the provision of a “standard latrine” to each house which would be cleaned out twice a day to make sure that the whole of village excreta is incinerated, and liquids buried.⁵⁴⁸ The

⁵⁴⁶ Colonel Perry, “Extract from Sanitary Report on Abadan,” June 4th, 1916. *His Britannic Majesty’s Consul*, Mohammerah to Strick, Scott and Company. BP Archives, ArcRef 68790.

⁵⁴⁷ Dr. Jamieson, November 23rd, 1922, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁵⁴⁸ L. F. Bayne to Messrs. Strick, Scott & Co., March 30st, 1921, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

Company also contemplated collaborating with the Sheikh to build water-carrying public latrines in the village.⁵⁴⁹ None of these schemes materialized until 1924.

3.2.3 Policing the Oil Town: From the Arab Guard to the Security Department

Following in Burmah Oil Company's footsteps, the Anglo-Persian Oil Company created a system of policing to protect the Refinery premises, suppress riots, handle petty crimes, and control the workforce. Soon after the construction of the Refinery was commenced, the necessity of safeguarding the works came to the surface. Besides fencing the premises, stringent measures were taken to protect the operations on the island. For instance, only visitors with a valid "permit" were allowed to land at the site of the Refinery. Even high-ranking British officials, such as the Acting Consul for Khorramshahr, were not exempted from this regulation. Outsiders were not allowed to photograph the operations either.⁵⁵⁰ Articles 14 & 15 of the Abadan Agreement included stipulations as to how guards should be supplied and recruited. The Company was required to employ from the local Arabs picked by the Sheikh or his representatives, and in turn the Sheikh was held responsible for the watchmen's misdeeds, capturing thieves, etc.⁵⁵¹ In the beginning, a few Arab watchmen were employed as day guards. At night watch dogs were deployed around the property. As a result of the occurrence of night robbery attempts and in view of the increased volume of goods stored on site, it seemed imperative to strengthen the security team. The Sheikh was

⁵⁴⁹ Dr. Jamieson, November 23rd, 1922, "Sanitary Conditions at Abadan and Schemes for Improvement," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁵⁵⁰ A. T. Wilson to P. Cox, 13th September 1910, in *The Anglo-Persian Oil Company 1908-1916*, "E. Relations with Sheikh Khazal. Labor at Abadan and other questions", FO 460/3. p.79

⁵⁵¹ A minimum monthly wage of fifty krans was set for unmounted watchmen in the employ of the Company. The Company was allowed to acquire guards from outside only if the local guards did not agree to work for the aforementioned monthly wage. File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Khorramshahr and the Anglo-Persian Oil Co.' [318v] (202/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*.

asked to introduce nine men and one headman from his trustworthy *ghulams*.⁵⁵² Trying to economize on labor costs, the Refinery works manager used the Arab guards not only for watching the refinery but also for running errands. However, the guards were prohibited from taking up labor jobs. An Arab Guard who would obtain employment as a day coolie was punished by a fine of fifteen days' pay.⁵⁵³ After the Sheikh opposed to this practice, it was decided that a separate cohort of men be employed as day watchmen.⁵⁵⁴

As the workforce diversified, the Company decided to institute its own security force and decided to look for men among non-Arab communities.⁵⁵⁵ Eventually, the Company sought day guards from the Kurds of Northwest Iran. Seven Kurdish men were recruited in August 1910 as *farashes*, thus relieving the Arab guards from day duties.⁵⁵⁶ Kurdish *farashes* were equipped with sticks and badges and, in the Company Manager's words, “would have no executive power further than detection of theft and handing over

⁵⁵² A. T. Wilson to Lloyd, Strick & Co., 20th November 1909, in *The Anglo-Persian Oil Company 1908-1916*, “D. Correspondence re Abadan and Manikh Site”, FO 460/3

⁵⁵³ A. T. Wilson to Lloyd, Strick & Co., 22nd July 1910, in *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal. Labor at Abadan and other questions”, FO 460/3. p.69

⁵⁵⁴ After a few months, upon receipt of reports on a guard being employed as a tindal, the Sheikh made complaints that Arab guards should not be used in capacities other than watching the works and properties, nor should they be employed as ordinary laborers (coolies) at higher rates. In his view, this would set a dangerous precedent for the class of guards not only at Abadan but also elsewhere in his territory and would encourage them to seek ordinary employment at the company or ask for higher wages. A. T. Wilson, 24th May 1910, “Office Note,” *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal. Labor at Abadan and other questions”, FO 460/3, p.58.

⁵⁵⁵ The Company had to comply with Article 15 of the Abadan Agreement stipulating that watchmen recruited from outside Khuzestan should not be taken from territories hostile to the Sheikh and not be paid greater than men recruited through the Sheikh. At first, Talkaifis [Tel Kaifis from Tel Keppe], Chaldean Christians of Northern Mesopotamia, were proposed to be hired as day watchmen. Talkaifis were well-known for being competent “deck-hand” and “firemen” on steamers and praised as reliable domestic servants in Turkish Arabia. However, in view of possible disturbances the presence of Christian women in Abadan might have caused, the company decided to recruit the day guards from the Kurds of Northwest Iran. Kurds were known to have been among the finest classes of men in the region. 'Gazetteer of the Persian Gulf. Vol. II. Geographical and Statistical. J G Lorimer. 1908' [770] (843/2084), British Library: India Office Records and Private Papers, IOR/L/PS/20/C91/4, in *Qatar Digital Library*

⁵⁵⁶ John Black to A. T. Wilson, 26th August 1910, in *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal. Labor at Abadan and other questions”, FO 460/3, p.74

culprits to the Sheikh's Arab guards."⁵⁵⁷ Therefore, following the colonial model, the Kurds were in charge of watch-and-ward, while the Arab Guard was responsible for the maintenance of law and order.⁵⁵⁸

On the eve of the Great War, the security force at Abadan included 29 Kurds who made up the Refinery Police Force and 30 Arabs from the Sheikh's *ghulams* who were in charge of the safety of the oil establishment overnight. In April 1914, Company officials raised the idea of obtaining Indian guards for the Refinery. This decision was the outcome of the increased ethnic tensions in the oil camp in which Indian workmen were involved. For instance, in February 1913 during a labor unrest, which came to be known as the Lur Riot, a quarrel erupted between Bakhtiari and Indian workmen when a Bakhtiari coolie was run over by an Indian driver. The Refinery management felt powerless during the brawl as the Arab Guard failed to control the violence. A plan was devised to strengthen the backbone of the *ghulams* in cases of emergency and to control the community of Lurs numbering 1200. To avoid possible objections from the Sheikh, the recruitment of the new force was justified on the pretext of disciplining more than 1000 Indian workmen whose drinking and gambling habits had triggered complaints from local authorities. The Indian Guard, which consisted of 37 sepoy from 4th Rajput Detachment, was deployed at the

⁵⁵⁷ Lloyd, Scott & Co. to A. T. Wilson, 30th May 1910, in *The Anglo-Persian Oil Company 1908-1916*, "E. Relations with Sheikh Khazal. Labor at Abadan and other questions", FO 460/3, p.59.

⁵⁵⁸ In colonial India, the company police were in charge of watch-and-ward, while the maintenance of law and order was the responsibility of the Government. Sir Hugh Barnes, July 30th, 1915. "Proposed Abadan Police Force," *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

Refinery. This force, recruited from Punjabi Muslim veterans, was comprised of four ranks, including Jamadar (Jemadar), Hawildar (Havildar), Naiks, and ordinary guards.⁵⁵⁹

With the Indian force onboard, the Refinery management consulted the colonial practices to organize and determine the responsibilities of the three sets of guards. The major challenge was to maintain law and order and efficiently carry out watch-and-ward in a growing industrial camp which had become home to a mosaic of populations with varied subjectivities. The new arrangements called for the collaboration of all the three groups, while each security force had its own assigned posts and specific duties. The presence of the Arab Guard was believed to have a certain “moral effect” in the oil camp. The Guard’s main duties included patrolling the fences around the refinery at night, settling the disturbances caused by Iranian and Arab employees, and maintaining law and order in the Abadan Village. Kurdish *ferashes* served as gate-keepers during the day. The Indian sepoy were responsible for patrolling between the gates, preventing Indians from passing stolen articles through the gates or over the fence, and warding off ethnic tensions between “native” groups. For instance, in October 1915, when the prevalence of firearms in the Abadan Village became a source of anxiety for both the Company and the local authorities, the Refinery Police was dispatched to disarm the residents. A group of Arab guards from the Sheikh’s *ghulams* and a Jamadar from the Indian sepoy were on this mission. The former team dealt with Iranians and Arabs, while the latter handled the Indian employees.⁵⁶⁰ Following the colonial precedents, a European Inspector, vested with the

⁵⁵⁹ Major L. Haworth to Major S. Knox, 25th April 1914, File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [235r] (35/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in *Qatar Digital Library*

⁵⁶⁰ R. G. Nielson to Colonel R. L. Kenion, October 1st, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

vice-consular judicial power, was appointed to the head of the Refinery Police.⁵⁶¹ In the words of the Refinery works manager, “It will not be possible to subordinate satisfactorily the Kurd[ish] Ferashes and Indian Police to any Asiatic...”⁵⁶²

Four outposts across the Refinery and one station in the Native Village near the Main Gate were chosen for the deployment of the Abadan Police. As Figure 3.36 illustrates, a second-class, fortified police station, a prevalent model in colonial India, was proposed for the Abadan Police headquarters. However, unlike the typical police stations in India, the Abadan Police building did not include such spaces as stable, store house, female lock-up, and record room. Moreover, the Company draughtsman was tasked with changing the proposed layout to suite local conditions.⁵⁶³ The station and four outposts were constructed with local building materials and “native roofing” at a cost of £5,250. Initially, the Company requested receiving a fifteen-percent interest on the costs of the police buildings and the reimbursement of the whole expenses if Abadan became the British territory—a scenario which in the minds of Company officials was not a “remote possibility.” However, in 1916, the Company and the Government of India agreed to equally divide the expenses of the establishment, wages and accommodation of the personnel, and the maintenance of the buildings⁵⁶⁴ A few years later, the 1916 arrangement was revised by the Government

⁵⁶¹ C. A. Walpole to R. G. Nielson., June 8th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁵⁶² R. G. Nielson to Strick Scott & Co., May 28th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁵⁶³ R. G. Gregson, “Memorandum,” May 21st, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁵⁶⁴ Charles Greenway to the General Manager, Strick Scott & Co., March 30th, 1916. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.119

of India and the Company was obliged to cover three-fourths of the expenses of the Police Department at Abadan.⁵⁶⁵



Figure 3.36 Abadan Police Station, circa 1921. Constructed based on the second-class colonial buildings, the Police Station represented the industrial vernacular style in Abadan in the post-war years.

Source: BP Archives, ArcRef 77523

In September 1915, due to the requirements of the War, the Indian Sepoys were gradually withdrawn from Abadan and were relocated to Basra to join the Expeditionary Forces in Mesopotamia.⁵⁶⁶ In light of this development, the idea of establishing an Indian Police Force headed by a British Indian Inspector was coined. The Police Force was to be quartered in the Native Village in the sarifas previously occupied by the Indian Sepoys until proper police barracks could be erected.⁵⁶⁷ In the same year, following the cutting of

⁵⁶⁵ Arnold Wilson to Anglo-Persian Oil Company, Mohammerah, July 10th, 1919. File 1421/1908 Pt 3 'Persia: oil; negotiations between the Shaikh of Mohammerah and the Anglo-Persian Oil Co.' [221r] (7/338), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/1, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100030500368.0x000033> [accessed 5 October 2018]

⁵⁶⁶ C. A. Walpole to Sir Percy Cox, October 15th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁵⁶⁷ Company officials believed that given the large amount of Admiralty work being carried out at Abadan in the war years, such as gunboats construction, lighthouse, slippery, etc., the British Government should incur a large proportion of the expenses for the proposed Police Force. C. A. Walpole to Colonel R. L. Kennion, September 6th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

the pipeline by local tribesmen, several detachments of the Indian Army were dispatched to Khuzestan and deployed at pumping stations and other vulnerable points along the pipeline. The goal was to safeguard the steady flow of oil from the Fields to Abadan. With the cessation of the War, some military units were withdrawn while others were maintained in sensitive areas like Ahwaz. In 1920, the outlook of a complete withdrawal of British forces from the province coupled with the mounting nationalist sentiments in the region caused some anxiety for both Company and British diplomatic officials. For instance, Acting Political Resident in the Persian Gulf suggested that, among other measures, the Company should construct unclimbable fencing and “blockhouses” at regular intervals around all oil establishments, including the Abadan Refinery, to protect “delicate machinery” and the lives of European employees against all probable threats.⁵⁶⁸

In the early 1920s a detachment of Indian Police named *Qurawel* under the authority of the Iraqi Government was stationed at Abadan. Similar forces, called the Mesopotamian Police, were sent to the Fields. In 1922, the Iranian Government objected to the presence of such forces and considered this arrangement contrary to the terms of the Oil Concession and against the spirit and letter of International law and called for their removal from Abadan at once. In April 1923, as a result of the protest from the Iranian Government, the Iraq Police detachment was withdrawn, and the Company began to consider shaping its own police force under the British consular authority. The Security Department was then established which consisted of 200 security guards under two

⁵⁶⁸ Arnold Wilson to The Secretary to the Indian Government, October 25th, 1920. ‘Letter from Lt-Col Sir A.T. Wilson, K.C.I.E., C.S.I., C.M.G., D.S.O., Officiating Political Resident in the Persian Gulf, to the Secretary to the Government of India, Foreign and Political Department, Simla.’ [2r] (3/4), British Library: India Office Records and Private Papers, IOR/L/PS/18/B364, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100023463704.0x000004> [accessed 6 October 2018]

European assistants. The nucleus of this establishment included 80 veterans of the recently disbanded South Persia Rifles.

The new security forces were unarmed but uniformed, disciplined, and administered on police lines. They were in charge of maintaining security in the Refinery and the Native Village—areas that were within the Company’s territory. The Security Department was also responsible for “the maintenance of order, the investigation of crime and complaints, welfare of local employees, and the conduct of purely local affairs within the Company’s limits.” The Company also funded the Sheikh’s armed *ghulams* who, with the strength of 150, were providing security outside the Company’s territory, including the Abadan Village and other parts of the island.⁵⁶⁹ In 1923, the Refinery Security Department was divided into two branches, namely police and fire services.⁵⁷⁰ After the political takeover of Khuzestan by the Iranian Government in August 1924, military Governor-General of Khuzestan General Fazlullah Zahedi took in hand the security of the oil establishments throughout the province.⁵⁷¹ However, the Company police force was not abolished until 1930 when it was taken over by the Iranian police.⁵⁷²

3.3 Spaces of Resistance and Confrontation

Control of oil production and labor was the outcome of the Company’s exercise of power over space. While this capacity was most evident within the refinery’s premises, the

⁵⁶⁹ *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1922*. April 1923, BP Archive ArcRef 54365, P.79

⁵⁷⁰ H.E. Nichols to the General Manager Strick Scott & Co., March 19th, 1923. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.487

⁵⁷¹ R. W. Ferrier, *The History of the British Petroleum Company: The Developing Years: Volume 1 The Developing Years 1901-1932* (The British Petroleum Company Ltd., 1982), p.396

⁵⁷² The *Shafagh-i-Surkh* Newspaper, April 22nd, 1931. *Coll 28/48 ‘Persia. Anglo-Persian Oil Company; Relations with Persian Govt.’ [12r] (34/540)*, British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100076699143.0x000023> [accessed 22 June 2019]

Company's influence beyond its legal territory was contingent upon building partnerships with major political actors. Until 1924, to exercise social control and coercion in southern Khuzestan, the Anglo-Persian had to nurture strong bonds with local chieftains and, simultaneously, look to the British Government for diplomatic and military support. Thanks to its absolute dominance over the oil camp, the Company pursued different strategies aiming at social engineering and labor management. As discussed earlier, with the help of various spatial tools, the Company blurred the boundary between working and living realms, created a tripartite urban space, and designed segregated residential and public spaces for different segments of the labor force. As Rasmus Christian Elling shows, the systems of spatial coercion and social control instituted by the Company triggered tension, violence, and inter-group animosity within the workforce.⁵⁷³ Paternalistic efforts also created conditions of dependence for different classes of employees.

All this notwithstanding, oil laborers played active roles in both defining their living and working conditions and creating meaningful spaces. There are also numerous examples showing the agency of the labor force at the individual level. Local coolies, for instance, were mobile. In 1917, due to the urgent demand and high wages in Basra, most coolies who were already at work for the Company found better opportunities on the other side of the Shatt. This caused acute labor shortage on the island to the extent that the Abadan Refinery was one thousand men under strength in March 1917. The sharp reduction in the number of manual laborers reduced the production of cased oil from 4000 to 2000 tins per day. The Works Manager confessed that it would be impossible to stop local Arabs from

⁵⁷³ Rasmus Christian Elling, "On Lines and Fences: Labour, Community and Violence in an Oil City," in *Urban Violence in the Middle East: Changing Cityscapes in the Transition from Empire to Nation State*, ed. Ulrike Freitag (Berghahn Books, Incorporated, 2015), p.215

moving to Basra and asked for the formation of a regular labor corps at Basra to supply the required labor for the Abadan Refinery.⁵⁷⁴

Collaboration on a single product, namely crude oil and its derivatives, provided workmen with a sense of engagement in a collective enterprise. Moreover, as Daniel Walkowitz notes, company paternalism structured “a common set of experiences upon which workers could draw and organize.”⁵⁷⁵ Working and living in the atmosphere of oil fostered social relations among workmen that transcended the workplace, giving rise to what labor historians term “occupational community.”⁵⁷⁶ For instance, Iranian and Arab workmen gradually developed a collective experience of modern industrial life.⁵⁷⁷ Similarly, for British staff and Indian migrant laborers, everyday practice of working under challenging conditions and in tough terrains or isolated places in southwestern Iran helped forge a sense of community and of place. All this resulted in labor solidarity and a web of mutual support and sentiments of shared space within the community of men engaging in the same trade or living in the same line or in the same quarters. Emboldened by these sentiments, oil workmen and local populations reacted to the Company’s paternalistic efforts, spatial coercion, and social control in various ways. In what follows I will analyze the dialectics of community reactions — which ranged from accommodation and resistance to confrontation and unrest— and the Company’s responses, on different scales.

⁵⁷⁴ General Manager to A. T. Wilson, 20th March 1917, BP Archives, ArcRef 68779

⁵⁷⁵ Daniel Walkowitz, *Worker City, Company Town: Iron and Cotton-Worker Protest in Troy and Cohoes, New York, 1855-84*. (Urbana: University of Illinois Press, 1978), p.111

⁵⁷⁶ Marcelo J. Borges and Susan B. Torres, “Company Towns: Concepts, Historiography, and Approaches,” in *Company Towns: Labors, Space, and Power Relations across Time and Continents*. Edited by Marcelo J. Borges and Susan B. Torres (Palgrave Macmillan, September 2012), p.19

⁵⁷⁷ Stephanie Cronin, “Popular Politics, the New State and the Birth of the Iranian Working Class: The 1929 Abadan Oil Refinery Strike,” *Middle Eastern Studies*, (2010) 46:5, p.706

3.3.1 Public Sphere and Anti-British Sentiments

Public opinion represented by the local press reveals both the spaces of resistance at the societal level and the ways in which the general public viewed the Company and its activity in Khuzestan. In the wake of the Constitutional Revolution of 1906-1911, nationalist sentiments gathered steam in Iran. One of the major demands of this movement was to put an end to British and Russian interference in Iran's internal affairs and to cancel concessions already awarded to foreign parties. Quite optimistically, British officials in the region always presented a rosy picture of the relationships between the Company and local populations. For instance, in the official correspondence with the Government of India, Acting Political Resident once portrayed the Company as the "friend of the people and benefactor of the tribes," and stated that the oil enterprise was viewed "favorably" by the local population of Abadan and Khorramshahr.⁵⁷⁸ Despite such positive accounts, anti-British and anti-imperial sentiments were rampant across the country and caused a great deal of concern among Company officials in Iran and Britain.⁵⁷⁹

Nationalist opinion was always against the activity of the Anglo-Persian Oil Company in Iran. One of the early oppositions appeared in Tehran Newspaper *Junub* (The South) in late 1910. The article written by an anonymous author characterized the A.P.O.C. as a political entity rather than a commercial enterprise which allegedly was hatching a plot

⁵⁷⁸ Arnold Wilson to the Secretary to the Government of India, October 25th, 1920.

'Letter from Lt-Col Sir A.T. Wilson, K.C.I.E., C.S.I., C.M.G., D.S.O., Officiating Political Resident in the Persian Gulf, to the Secretary to the Government of India, Foreign and Political Department, Simla.' [2r] (3/4), British Library: India Office Records and Private Papers, IOR/L/PS/18/B364, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100023463704.0x000004> [accessed 6 October 2018]

⁵⁷⁹ For instance, in 1924, Income Tax Bill which was before the Majlis (Iranian Parliament) and anti-British demonstrations in the emotionally charged month of Muharram were major sources of concern for the Company Managers in London. H.E. Nichols to the General Managers APOC., August 6th, 1924. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.875

to turn the Province of Khuzestan into a British colony. To substantiate this allegation, the article claimed that, "...The Oil Company, in accordance with a political object, is continuously bringing Indians and Europeans into [Khuzestan] under the pretext that they are employés ... the Company's employés are all sepoys, soldiers, and officers of the Army." The article also called on the Iranian Government to strengthen its position in the province and check the Company's increased domination over the region.⁵⁸⁰ Similar anti-British criticisms were voiced on the other side of the Shatt. A Basra-based newspaper severely criticized the Sheikh of Khorramshahr for allowing the Company to interfere in the internal affairs of the province and exclaimed that, "Oh, People! The foreigners, especially the English, if they enter your country, they will corrupt it and debase your honor." The article also warned against turning Abadan, like Dubai, into a British protectorate.⁵⁸¹

Anti-British feeling was revitalized in the public realm as a result of the Anglo-Iranian Agreement of 1919, which would have provided the British Government with full control over Iran's military and financial affairs. Although this accord was never ratified by the Iranian Parliament (Majlis), its ramifications marked the political developments of the following decade.⁵⁸² Moreover, the post-war nationalist feelings in the region also

⁵⁸⁰ Extract from the Newspaper *Junub*, December 24th, 1910. 'File II. IRAQ (3) Vol. 1 Shaikh of Kuwait's Date Gardens on the Shatt-al Arab. (Kuwait's relations with Turkish Govt. and Turkish demand that Kuwaitis should take out Turkish Nationality Certificates)' [268r] (553/636), British Library: India Office Records and Private Papers, IOR/R/15/5/5, in Qatar Digital Library

<https://www.qdl.qa/archive/81055/vdc_100050944618.0x00009a> [accessed 4 October 2018]

⁵⁸¹ Extract from the Newspaper *El-Bussorah-el-Feyha*, April 9th, 1911. File 1421/1908 Pt 4 'Persia: oil; Anglo-Persian Oil Co and Bakhtiaris' [135r] (127/292), British Library: India Office Records and Private Papers, IOR/L/PS/10/144/2, in Qatar Digital Library

<https://www.qdl.qa/archive/81055/vdc_100030500367.0x00004f> [accessed 4 October 2018]

⁵⁸² To read more on this agreement, see: N. S. Fatemi, "ANGLO-PERSIAN AGREEMENT OF 1919," *Encyclopædia Iranica*, II/1, pp. 59-61, available online at <http://www.iranicaonline.org/articles/anglo-persian-agreement-1919> (accessed on 10 May 2019).

translated into anti-British sentiments. In 1920, the London management warned against the spillover of the alleged Bolshevik-funded nationalism from Turkey and Iraq into Iran as well as possible sabotage and incendiaryism instigated by such feelings.⁵⁸³ Wary of being viewed in the eyes of the public as a protégé of the British Government, the Company began a campaign to portray itself as an independent commercial interest. For instance, in 1921 the Company appointed an agent in Tehran to make direct representation to the Iranian Government and ceased the older practice of communication with high-ranking Iranian officials through the British diplomatic channels.⁵⁸⁴

3.3.2 Spaces of Public Insurgency

Popular protests also offer revelations about the ways in which nationalist sentiments translated into public resistance against the Company on the urban scale. There are multiple examples of how local shopkeepers and homeowners in the Native Village defied the Company's exertion of power over the village's marketplace. Indeed, the bazaar was an important social and economic institution, and like other social elements of the Iranian city—such as the urban quarter, the guild, and the mosque—functioned as networks of organization and mobilization capable of generating urban protests.⁵⁸⁵ The bazaar in the Native Village served as a major public space for social intercourse and as a venue where

⁵⁸³ H. E. Nichols to the General Manager, Strick Scott & Co., September 2nd, 1920. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.259

⁵⁸⁴ In the following years, as a result of rise to power of Reza Khan Mir Panj, the Company changed its policy towards the Iranian Government. In 1924 when tensions between the Government and the Sheikh of Khorramshahr escalated, the Company adopted the policy of "strict neutrality." H.E. Nichols to the General Manager APOC, June 2nd, 1921. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.282

⁵⁸⁵ Stephanie Cronin, "Popular Politics, the New State and the Birth of the Iranian Working Class: The 1929 Abadan Oil Refinery Strike," *Middle Eastern Studies*, (2010) 46:5, p.702

local and national news circulated. The Company management, however, regarded the bazaar as a scapegoat for the “chaotic” and “insanitary” conditions of the village. It was also blamed for the increased living expenses and labor discontent.⁵⁸⁶

Historical documents in the Iranian National Archives and the British Petroleum Archives reveal that Company officials in London, Khorramshahr and Abadan consciously steered the village’s so-called “haphazard” growth. In the beginning, in exchange for a fee, the Refinery management issued building permits for the construction of houses and shops. The management only allowed timber structures for shops, and promised that in due course permission for the construction of brick shops will be granted.⁵⁸⁷ In the post-war years, due to the shortage of housing and rapid growth of population, the value of these structures drastically increased, and they changed hands frequently.⁵⁸⁸ Besides Iranians and Indians, Arab and Jewish merchants from Basra and other southern cities of Iraq acquired properties and established businesses in the Abadan bazaar.⁵⁸⁹ After property values inflated in 1922-1923, new subdivisions were made, and the bazaar area became even more congested.⁵⁹⁰ In October 1923, as a result of the increased number of structures, the Company introduced

⁵⁸⁶ The Company Director once attributed the village’s uncontrolled growth and insanitary conditions to the exigencies of the war and post-war years, such as the lack of supervision on the part of the refinery management and illegally squatting land by local people in the bazaar area. John Cadman, January 1925, “Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924,” BP Archives, ArcRef 68331, p.47

⁵⁸⁷ “Residents’ Representative to the Ministry of Public Works,” 30 May 1924, *Complaints from Residents of Abadan about destruction of their Houses and Shops by the Anlgo-Persian Oil Company*, IRA:240-15694

⁵⁸⁸ F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211

⁵⁸⁹ L. Y. Elliott to Assistant General Manager, Mohammerah, “Statement Showing Names of Landlords Possessing Premises in Company’s Area Who Have Refused the Compensation Offers For Their Houses,” November 20th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁵⁹⁰ The List of 87 property-owners complaining against the Company, November ?, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

a system of registration of property in the Native Village.⁵⁹¹ In order to control food prices, the Company also opened a provision store in the bazaar selling major staples— such as rice, flour, sugar, dahl, and ghee— exclusively to Indian employees. A Basra-based firm was also encouraged to open a shop in the Native Village on the condition that the merchandise be regulated at the Basra rates.⁵⁹²

The bazaar was the place where the first nucleus of public resistance against the Company emerged. For instance, in June 1915, Abadan bazaar prices increased relative to prices at Khorramshahr. Besides the consequences of the War, the flow of foodstuffs to the Village Bazaar was controlled by the Sheikh's representative and, in general, merchandise was more expensive at the Native Village than the Abadan Bazaar. To control the bazaar prices, the Refinery works manager decided to introduce a fixed price list at lower rates and to enforce the prices with the assistance of the Refinery Police. The works manager believed that the Company had a right to interfere with the bazaar prices since shopkeepers were occupying ground on the Company's land. In reaction to this move, Abadan shopkeepers threatened to close down the bazaar.⁵⁹³

Similarly, in 1916 shopkeepers reacted to the currency exchange rate imposed by the Company. In this year the Abadan bazaar experienced periodical shortage of foodstuffs due largely to the high demands of the crews from tankers and cargo steamers that regularly berthed at the Abadan Port.⁵⁹⁴ Abadan also experienced inflation in the same year, which

⁵⁹¹ N. A. Gass to the General Manager, Khorramshahr. May 23rd, 1925. *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

⁵⁹² H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

⁵⁹³ R. G. Neilson to C. A. Walpole, June 8th, 1915. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁵⁹⁴ In these years there was only one butchery at bazaar. The shortage of foodstuffs, in particular the scarcity of meat, coupled with increased prices, became a source of dissatisfaction among company

was attributed to the shortage of Kran (Iranian currency), which decreased the purchasing power of Indian rupee. In the course of a few months, the exchange rate of rupee to kran dropped from 4 to 3.35 and, consequently, the cost of living for the Indian labor increased by 30 percent.⁵⁹⁵ This posed a new challenge to Company officials as they had to increase wages of more than 4000 Indians to counterbalance the decrease in the exchange rate of the Indian currency. Instead, the refinery management, in cooperation with the Sheikh administration, artificially set the exchange rate at Abadan around 7% lower than the average rate in the region. This aimed to keep the wages low and simultaneously strengthen the rupee's purchasing power at the Abadan bazaar. In response, shopkeepers threatened to close down the bazaar. The Company, once again, was forced to succumb to the public protest and readjusted the exchange rate at the market rate.⁵⁹⁶

Faced with severe public resistance, the Company initiated a campaign to appropriate the entire Abadan bazaar. Since a major segment of the bazaar was located within the Abadan Village, the Company tried to acquire from the Sheikh some 38 jareeb (acres) of land along the Abadan's Main Street. However, due to the increased rental value of the bazaar shops, the Sheikh turned down the offer.⁵⁹⁷ The next step was to weaken the pockets of resistance in the bazaar. With the rise in the market value of shops⁵⁹⁸ and under the guise of lowering the increased price of foodstuffs, the Company employed different

employees. R. G. Neilson to C. A. Walpole, April 18th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁵⁹⁵ R. G. Neilson to C. A. Walpole, May 12th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁵⁹⁶ R. G. Neilson to C. A. Walpole, May 15th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁵⁹⁷ H. E. Nichols to C. A. Walpole, April 6th, 1920, "Sheikh's Bazaar and Village," *Persia-General Correspondence between London and Mohammerah*. BP Archives, ArcRef 72138

⁵⁹⁸ For instance, in the early 1923 timber shops were traded between ₹800 and ₹1000.

tactics to appropriate the shops and expel Iranian tenants and landlords from the bazaar area in its territory. For instance, Iranians were not allowed to repair their houses or even replace dilapidated timber shops with masonry structures. The Company was even accused of setting fire to timber shops and instigating Indians and Iraqis to take over the properties owned by Iranian merchants and shopkeepers.⁵⁹⁹ The legal battle to retake possession of these shops took almost eight months. Dozens of complaints and petitions were submitted to both Iranian authorities and British officials in Khuzestan. As a result of the public opposition, the Company stepped back and returned the properties to Iranian landlords on the condition that the owners pay twenty rupees per month as compensation for the interest of the capital expended on the shops. One year later, the same owners were asked to pay fifty-four rupees per month or move out.⁶⁰⁰

The Company also established the Sanitation Office and adopted the practice of collecting ground rents and sanitary taxes in the Native Village. All groups of tenants in the bazaar area had to pay sanitary taxes. Ground rents, however, were collected directly from landlords.⁶⁰¹ In November 1923, all the property was renumbered, and ground rents and sanitation taxes were reassessed, resulting in a fivefold increase of rates.⁶⁰² This meant an additional charge of at least ₹2 (two rupees) per month for each household. Inhabitants

⁵⁹⁹ "The Report prepared by Ahmad Akhgar for the Parliament," June 1924 (Saratan, 1303), *Complaints from Abadan Residents about Destroying their Houses and Shops by the Anglo-Persian Oil Company*, IRA:240-15694

⁶⁰⁰ "The Report prepared by Ahmad Akhgar for the Parliament," June 1924 (Saratan, 1303), *Complaints from Abadan Residents about Destroying their Houses and Shops by the Anglo-Persian Oil Company*, IRA: 240-15694. Similar claims appeared in the complaints filed by the inhabitants' representatives to Iranian authorities in Tehran.

⁶⁰¹ Jas Jameson (General Manager, Fields and Refinery) to T. L. Jacks (General Manager), October 15th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁶⁰² Ground rents and sanitation taxes spiked from ₹800 per month to ₹4000 per month. N. A. Gass to the General Manager, Khorramshahr. May 23rd, 1925. *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

were asked to pay the assigned amounts by the third day of each month.⁶⁰³ The Company claimed that the new rates which averaged ₹5 (five rupees) per household per month were less than the municipal and sanitation taxes levied in the Abadan Village and even less than the actual costs of maintenance and sanitation of the Native Village.⁶⁰⁴ However, as I will show in the next chapter, the sum of money collected as rents and sanitary taxation was not expended to improve sanitation in the Village; rather, the funds were later spent on demolition of shops and houses, displacement of local inhabitants, and construction of new residential quarters.

Local residents also accused the Company of favoring non-Iranian residents in property tax assessment. Tax rates, ranging between four and sixteen rupees, were allegedly determined by the nationality of landlords rather than by the size of houses or the type of businesses.⁶⁰⁵ Telegrams and petitions streamed out of Abadan to Iranian officials in Tehran and Khorramshahr, complaining about the Company's discriminatory policies towards Iranians. For instance, the heads of guilds, merchants, and shopkeepers submitted complaints to the Khuzestan Agency of the Iranian Government (*Karguzar*) and claimed that, "... if Abadan is under the sovereignty of the Iranian Government, the Company has no right to ask for land tax."⁶⁰⁶ Similarly, in three consecutive petitions to the Ministry of Commerce, Agriculture and Public Works⁶⁰⁷ the residents' representatives questioned the Company's legal rights to set up the Sanitation Office and police force, impose taxes, and

⁶⁰³ Residents' Representative to the Ministry of Public Works, 30 May 1924, *Complaints from Abadan Residents about Destroying their Houses and Shops by the Anglo-Persian Oil Company*, IRA:240-15694

⁶⁰⁴ N. A. Gass to the General Manager, Khorramshahr. May 23rd, 1925. *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

⁶⁰⁵ Ibid

⁶⁰⁶ The Khuzestan Agent (Karguzar) to the Ministry of Foreign Affairs, 23 October 1923 (31 Mizan 1302); IRA: 240-9253

⁶⁰⁷ The Mines Department of the Ministry of Public Works was in charge of the oil concession.

intervene in Iran's "national affairs."⁶⁰⁸ As a result of public outcry and the political pressure from the Iranian Government, the Refinery management agreed to reduce the new tax rates by 25 percent.⁶⁰⁹

3.3.3 Spaces of Labor Militancy

Public protest on the scale of the oil establishment manifested itself in organization of labor that culminated in a series of strikes in the early 1920s. Although there are references to numerous labor unrests, or what the Company termed "riot," since the inception of operations in Abadan, only a few cases were discussed in detail in official correspondence. In fact, the Company was never keen on acknowledging the heightened discontent within the workforce. For instance, in April 1914 when the accounts of a labor unrest appeared in *Near East Journal*, a Company Director cautioned that the local management should be always in a position to censor any information not fitted for public consumption.⁶¹⁰ However, in the early 1920s, two subsequent episodes of labor action found their ways into the formal correspondence of Company officials and British diplomatic officers. These incidents opened up spaces of resistance and confrontation within the highly controlled and militarized space of Abadan and made the Company rethink its labor policy and paternalistic programs.

⁶⁰⁸ The Resident's Representative to the Ministry of Public Works on May 30, 1924; IRA:240-15694

⁶⁰⁹ N. A. Gass to the General Manager, Khorramshahr. May 23rd, 1925. *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

⁶¹⁰ H. E. Nichols to Strick, Scott and Co., 1st May 1914, *Persia: General Correspondence (Mainly Between London and Mohammerah)*, BP Archives, ArcRef 70284

3.3.3.1 The 1920 Strike. The Indian migrant labor is credited with introducing industrial militancy and methods of collective bargaining into the Iranian oil industry.⁶¹¹ In December 1920, Indian workmen took the opportunity of the Managing Director's visit to Abadan and staged a strike. Approximately 3000 Indian laborers stopped work and gathered around the Refinery office. In the act of protest, strikers squatted on the ground and refused to resume work or even eat until evening when the Managing Director agreed to their requests. The strikers asked for an eighty-percent increase in wages, better housing conditions and medical services, pension, reduction of working hours, and more paid holidays—among other requests. Iranian and Arab laborers followed suite and went on strike on the following day and demanded similar benefits.⁶¹²

Although the strikers' demands, first and foremost, concerned low wages and high living expenses at Abadan, the 1920 strike, which was the first sweeping labor unrest since the beginning of operations, reflected the broader conflicts between the Company and indigenous employees. This form of labor militancy was the product of both local and global conditions of the time. Not only was this industrial action the outcome of accumulated labor discontent and sufferings, it was also the result of Company's discriminatory paternalism and coercive labor policies of the previous years. Company officials always endeavored to attribute the growing restlessness and dissatisfaction amongst Indian and Iranian workmen to "cultural claustrophobia in an alien and not always sympathetic environment" and the lack of familiarity with "industrial practices and

⁶¹¹ Stephanie Cronin, "Popular Politics, the New State and the Birth of the Iranian Working Class: The 1929 Abadan Oil Refinery Strike," *Middle Eastern Studies*, (2010) 46:5, p.707

⁶¹² H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

discipline,” respectively.⁶¹³ However, as discussed in the previous section, harsh working and living conditions and unfair allocation of company paternalism were also sources of discontent within the indigenous workforce.

Under clause 5 of the labor contract, Indian workmen were entitled to free accommodation and free medical attendance.⁶¹⁴ However, housing shortage and congestion in the Native Village had forced many workmen to look for shelter either in the Company’s bazaar area or in the Abadan Village. Moreover, the Company employed coercive measures to keep Indian workmen at Abadan.⁶¹⁵ For instance, in the early years, due to low pay rates and tough working conditions, groups of Indian skilled laborers deserted the works and moved to Khorramshahr, planning to return home. The Company resorted to British authorities to prohibit the deserters from leaving Iran.⁶¹⁶ During the War, when better remunerative opportunities in Basra motivated Indian workmen to leave Abadan, the Company used its political leverage to create legal and political barriers against the departure and employment of its ex-employees in Iraq.⁶¹⁷

⁶¹³ Ronald W. Ferrier, *The History of the British Petroleum Company: Volume 1, The Developing Years, 1901-1932*. (Cambridge University Press: 1982), p.275

⁶¹⁴ Shaw, Wallace and Company to J. C. Ker, March 28th, 1922. *Persia: Strikes of the Anglo-Persian Oil Company’s Employés at Abadan*. British Library IOR/L/P.S/11/213

⁶¹⁵ R. G. Neilson to C. A. Walpole, May 12th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754

⁶¹⁶ D. W. Mathews to W. Lamb, 21st August 1911, in *The Anglo-Persian Oil Company 1908-1916*, “E. Relations with Sheikh Khazal. Labor at Abadan and other questions”, FO 460/3. p.92

⁶¹⁷ The Company employed different strategies to retain the services of the Indian labor after the expiry of their agreement, such as the Force Routine Order of 4th April. In 1917, the King’s Regulation No.1 was issued to help the company retain its labor. The Indian labor wanted to leave Abadan for several reasons: expensive living expenses, hard conditions of work caused by the War, and the Company’s coercive methods to retain their services. R. G. Neilson to C. A. Walpole, May 12th, 1916. *Works Manager, Abadan, to Strick Scott & Co., Mohammerah, Demi-Official Government Private, and Demi-Official General*. BP Archives, ArcRef 71754; Strick, Scott & Co. to A. T. Wilson, 27th December 1917, *Captain A. T. Wilson*. BP Archives, ArcRef 68779

In the early 1920s, the Indian press made numerous allegations against the Company. The Anglo-Persian was accused of maltreating Indian laborers by imposing inordinately long working hours, instigating class hatred among workers, disregarding social privileges of high-ranking clerks, and providing insufficient medical and housing services.⁶¹⁸ Under these conditions some Indian employees resorted to the general public and the labor community in India for support: “There are thousands of Indian workers in Persia. The Anglo-Persian Oil Company alone employed 90 percent Indians. There is no restriction in the number of hours worked every day. Neither coal nor ice were supplied to the workers until agitation was started. Workers die of sunstroke in summer and pneumonia in winter as little is done to look to their wants and comforts. I request Indian labor to take up the cause of their comrades in Persia...”⁶¹⁹

The Company was also accused of exploiting Iranian workmen.⁶²⁰ Local laborers sent multiple petitions to the Iranian government and complained about low wages, inadequate facilities, and insanitary living conditions at Abadan.⁶²¹ Iranian and Arab workmen also cried out about the preferential treatment of Indians and other classes of labor.⁶²² The Deputy of the Ministry of Public Works was sent to the region to investigate

⁶¹⁸ A. T. Mudliar to the Fields Manager, January 10th, 1922. “Indians in Persia,” Advertisement in *Bombay Chronicle*, A. P. *Oil Company: Number and Treatment of Indian Employees*. British Library IOR/L/P.S/11/213

⁶¹⁹ Dr. Ghore, January 10th, 1922. “Indian Workers in Persia, Miserable condition,” *Bombay Chronicle*, A. P. *Oil Company: Number and Treatment of Indian Employees*. British Library IOR/L/P.S/11/213

⁶²⁰ H.E. Nichols to the General Managers APOC, June 3rd, 1924. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.836

⁶²¹ Touraj Atabaki, “Far from Home, But at Home: Indian Migrant Workers in the Iranian Oil Industry”, *Studies in History* 31, no.1 (2015): 107

⁶²² Laurence Paul Elwell-Sutton, “The Company’s Civilizing Mission,” *Persian oil: a study in power politics*. (Lawrence and Wishart, 1955), p.90

these claims. In response to the Deputy's inquiry, the Company attributed the lower pay rates of the Iranian workforce to their "lack of commitment" and "seasonality."⁶²³

Despite Company's centrifugal policies which aimed at effecting sectorial cleavages amongst Indian laborers, the centripetal properties of oil created an entente between all sects. The Indian migrant labor managed to overcome the perceived differences between the Sikh, Hindoo, and Muslim groups and get unified around a common cause. The preparation for the strike took place at the Sikh Lines and escaped the Company's constant surveillance. The Iranian workmen, however, failed to establish similar intra-group solidarity. This manifested itself in the manner in which the demands of each labor group were accommodated by the Company. Indian artisans' request for an eighty-percent rise was approved, and other grades of the Indian labor were granted different benefits. Iranian skilled and semi-skilled workmen, who numbered 1400 by this date, received only a forty-percent increase, because, in the words of the Managing Director, Iranians "live on local produce, and for other obvious reasons, their case is not analogous." Even worse than that, no rise was granted to Iranian unskilled workers.⁶²⁴ Therefore, the semi-organized labor movement that led to the 1920 strike managed to foment intra-group relations only within the Indian workforce and failed to establish inter-group bonds between Indian and Iranian workmen.

To the Managing Director, the increased level of labor militancy at Abadan was the outcome of several factors, such as the conditions of the War, the changed dynamics of labor regimes in India, and the propaganda of agitators as well as "kaiserism" and the non-

⁶²³ Report from the Department of Mines to the Minister of Public Works, 30 April 1925 (10/Ordibehesht/1304); IRA:240-15694

⁶²⁴ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

accommodating attitude of the Refinery management. To avoid future unrests, the Director introduced a set of reforms. He replaced the Refinery works manager with a new administration, adopted a “standard” scale of pay for the entire workforce, and called for the reorganization of the medical system at Abadan—among other things. While sailing back to London, H. E. Nichols wrote to the Board of Directors and after summarizing his major accomplishments in Iran confidently claimed that no labor disturbances would arise in Abadan as long as the cost of living would not increase.⁶²⁵ Nichols’s optimism proved wrong.

3.3.3.2 The 1922 Strike. In less than two years, a second strike on a much larger scale shook Abadan. In March 1922 more than 2,000 Indians from all *jats* and sects under the leadership of a group of Sikhs and Pathans stopped work. Soon, Iranians, Arabs, and other labor groups— except Europeans and Chittagonians— joined the unrest, and the total number of strikers reached 4000. This industrial action affected different branches of the Refinery and continued for a few days. Unlike the previous strike, the Company was more prepared for this event and did not accommodate the workers’ demands. In the end, with the help of the British military force and the local law enforcement, the Company managed to quell the strike and repatriated more than 2000 Indians.

British diplomatic officers in the region and Company officials alike tried to give a distorted account of the strike and its roots. Political Resident, for instance, stated that the causes of the strike were political rather than economic and that it was organized by an

⁶²⁵ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

experienced hand of Sikh agitators.⁶²⁶ The 1922 strike, however, had a progressive and equitable cause. The goals were to increase wages for all laborers by eighty percent, irrespective of grades, and to rescind the grading scale of pay established in 1921. In other words, the workmen intended to upend the existing labor hierarchy by requesting that all men be paid on an equal basis and the distinction between a workman and a cooly be abolished. Besides the grievances about ill-treatment of laborers, the strikers complained about the lack of amenities in the quarters, such as poor cooking facilities and inadequate waste disposal provisions and water supplies.⁶²⁷

The laborers commenced the strike with posting pickets in front of the Refinery's main gate.⁶²⁸ As one of the few public spaces in the Native Village, the Cinema was used for organizing the strike and for negotiating with the authorities. On March 19th, 1922, for instance, the "Workmen's Committee" met with Colonel Trevor, Political Resident in the Persian Gulf, at the Cinema Theatre to discuss the strikers' requests. The 18-member committee consisted of artisans from all trades including fitters, wiremen, painters, caulkers, carpenters, masons, soldermen, and sweepers. Although the majority of the leaders were Sikhs and Pathans, the committee also included members from other groups, such as chittagonians and Chinese workmen. The square outside the Cinema became the venue where thousands of workmen held congregations and displayed solidarity. The order and arrangement of the rallies struck the Political Resident: "They [the strikers] were kept in good order by their own police who wore badges of ribbon. A number of them wore

⁶²⁶ A. P. Trevor to D. DES. Bray, March 28th, 1922. "Abadan Strike," *Persia: Strike of the Anglo-Persian Oil Company's Employés at Abadan*. British Library IOR/L/P.S/11/213

⁶²⁷ The General Committee of the Workmen to L. F. Bayne, March 10th, 1922. *Persia: Strike of the Anglo-Persian Oil Company's Employés at Abadan*. British Library IOR/L/P.S/11/213

⁶²⁸ T. L. Jacks, March 24th, 1922. "Appendix to Correspondence: Abadan Refinery Strike," *Persia: Strike of the Anglo-Persian Oil Company's Employés at Abadan*. British Library IOR/L/P.S/11/213

large kirpans or swords. The strike leaders maintained very good order and appeared to be convinced that they were indispensable and could get whatever they demanded.”⁶²⁹ After attending one of the mass meetings that included more than 2000 men, the Company’s works manager was shocked at the degree of order and control maintained by the labor police.⁶³⁰

Not only did the laborers take the law into their own hands, they also used Abadan’s major public spaces to express their presence and demonstrate their requests. During the strike, mass rallies were held twice a day at different locations on Abadan’s main street where the leaders publicly communicated the workmen’s messages to the Company management and to other comrades. For instance, a group of Pathans holding banners and playing drums walked in procession along the bazaar road from the Bawarda Tank Farms to the Refinery’s main gate. This demonstration left a profound effect on the local authorities. Believing that such behavior could demoralize Iranian and Arab laborers, the Sheikh called for the dismissal of Indian strikers at once.⁶³¹ The strike’s message resonated with Iranian and Arab workmen and local residents of the Abadan Village. In order to prevent a potential urban unrest, the Sheikh increased the number of Arab guards in the Abadan bazaar.⁶³²

The strike took place at the time when the Company was experiencing a sudden fall in crude oil production which necessitated the overhaul of several of the Refinery’s old

⁶²⁹ A. P. Trevor to D. DES. Bray, March 28th, 1922. “Abadan Strike,” *Persia: Strike of the Anglo-Persian Oil Company’s Employés at Abadan*. British Library IOR/L/P.S/11/213

⁶³⁰ T. L. Jacks, March 24th, 1922. “Appendix to Correspondence: Abadan Refinery Strike,” *Persia: Strike of the Anglo-Persian Oil Company’s Employés at Abadan*. British Library IOR/L/P.S/11/213

⁶³¹ A. P. Trevor to D. DES. Bray, March 28th, 1922. “Abadan Strike,” *Persia: Strike of the Anglo-Persian Oil Company’s Employés at Abadan*. British Library IOR/L/P.S/11/213

⁶³² A. P. Trevor to D. DES. Bray, March 28th, 1922. “Abadan Strike,” *Persia: Strike of the Anglo-Persian Oil Company’s Employés at Abadan*. British Library IOR/L/P.S/11/213

benches. On the other hand, the level of fuel oil in the Tank Farm was tight. The combination of these factors made the management consider resisting the strikers' demands, and even dismissing all Sikhs and Pathans, and replacing them with local workmen. The Company estimated that they could get at least 200 artisans from Basra and Baghdad in Iraq and many more from central part of Iran to substitute for the Indian strikers.⁶³³ Eventually, with the assistance of the British diplomatic and military forces and the Sheikh's guards, the Company managed to crush the strike and repatriated more than 2000 Indians, on the grounds of breaking their employment agreements. An evacuation plan was prepared by a British military officer. The layout of the Native Village facilitated the removal of workmen. During a night ambush, a military squad surrounded ten Sikh Lines and removed all the Sikhs from the quarters and forcibly sent them back to India. In a separate attack, all the Pathans living near the Bawarda Tank Farms were also repatriated to India.⁶³⁴

The Indian strikers could engage all groups of the Indian migrant labor as well as Iranian, Arab and Chinese workmen. Unlike the 1920 strike, this labor movement transcended racial and class boundaries and established solidarity amongst different labor groups. At first, Chittagoninas and contract-based laborers did not participate in the strike.⁶³⁵ When it became evident that these groups were also wavering, the Company shrewdly managed to buy them out by the promise of bonuses and increases of pay. In fact,

⁶³³ T. L. Jacks, March 24th, 1922. "Appendix to Correspondence: Abadan Refinery Strike," *Persia: Strike of the Anglo-Persian Oil Company's Employés at Abadan*. British Library IOR/L/P.S/11/213

⁶³⁴ Colonel Parrett, March 22st, 1922. "Operation Order No.1, By the Officer Commanding, Abadan" and "Operation Order No.2, Second Phase." *Persia: Strike of the Anglo-Persian Oil Company's Employés at Abadan*. British Library IOR/L/P.S/11/213

⁶³⁵ T. L. Jacks, March 24th, 1922. "Appendix to Correspondence: Abadan Refinery Strike," *Persia: Strike of the Anglo-Persian Oil Company's Employés at Abadan*. British Library IOR/L/P.S/11/213

it was important for the Company to prevent process men from joining the strikers at all costs because this group numbering 1500 was in charge of all oil-refining benches. If they had ceased to work, the whole refinery would have come to a standstill.⁶³⁶

The 1922 strike had tremendous outcomes. As a well-organized and non-violent industrial action, it set an important precedent for future labor movements at Abadan. The strikers were resolute, and yet did not resort to violence. They refused to return to India unless they all leave together. Their behavior onboard and upon arrival in India debunked the unruly image that the Company had painted of them. The inappropriate manner in which they were treated and loaded to steamers at Abadan invoked a sense a sympathy towards them among British officials in Karachi.⁶³⁷ This event also led to the revision of the Indian Emigration Act which ended the practice of indentured labor. The Government of India reduced the maximum period of employment for the Indian migrant labor from three years to one year, introduced standard Agreement Forms for clerks and artisans, and granted employees the power of resignation, all of which raised the Company's objection.⁶³⁸

New circumstances called for a revision of the Company's labor policy. For instance, rather than relying on intermediaries, the Company began to recruit workmen directly. As Chittagonians proved to be the most royal group during the strike, the management planned to recruit the majority of the required labor for process work from

⁶³⁶ A. P. Trevor to D. DES. Bray, March 28th, 1922. "Abadan Strike," *Persia: Strike of the Anglo-Persian Oil Company's Employés at Abadan*. British Library IOR/L/P.S/11/213

⁶³⁷ J. L. Bieu, April 13th, 1922. "Repatriated Indian Employees of the Anglo-Persian Oil Company," *Persia: Strike of the Anglo-Persian Oil Company's Employés at Abadan*. British Library IOR/L/P.S/11/213.

⁶³⁸ *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1922*. April 1923, BP Archive ArcRef 54365, P.82-3

Chittagong and opened a recruitment office in that province.⁶³⁹ This policy, however, was modified after a year.⁶⁴⁰ The Company also employed more strict recruitment methods. For instance, a tracking system was adopted to ensure that “ring leaders” and “troublemakers” will be prohibited from future re-engagement with the Company. Under this system, a “pass book” and an “identity disc” was issued for each Indian employee.⁶⁴¹ In 1923, almost 5000 local workmen were discharged, and more than 6500 new men were engaged. During the same period, the Company repatriated 1000 Indians and brought in more than 1200 new men from India. In addition, a cut in the standard of wages ensued. For instance, the Company decreased the standard of wage for Chinese carpenters, reportedly “with their own consent,” by 30 percent.⁶⁴²

In the light of the 1921 Coup d'état and the heightened nationalist sentiments, the Company felt the pressure to increase the population of its Iranian employees. To enhance its public image and address the shortage of labor, the Company launched a program to train local populations for skilled and semi-skilled trades. Several workshops were opened in the Fields and at Abadan to cultivate first-grade artisans.⁶⁴³ Replacement of Indian artisans with locals or what came to be known as the “Persianization” of the workforce also

⁶³⁹ *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1922*. April 1923, BP Archive ArcRef 54365, P.82-3

⁶⁴⁰ The Company always endeavored to prevent the creation of strong established labor. Due to the strong position of Chittagonians, the company decided to change its policy towards this class of workforce. APOC Agents in India was asked to broaden their recruiting net in the Chittagong region of British India so that this class of old labor would be diluted with “a little fresh blood.” *Anglo-Persian Oil Company Limited: Annual Report, April 1923 to March 1924*, BP Archive ArcRef 54364, P.50

⁶⁴¹ *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1922*. April 1923, BP Archive ArcRef 54365, P.82-3

⁶⁴² *Anglo-Persian Oil Company Limited: Annual Report: April 1923 to March 1924, 1923*. November 1924, BP Archive ArcRef 54364, P.52

⁶⁴³ The Company introduced a trade standard test and wage scale that divided the artisan labor into four grades. The 1st grade of artisans with the lowest rate of compensation was locally recruited and the 4th grade would get a monthly rate of ₹162. *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1922*. April 1923, BP Archive ArcRef 54365, P.82-3

aimed to show Indians that the Company was no longer dependent on them. As a Company Director once put it, "...In the course of time, it should be possible to replace much of the remaining Indian staff by skilled locals, but it will probably always be politic to retain two classes of skilled labor rather than to become entirely dependent on one."⁶⁴⁴ The Persianization, or Iranianization, of labor, however, occurred at a very slow pace. In fact, before 1924 when the new Iranian Government increased pressure on the Company to replace foreign migrant labor with Iranians, this policy was implemented at a lower rate at Abadan compared to Ahwaz and the Fields. In 1922 the total number of Iranian and Arab employees spiked from 3,700 to more than 9,000 while the number of Indian clerks and artisans dropped from 3800 to 2500.⁶⁴⁵ This had social implications for the Native Village. The newly employed Iranian and Arab artisans populated the "lines" in which previously the repatriated Sikhs resided.

All this notwithstanding, the Company did not intend to radically reshuffle the existing labor hierarchy. It continued to supply the workforce in such trades as Fitters, Boiler-makers, Turners, Electrical workers, etc. from India. Skilled Indian laborers were recruited from Punjabi Muslims from the Lahore District. Semi-skilled laborers for such trades as Durwans (gatekeepers), Telephonchis (Telephone attendants), Tael wallahs (engine attendants), etc. were recruited from local Iranians and Arabs. These workmen replaced Indians who were previously in charge of such positions.⁶⁴⁶ However, like other

⁶⁴⁴ John Cadman, 1925 "Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924," BP Archives, ArcRef 68331, p.73

⁶⁴⁵ *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1922*. April 1923, BP Archive ArcRef 54365, P.88

⁶⁴⁶ *Anglo-Persian Oil Company Limited: Annual Report: April 1923 to March 1924, 1923*. November 1924, BP Archive ArcRef 54364, P.52

nascent industries, most of the local labor was coming from the impoverished rural poor areas and turnover of labor was high.⁶⁴⁷

In the wake of the strike, the company also employed a “Defense Scheme.” This plan entailed reinforcing the Refinery’s critical infrastructure— namely the power house, water pump, fuel pump, and temporary European hospital— in case of a labor unrest.⁶⁴⁸ The London management also recommended secretly training the personnel on the use of fire arms without raising suspicions of the Iranian Government, the press, and the Majlis as well as the British Government.⁶⁴⁹ The Cinema which was used by the strikers for mobilizing laborers was also converted into residential quarters for the accommodation of clerks and artisans.

⁶⁴⁷ Stephanie Cronin, “Popular Politics, the New State and the Birth of the Iranian Working Class: The 1929 Abadan Oil Refinery Strike,” *Middle Eastern Studies*, (2010) 46:5, p.715

⁶⁴⁸ *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1922*. April 1923, BP Archive ArcRef 54365, P.133-4

⁶⁴⁹ The reason for keeping the British Government in the dark was that the Company intended to hold the War Department accountable for the protection of the oil establishments in Iran. H. E. Nichols to the General Manager Strick Scott & Co., June 14th, 1922. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.1*, BP Archive ArcRef 54496, P.410

CHAPTER 4

HOUSING, PUBLIC HEALTH, AND TOWN PLANNING: URBAN EXPERIMENTATION IN ABADAN, 1924-1933

This chapter gives an account of urban reformation in Abadan between the second half of the 1920s and the early 1930s. This period witnessed the evolution of the Abadan company town from a petro-scape into a bustling oil town with more than 70,000 inhabitants. Abadan's urban form during this period underwent drastic changes. In 1924, the town's sprawling growth coupled with inadequate urban infrastructure began to pose existential threats to the security and operations of the Company. Besides labor discontent, regional epidemics frequently visited the island with resultant mass casualties, particularly among local workmen and indigenous residents. Moreover, quarantine measures hampered the export of oil and trade of petroleum products through the Port of Abadan. The lack of planning, poor sanitation, and housing shortage were blamed for the catastrophic consequences. The Company was constantly pressed by the Iranian Government and public opinion to enhance the living conditions of workmen. With a view to addressing these acute challenges, Company officials, in collaboration with professional town planners, architects, and engineers, formulated several urban reform programs, crafted development plans, and launched multiple reconstruction campaigns that collectively helped reorganize the spatial structure of Abadan. The social and physical planning introduced by the Company was grounded in the premises of "model towns" as well as the "best practices" in both India and the metropole.

This episode also marked a watershed between the Company's old styles of paternalism and the professionalized welfare policies. The proposed urban reforms

included housing programs and plans for public amenities that, for the first time, targeted the lower strata of the labor force and the impoverished residents of Abadan. Welfare professionals were also consulted to ensure efficiency and effectiveness of paternalistic services. However, discussions on the extent and scope of welfare programs revealed contradictions in welfare paternalism. Grand visions and ambitious plans advocated by reform-minded Company officials were usually rectified by senior managers on account of economic concerns.

Change, as Margaret Crawford argues, is an inherent feature of company town.⁶⁵⁰ Therefore, it is important to locate the transformation of Abadan within the “dynamic of capitalist development,” which was the process that created, altered, destroyed, and rebuilt different parts of Abadan. Analyzing the physical form of Abadan within the broader contexts of industrial restructuring, welfare paternalism, and labor history, in what follows, I will show how Abadan’s urban form in this period was not only the product of urban reformation introduced by the company, but also the outcome of the activities of multiple social agents, ranging from Iranian officials to emerging urban merchants, Iranian oil workers, and ordinary denizens of Abadan.

4.1 Scientific Management, Industrial Restructuring, and New Political Order

Re-organization of space in Abadan coincided with the restructuring of the oil industry and the re-arrangement of political power in Khuzestan Province. As early as 1921, the wave of nationalism, represented by the accession to power of Reza Khan, was at work to bring Khuzestan back into the Iranian sovereignty. In the second half of 1924, the imbroglio

⁶⁵⁰ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.5

between the Sheikh of Khorramshahr and the Iranian Government came to a head. Reza Khan, then the Prime Minister and the Commander-in-Chief, launched a military campaign to Khuzestan which eventually led to the downfall of the Sheikh. In January 1925, the reorganization of political power in Khuzestan resulted in the gradual abolition of the Sheikh administration and the strengthening of the military and political institutions of the central government in the province. While military outposts were reinforced in major cities including Ahwaz, Shushtar, Dizful and Khorramshahr, new military representatives were posted at Abadan and the oil fields.⁶⁵¹ The Iranian Government also appointed a military Governor-General to the Province and a Deputy Governor and the chief of the municipality (*Rais-i-Baladiyah*) to Abadan. Moreover, due to the increased strategic importance of southern cities, the capital of province was moved from Shushtar to Ahwaz.

The Government takeover of Khuzestan had also social and economic implications for the province. New infrastructure and communication technologies facilitated the integration of Khuzestan with the rest of the country. New roads were constructed which served not only as a means of communication, but also as a tool for military control.⁶⁵² The introduction of motor cars into the region also opened up remote districts and connected them to the towns.⁶⁵³ Also, aviation technology helped bring provincial cities in close

⁶⁵¹ "Situation in Khuzistan," *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1st April 1924 to 31st March 1925 (General Section)*, BP Archives, ArcRef 54361

⁶⁵² For instance, the opening of the Khorramabad road brought the province into close contact with the capital and facilitated the rapid dispatch and deployment of military forces. R. J. Monypenny, March 9th, 1931. "Report on the Tribes in the Area Exploited by the Anglo-Persian Oil Company," Coll 28/48 'Persia. Anglo-Persian Oil Company; Relations with Persian Govt.' [38r] (86/540), British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100076699143.0x000057> [accessed 23 June 2019]

⁶⁵³ R. J. Monypenny, March 9th, 1931. "Report on the Tribes in the Area Exploited by the Anglo-Persian Oil Company," Coll 28/48 'Persia. Anglo-Persian Oil Company; Relations with Persian Govt.' [53r] (116/540), British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100076699143.0x000075> [accessed 23 June 2019]

contact with Tehran. In 1924, the German aviation company Junkers Luftverkehr AG instituted the first national air service in Iran with direct monoplane flights between Tehran and Khorramshahr. Removal of the Sheikh from power led to the disintegration and dispersal of Arab tribal communities. The central government also managed to establish its authority and direct control over Arab tribes by disarming the tribesmen and weakening the influence of the hereditary sheikhs. These reforms led to Arab uprising in 1925.⁶⁵⁴ The Provincial Director of Revenue was instituted in Khuzestan which introduced numerous economic reforms, such as the date taxation or the prohibition of Indian rupee, which reorganized the economic structure of Khuzestan.⁶⁵⁵

As the center of power shifted to the capital, the Company revisited its old policy towards the Iranian Government and got more engaged in the “Persian affairs.”⁶⁵⁶ The new policy was marked by the attendance of Sir John Cadman, then the Deputy Chairman, in the coronation celebrations of Reza Shah in Tehran in April 1926, the first visit of a high-ranking Company official to the seat of the Iranian Government since 1911. The Company also commemorated the Iranian Government takeover of the province by the erection of

⁶⁵⁴ H.E. Nichols to T. L. Jacks, October 22nd, 1925. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.2*, BP Archive ArcRef 54499, P.83

⁶⁵⁵ “Security,” September 1926. *General Manager’s Monthly Report, Abadan, 1926*, BP Archive ArcRef 5484

⁶⁵⁶ For instance, rather than making representations through the intermediary of the British Legation, the Company’s representative in Tehran established a direct communication line with the Iranian Government. Moreover, the Management Committee in London adopted a new propaganda policy to demonstrate to the Iranian people and Government officials the extent of Company’s contribution to development and progress in Iran. To this end, Iranian and British notables and influential figures were invited to visit Abadan and other operation areas, Iranian booklets were published, Persian Khan was erected at Wembley, etc. Also, to improve intercourse with Iranian employees and Iranian officials in the areas of operations, the Deputy Chairman laid down instructions to encourage British employees to attend classes in Persian and gain a fair command of colloquial Persian. H. E. Nichols, “Recommendations of the Management Committee on the Subject of Propaganda Referred to Them by the Board,” February 26th, 1924. *Miscellaneous Papers Prepared for Management Committee, BP Archives, ArcRef 87231*.

the statute of Reza Shah at Khorramshahr on the Abadan bank of the Karun River.⁶⁵⁷ In an interview with the new Shah, Cadman promised to contribute to the development of Iran by providing cheap oil, to share with the Iranian Government the Company's public works and road building experiences, to assist with the professional development of the Iranian workmen, and to pursue Reza Shah's modernization policy.⁶⁵⁸ The project of regeneration of Iran and the discourse of modernity and progress promoted by the Shah and his administration soon were embraced by Company officials. In fact, the Company launched a publicity campaign to portray Iran's oil centers as places where oil modernity manifested itself. In crafting this discourse, references were made to the symbols of modernity in the Metropole: Abadan, in particular, was pictured as a center of civilization replicating "English modernity" embodied in sloping roofs, English-style port, English institutions, among others,⁶⁵⁹ and Masjid-i-Sulaiman at night resembled Piccadilly Circus with the exception of great flares in the distant background.⁶⁶⁰

The Anglo-Persian Oil Company also introduced administrative and technical reforms to grapple with the emerging political and economic challenges in Iran and abroad. In this period, the managerial doctrine of Charles Greenway, which was grounded both in the colonial mercantilism and the imperial mentality of the pre-war era, gave way to the pragmatic-globalist and neo-imperialist visions and policies promoted by the new

⁶⁵⁷ "General," *Anglo-Persian Oil Company Limited: Annual Report for Year Ending 1928*, BP Archive ArcRef 54372

⁶⁵⁸ Sir John Cadman, 1926, *Secret Diaries of Sir John Cadman*, BP Archive ArcRef 70210

⁶⁵⁹ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.150

⁶⁶⁰ The Financial News, "Modern Development of Persia," December 24th, 1924, *Lectures, Speeches, and Articles by Sir John Cadman, 1919-1931*, BP Archive ArcRef 106592

Chairman, Professor John Cadman.⁶⁶¹ The new Chairman's vision picturing the Company in an "impregnable position" vis-à-vis other competitors and providing an "ideal system of service to the public" were pursued by implementing aggressive reforms and reorganizational schemes which collectively aimed at elimination of time wastage and unnecessary duplication of administrative work as well as enhancing productivity and efficiency.⁶⁶² Therefore, the 1921 system of triumvirate management gave way to the centralized system of administration⁶⁶³; a system of budget and estimate was introduced⁶⁶⁴; and the Company's headquarters was relocated from Khorramshahr to Abadan.⁶⁶⁵ This latter policy further elevated Abadan's position among the Company's centers of operation.

The growing importance of "scientific management" in industrial production also captured the attention of Company officials and inspired the ongoing restructuring efforts. In the beginning of the twentieth century, a comprehensive and rationalized system of technical organization, informed by Frederick Winslow Taylor's scientific management movement, replaced the systematic management of the late nineteenth century

⁶⁶¹ Cadman was also a fervent propagator of orderly development and conservation of oil fields and an advocate for the policy of attaining equilibrium between supply and demand or what he described as the idea of "sane and honest internationalism" and "spirit of careful husbandry" in the production of oil, which he tried to replace the prevalent notion of aggressive commercialism that marked the industrial production of oil in America. Sir John Cadman, 1928, "Oil in the Post-war Era," *Lectures, Speeches, and Articles by Sir John Cadman, 1919-1931*, BP Archive ArcRef 106592

⁶⁶² Sir John Cadman to E. H. O. Elkington, November 27th, 1931. *EHO Elkington- Personal Correspondence from Persia*, BP Archive ArcRef 71527

⁶⁶³ T. L. Jacks was appointed Resident Director in Iran and Iraq and was vested with the authoritative power of a Director. The executive management was centralized under a General Manager, James Jameson, and three Assistant General Managers who were in charge distinct technical, administrative, and commercial purviews. John Cadman, 1926, *Report by Sir John Cadman: Visit to Persia and Iraq, Spring 1926*, BP Archives, ArcRef 68386, p.20-21

⁶⁶⁴ It should be noted that for every major plan, budget and policy approval by the Board of Directors was required. However, with respect to decisions that could "effect a big saving," the management team in Iran was granted full authorization. Cairo Conference, March 1924, BP Archives, ArcRef 71403, *Notes on a Visit to Persia and Mesopotamia, November and December 1919, and Reports on Persian Organization 1924-1927*. P.10

⁶⁶⁵ T. L. Jacks to John Cadman, February 24th, 1925. *Miscellaneous Correspondence with Mr. Jacks*, BP Archives, ArcRef 71460

administered by engineering professionals.⁶⁶⁶ The application of scientific knowledge and methods to industrial problems was promoted by the British Government during the Great War. In 1915, the Department of Scientific and Industrial Research was instituted as a Committee of Privy Council. This Committee established the British Scientific Instrument Research Association in 1918 to advance the application of scientific and industrial research in all instrument-making industries.⁶⁶⁷ Prominent British statesmen like A. J. Balfour also advocated the notion of scientific industrial production and manufacturing in the postwar years. Like other British industries, the Anglo-Persian Oil Company joined the conversation on the application of science to industrial production. This approach gained momentum especially after John Cadman replaced Charles Greenway as the new Chairman of the Company in 1927. In his lectures and interviews, John Cadman stipulated that all operations of the Company were grounded in “scientific principles,” and that thanks to this approach the landscape of the Iranian oil industry was unique among all oil-producing countries.⁶⁶⁸ To prove his claims, Cadman in 1927 commissioned J. M. Williamson, the secretary to the British Scientific Instrument Research Association, to visit Iran and illustrate the ways in which the APOC was applying “science” to the process of extraction, treatment, and distribution of crude oil.⁶⁶⁹ The main aim of this project was twofold: to publicize the Company’s industrial activities and paternalistic programs in Iran with a narrative that could be comprehensible by the general public, and to demonstrate that the

⁶⁶⁶ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.54

⁶⁶⁷ J. M. Williamson, “Industrial Research Association: I- British Scientific Instrument Research Association,” December 24th, November 11th, 1920. *Nature*, volume 106, pp. 346–348

⁶⁶⁸ Sir John Cadman, “Oil in the Post-War Era,” 1928, *Lectures, Speeches, and Articles by Sir John Cadman, 1919-1931*, BP Archive ArcRef 106592

⁶⁶⁹ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.12

Company was acting as the harbinger of modernity in Iran, with tremendous “civilizing influence” transcending the areas of operations.

Company officials also equated oil modernity in Iran with scientific industrialism. In an interview with *The Financial News* in December 1924, Sir John Cadman described Abadan as a “modern city of considerable magnitude, with every convenience for comfort and health and industrial efficiency.” However, oil modernity from Cadman’s point of view was not limited to welfare amenities and industrial efficiency, it was also represented, among other things, by good roads, fleets of motor cars, better connectivity of different parts of the vast, decentralized oil infrastructure, and social transformations. Cadman believed that the modern development that oil had brought to Iran— especially the promise of secure and remunerative employment as well as consumption culture— encouraged local tribespeople to abandon their nomadic lifestyle in favor of Western and industrial modes of life.⁶⁷⁰

4.2 Popular Protest, Labor Organizations, and the 1929 Strike

Labor protest against the Company gathered steam in 1927 following the reorganization of the political system in Khuzestan and when the number of Iranian workmen in the employ of the Company reached a historic high. Emboldened by the nationalist feelings and deprived of Company housing and other social amenities that first-and second-class employees were enjoying, third-tier Iranian workforce in May 1929 staged a major industrial strike at the Abadan Refinery.⁶⁷¹ The roots of the strike could be traced in the

⁶⁷⁰ *The Financial News*, “Modern Development of Persia,” December 24th, 1924, *Lectures, Speeches, and Articles by Sir John Cadman, 1919-1931*, BP Archive ArcRef 106592

⁶⁷¹ To read a full account of the strike see: Stephanie Cronin, “Popular Politics, the New State and the Birth of the Iranian Working Class: The 1929 Abadan Oil Refinery Strike,” *Middle Eastern Studies*, 46, No. 5 (2010), pp. 699-732.

accumulation of popular discontent about ill-treatment of Iranian labor and residents of Abadan by the Company and in the increased influence of trade unions based on the Soviet model. Two major Iranian newspapers as early as March 1927 began to put out critical articles against the oil company. The prestigious *Habl-al-Matin*, published weekly in Calcutta, and *Hayat-i-kargar* (Workmen's Life), an incipient newspaper published in Shiraz, circulated freely in Khuzestan, served as the pioneers of advancing the interests of Iranian laborers and nationalist circles, and played a major role in enlightening public opinion on the activities of the Company in Southwestern Iran.⁶⁷²

Hayat-i-Kargar was edited by a young journalist, by the name of Ahmadzadeh, whose previous newspaper, *Atash-feshan* (Volcano), had been suppressed by local Iranian authorities during the parliamentary election period in 1926, on account of its alleged radical left-leaning views.⁶⁷³ Company officials became wary of this newspaper's influence on the lower ranks of the Iranian labor. As the Refinery Works Manager once put it, "This newspaper is fairly widely read in Abadan, and whilst the more intelligent Persians here easily realize that the articles are pure propaganda directed against the Company by its enemies, there is no doubt but that when they are read by, or read out to,

⁶⁷² Rejecting the allegations that appeared in the press, the Company attributed all this campaign to the soviet propaganda. Moreover, the Company used its political leverage with the Iranian Government and its special relations with the British Government to suppress the newspapers. By rendering the labor movement as "subversive influence of Bolshevism," the Company tried to tap into anti-Soviet sentiments in Tehran and London to its own advantage.

⁶⁷³ Ahmadzadeh took over *Hayat-i-Kargar* from a former Company's employee who used to work as a carpenter at the workshops at Ahwaz, and, as such, possessed first-hand experience about Iranian laborers' living and working conditions in Khuzestan. However, the Company accused Ahmadzadeh of being on the pay roll of the Soviet Consul-General in Shiraz. British Consul, Shiraz to Sir Robert H. Clive, June 7th, 1927. Coll 28/48 'Persia. Anglo-Persian Oil Company; Relations with Persian Govt.' [222r] (454/540), British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100076699145.0x000037> [accessed 23 June 2019]

the less intelligent members of the community, they have a harmful effect.”⁶⁷⁴ For instance, in an article entitled “A.P.O.C. and Politics,” published on March 8th, 1927, *Hayat-i-Kargar* accused the Company of pursuing political objects in economic guise and called on the Iranian Government to restrict the British enterprise’s political activities in the province. The article stipulated that the Company has recruited a large number of British military and political officers, and it has violated international laws. Referencing the nationalist movements in the region, the article called for resistance against the Company to safeguard Iranian national interests: “Under what circumstance should the Persians submit to such transgressions? No, they should not do so. Submission is a sign of weakness and mental debility. On the contrary, the Persians should follow the example of other nations who have recently risen against the universal oppressors and are making self-sacrifice in reaching their ends.” The article also charged Company officials with all sorts of ill-treatment of Iranian workmen— in particular the disproportionately lower number of Iranian employees relative to Indians— and called on the Company to change its policy and comply with the Oil Concession.⁶⁷⁵

In another issue, *Hayat-i-Kargar* published the proclamation of the Labor Association of the A.P.O.C. workmen with a view to alleviating the “miserable” conditions of the Iranian labor at Abadan. The committee of workmen had suggested that at each major industrial center, including Abadan, a Mixed Committee be formed and meet once a

⁶⁷⁴ S. Clegg, to British Consul, Shiraz. March 29th, 1927. Coll 28/48 ‘Persia. Anglo-Persian Oil Company; Relations with Persian Govt.’ [225r] (460/540), British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library

<https://www.qdl.qa/archive/81055/vdc_100076699145.0x00003d> [accessed 24 June 2019]

⁶⁷⁵ “Extract from the *Hayat-Kargar* No.9,” March 8th, 1927. Coll 28/48 ‘Persia. Anglo-Persian Oil Company; Relations with Persian Govt.’ [227r] (464/540), British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library

<https://www.qdl.qa/archive/81055/vdc_100076699145.0x000041> [accessed 24 June 2019]

month to discuss and settle the disputes between the Company and Iranian workmen. The Mixed Committee, which resembled the workers' councils in Soviet Russia, was comprised of two representatives of the Company, two elected representatives of the coolies, one elected representative of the artisans, one elected representative of the clerks, and one representative of the Iranian Government. The Labor Association also demanded enhanced working and living conditions as well as sound welfare and pension policies for workmen. For instance, the Association demanded shorter work hours in summer, a minimum wage of 100 krans per month for coolies, abolition of recruitment of minors and abuse of workmen—among other requests. Workmen also asked for housing for all laborers with water, lights, fuel, and equitable access to medical and sanitary facilities, and requested that the Company should not interfere in the workers' private lives.⁶⁷⁶

The articles published in *Habl-al-Matin* also shed light on the grievances of Abadan's residents and reflected the anxieties of nationalist activists. For instance, the article titled "The Life Blood of Persia" enumerated what the author characterized as the "Company's intrigues," such as discharging and deporting Iranian workmen on account of patriotism, bribing Iranian officials, establishing a secret service office, and usurping upon the rights of residents. Revealing the nationalist circles' disappointment at the Iranian Government and the Parliament, the author pled to the Shah for help, "Oh! Thou our crowned Father! Our bones have nearly been crushed by the persecutions which we have received at the hands of the Company! We have no more strength to withstand the pressure

⁶⁷⁶ "Extract from the Hayat-Kargar," March 1st, 1927. Coll 28/48 'Persia. Anglo-Persian Oil Company; Relations with Persian Govt.' [228r] (466/540), British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100076699145.0x000043> [accessed 24 June 2019]

any longer. Come thou to the help of a large number of laborers and shopkeepers, for the present situation in these parts shows a very dark future.”⁶⁷⁷

Nationalist and communist groups in Khuzestan also joined the political campaigns against the Company. This movement was spearheaded by the local notable and Majlis (Iranian Parliament) Deputy for Abadan, Mirza Hussein Movaqar Bushiri and his associates. This group, known amongst Company and British officials as the Bushiri circle, had established the workmen’s clubs at Abadan. Company and British officials accused the Bushiri circle of communist tendencies. However, commercial interests and rivalries could have been the major reasons for Movaqar’s animosity towards the Company.⁶⁷⁸ During the 1929 strike, the Bushiri circle launched a nationalist and religious rally against the Company, and adopted such slogans as “Down with the foreigners and unbelievers,” “Khuzestan for the Persians” or “Let the sons of Darius enjoy the fruits of their land.” The Bushiri circle also made alliance with local clerics who used the religious processions during the holy Shi’ite month of Muharram to rouse local populations.⁶⁷⁹ British officials believed that such propaganda was supported by both the Iranian Government and the Russians.⁶⁸⁰

⁶⁷⁷ Translation Made from *Habl-ul-Matin* [Newspaper], “The Life Blood of Persia,” August 2nd, 1927. *Correspondence from V: Soviet Activities, Organization, etc.*, BP Archive ArcRef 129909.

⁶⁷⁸ For instance, the Company had prevented Movaqar from securing a concession to build a tramway in Abadan. R. H. Clive to A. Chamberlain. June 17th, 1929. *Coll 28/48 ‘Persia. Anglo-Persian Oil Company; Relations with Persian Govt.’ [106r] (222/540)*, *British Library: India Office Records and Private Papers*, IOR/L/PS/12/3453, in *Qatar Digital Library*

<https://www.qdl.qa/archive/81055/vdc_100076699144.0x000017> [accessed 29 June 2019]

⁶⁷⁹ The Senior Naval Officer, Persian Gulf Division, to the Commander-in-Chief, East Indies Station. June 30th, 1929. *Coll 28/48 ‘Persia. Anglo-Persian Oil Company; Relations with Persian Govt.’ [94r] (198/540)*, *British Library: India Office Records and Private Papers*, IOR/L/PS/12/3453, in *Qatar Digital Library*

<https://www.qdl.qa/archive/81055/vdc_100076699143.0x0000c7> [accessed 29 June 2019]

⁶⁸⁰ E. W. Fletcher to Sir R. Clive. June 10th, 1929. *Coll 28/48 ‘Persia. Anglo-Persian Oil Company; Relations with Persian Govt.’ [102r] (214/540)*, *British Library: India Office Records and Private Papers*, IOR/L/PS/12/3453, in *Qatar Digital Library*

<https://www.qdl.qa/archive/81055/vdc_100076699144.0x00000f> [accessed 29 June 2019]

The strike broke out on May 4 when a May Day demonstration by a group of Iranian-Armenian employees evolved into a sweeping popular protest. The strikers occupied the square in front of the New Refinery Gate and repeated the demands they had raised earlier which included, among other things, an increase in wages, reduction of foreign employees, and equal treatment of Iranian and Indian employees. Perhaps the nationalist components of the demands precluded Indians, Iraqis, and Chinese from the industrial action. British and Company officials alike portrayed the strike as a Soviet conspiracy and attributed the labor discontent to the Bolshevik propaganda.⁶⁸¹

This labor unrest was rapidly repressed by local Iranian authorities.⁶⁸² Unlike the 1922 strike, the Iranian Government, police, military forces, and secret services were actively present at Abadan and played a major role in quelling the labor movement.⁶⁸³ In the same year, Iranian workers of the southern segments of the Trans-Iranian Railway, who were in the employ of the American Ulen Company, went on strike on three occasions. Similar to the Abadan strike, all the labor actions were suppressed by the Iranian Police

⁶⁸¹ As a first reaction, the British Minister in Tehran in a conversation with a high-ranking Iranian official attributed this event to the presence of the Soviet Consulate at Ahwaz. To a senior British naval officer, the strike was an ill-fated scheme organized by a bunch of Soviet-funded agitators and executed by dozens of Iranian surrogates who began to foment the seed of violence amongst the workmen and aimed not only at "causing strikes and damage to the Refinery but also at creating general political unrest in the province." R. H. Clive to A. Chamberlain. May 16th, 1929. *Coll 28/48 'Persia. Anglo-Persian Oil Company; Relations with Persian Govt.'* [112r] (234/540), *British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library*

<https://www.qdl.qa/archive/81055/vdc_100076699144.0x000023> [accessed 30 June 2019]. See also: *The Senior Naval Officer, Persian Gulf Division, to The Commander-in-Chief, East Indies Station. June 30th, 1929. Coll 28/48 'Persia. Anglo-Persian Oil Company; Relations with Persian Govt.'* [91r] (192/540), *British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library* <https://www.qdl.qa/archive/81055/vdc_100076699143.0x0000c1> [accessed 29 June 2019]

⁶⁸² S. Cronin, 2010, p.699

⁶⁸³ Company officials in collaboration with British military and diplomatic officials in the region devised different plans to step in should the Iranian government lost control of the situation. A fleet of the British Navy was on alert upstream from Abadan to take action, if needed. "Extract from Senior Naval Officer." June 14th, 1929. *Coll 28/48 'Persia. Anglo-Persian Oil Company; Relations with Persian Govt.'* [161r] (332/540), *British Library: India Office Records and Private Papers, IOR/L/PS/12/3453, in Qatar Digital Library* <https://www.qdl.qa/archive/81055/vdc_100076699144.0x000085> [accessed 30 June 2019]

(*Amnieh*) upon the order of the Military Governor-General. The military detachment remained in Abadan and quartered in the security barracks until the end of the year.⁶⁸⁴ More than forty-five ringleaders were detained and sent to other cities, such as Dizful and Khorramabad, with their families left behind. The Company also managed to control the labor movement by discharging 4,200 men in Abadan and having them deported.

Similar to previous industrial actions, the 1929 strike had profound consequences. The new labor conditions forced the Company to revisit its paternalistic policies.⁶⁸⁵ The Company also established an intelligence service, which was in charge of screening new employees and gathering internal information about the “feeling among the employees at Abadan and at the Fields as well as in the province in general.”⁶⁸⁶ The occurrence of the strike at Abadan was completely censored in the Iranian Press. Government officials, however, began to make inquiries into the wage, welfare, and living conditions of Iranian workmen at Abadan.⁶⁸⁷ The establishment of the Iranian Security Police was also one of the outcomes of the 1929 strike. The resultant conflicts between this organization and the Company’s intelligence service gave rise to heated conversations between Iranian and Company officials in the following years.

⁶⁸⁴ *Anglo-Persian Oil Company Limited: Annual Report for year ending 1929*, BP Archive ArcRef 54371

⁶⁸⁵ J. Bamberg, p.79

⁶⁸⁶ R. H. Clive to the Foreign Office, London. November 28th, 1929. *Coll 28/39 'Persia: Printed Correspondence 1929-1936' [575v] (1161/1174)*, British Library: India Office Records and Private Papers, IOR/L/PS/12/3442, in Qatar Digital Library
<https://www.qdl.qa/archive/81055/vdc_100055143738.0x0000a2> [accessed 3 August 2019]

⁶⁸⁷ E. H. O. Elkington to Sir John Cadman, April 30th, 1931. *EHO Elkington- Personal Correspondence from Persia*, BP Archive ArcRef 71527

4.3 Flowers and Vegetables: The Paradox of Welfare Paternalism

*“In earlier years, the Company accepted no responsibility for the comfort of its Persian workmen in Abadan, and under the Sheikh of [Khorramshahr’s] rule ... conditions had become indescribable. Under the new regime, there are great possibilities not only of rectifying the conditions of public health, but also of improving the efficiency of the workmen, by establishing at small cost such facilities as will reflect credit upon the Company’s organization in the eyes of the Persian Government and people. An Abadan representative now sits in the Majlis, and the present member is an enthusiastic supporter of the Company.”*⁶⁸⁸

4.3.1 Economic Rationality with a Dose of Social Welfare

In this period, the Company adopted a new approach to welfare services. As the Deputy Chairman explained to the Board of Directors, in the early years of operations in Iran Company-sponsored social services were driven by economic logic and geared mainly towards the first-and second-class personnel. As discussed in the previous chapter, Iranian laborers were excluded from Company paternalism. In 1924, however, the Company changed this old policy and assumed responsibility for the welfare of the lower strata of the workforce and, simultaneously, expanded the range of social services for Europeans and high-ranking clerical staff. Nevertheless, social control and segregation by ethno-occupational status remained the cornerstone of Company paternalism. Several factors may account for the incorporation of social rationality into the framework of Company paternalism. First and foremost, in the light of the Government takeover of Khuzestan and the emboldened nationalist sentiments, the Company was constantly pressed by Iranian

⁶⁸⁸ John Cadman, 1926, *Report by Sir John Cadman: Visit to Persia and Iraq, Spring 1926*, BP Archives, ArcRef 68386, p.19

officials and public opinion to improve the working and living conditions of Iranian employees who made up more than sixty percent of the workforce.⁶⁸⁹

The growing importance of the notion of “human material” in industrial production also contributed to the rethinking of old styles of paternalistic efforts. In fact, the proponents of scientific industrialism viewed sociological and human factors as a critical component of the application of scientific methods to the management of operations and production of petroleum products.⁶⁹⁰ As the first academic to become the chairman of a global industrial enterprise, John Cadman was also a proponent of the application of scientific methods to different operations of the oil industry, from extraction, management of geological demarcation, production, and refining, to provision of social welfare service to oil workers. For instance, during his visit to Abadan in October-November 1924, Cadman introduced the concept of “mental relaxation” for the first time.⁶⁹¹

Popular progressive reforms of the day, such as industrial betterment movement, also known as welfare work, contributed to the formation of the professionalized welfare methods. Unlike laissez-faire capitalists, industrialists that adopted the principles of industrial betterment movement assumed a certain degree of responsibility for the well-being of their employees— though in exchange for increased loyalty.⁶⁹² One of the outcomes of the new approach to paternalism was soliciting advice from trained welfare experts and appointing a welfare professional to administer social services. The Anglo-

⁶⁸⁹ “Staff,” August 1924. *General Manager’s Monthly Report, Abadan, August-December 1924*, BP Archive ArcRef 5482

⁶⁹⁰ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.12

⁶⁹¹ Cadman believed this phrase “bids fair to become slogan in Abadan.” Sir John Cadman, “Visit to Persia: Secret Diary”, BP Archives, ArcRef 72549. 1924.p.81

⁶⁹² Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.48

Persian Oil Company also embraced this model. For instance, welfare professionals were dispatched to the Fields and Abadan to evaluate the needs of the personnel and give recommendations for enhancing social services.⁶⁹³ In the early 1930s, a Welfare Office was instituted with the task of provision of all welfare services, including educational facilities, to employees.⁶⁹⁴

The rhetoric associated with welfare paternalism stressed efficiency, productivity, economy, and public health. Paternalistic programs were not regarded as “bountiful largesse” of the Company; rather they were viewed as essential provisions for the welfare, happiness, and spirit de corps of employees and designed to ward off a sense of “staleness” and enhance performance of employees to increase industrial efficiency and productivity.⁶⁹⁵ The Company-sponsored services and amenities were also intended to serve as “models” to be replicated in different parts of Iran. In the words of a Company propagandist, “If plague spots tend to spread, so do health spots.”⁶⁹⁶

All this notwithstanding, mixed views existed within the Company management regarding the extent and scope of welfare paternalism. For instance, based on the conviction that cholera might be caused by the greens obtained from “distant and obscured bazaars,” Company officials in Iran called for planting vegetables under the supervision of the Company to ensure the health of the staff and check the outbreak of epidemics. However, the London Management favored growing of flowers, turfing the gardens, and

⁶⁹³ John Cadman, 1925 “Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924,” BP Archives, ArcRef 68331, p.74

⁶⁹⁴ “Education of Persian Clerks, etc.,” 16th March 1931, *Visit to Persia, February to March 1931*, BP Archives, ArcRef 71853

⁶⁹⁵ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.172

⁶⁹⁶ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.144

beautifying the environment rather than supplying vegetables to employees.⁶⁹⁷ Senior managers also tended to modify the progressive schemes proposed by reform-minded officials or design professionals. In certain cases, the initial plans were re-evaluated multiple times by the Production Department or by the higher management and different elements were either rectified or removed. For instance, in 1924 the Deputy Chairman questioned spending £750,000 on a rebuilding program, because, in his view, such colossal expenditure did not have any direct revenue-earning value for the Company. Therefore, he recommended finding a midway scenario with considerable reductions in capital without jeopardizing the scheme's major objectives.⁶⁹⁸ Similarly, in 1931 an ambitious medical re-organization scheme proposed by the Medical Department was completely overhauled by the senior management.

Company paternalism in this period also shifted from an individual-centered approach to the type of services that affected the broader terrains of the workforce. While the general welfare services diversified and expanded, in particular for the European employees, the Company rolled back on certain individual-level perks. This change in paternalistic policy manifested itself in different realms, from domestic allowances to medical services. For instance, as the Company expanded healthcare facilities, medical allowances per employee was abolished. Chief Medical Officer put it, "...We no longer undertake to give [individual] medical treatment, and the Doctors have no further need to pander to anyone. If a man requires treatment, he can come and ask for it, but the Doctors need not run after them, nor should the Office send any Doctors to give his verdict upon a

⁶⁹⁷ Cairo Conference, March 1924, *Notes on a Visit to Persia and Mesopotamia, November and December 1919, and Reports on Persian Organization 1924-1927*. BP Archives, ArcRef 71403, P.28

⁶⁹⁸ John Cadman, January 1925, "Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924," BP Archives, ArcRef 68331, p.44

case.”⁶⁹⁹ Similarly, allowances for messing allocated to the staff under the older paternalistic system, which covered expenses for cooks, foodstuffs, etc., were revoked when the Company built a central restaurant and canteen in 1926. Changing economic conditions also resulted in further shrinkage of individual-level welfare services. For instance, in the early 1930s when the global recession dampened the oil market, Company officials considered dismissal of a large number of employees and made changes to the grading and renewal of salaries and benefits.

4.3.2 Social Control and Professionalized Welfare Policies

The changes in the demographic composition of the European staff that had begun in the post-war years continued into the 1920s and created new labor conditions that necessitated a revision of paternalistic services. Between 1924 and 1926, the number of European employees at Abadan drastically increased. In 1926, roughly 70 percent of the staff were junior bachelors who were on their first three-year contract with the Company. The new cohort demanded better working and living conditions and improved social services. General dissatisfaction manifested itself in high rates of resignation, low physical and mental health status, and reluctance in renewal of contract with the Company. In the wake of the new labor environment, Company officials began to revisit welfare services to improve “morale” and address the increased discontent amongst Europeans.⁷⁰⁰

In 1925, with a view to enhancing the organization and implementation of paternalistic programs for the European employees, the Company picked two staff

⁶⁹⁹ Dr. M. Young to Dr. E. Jamieson, November 19th, 1924. *Correspondence between Dr. E. Jamieson, Principal Medical Officer, Iran, and Dr. M. Y. Young, Chief Medical Officer: June to December 1924*, BP Archives, ArcRef 112975

⁷⁰⁰ M. Y. Young, February 16th, 1926, “The Staff and Its Administration,” *General Administration*, BP Archives, ArcRef 62413

members to serve as superintendents of social welfare at the Fields and Abadan. Moreover, a welfare expert was invited from India to assess the quality of social amenities in the centers of operation. Upon visiting Iran and interviewing the staff, the welfare professional prepared a report in which he identified several shortcomings that, in his opinion, required immediate attention, including married housing, cinemas, orchestras, libraries, and recreational and worship facilities. He also made several recommendations which were mostly met with opposition from senior Company officials.⁷⁰¹

The welfare expert recommended extending the existing reading facilities and building new libraries with no membership fees. He also suggested that each library should contain at least 750 books on all subjects. Company Directors agreed to provide “standard” literary works as a permanent nucleus for the libraries at Abadan and the Fields and to provide twenty-four new books per months through a subscription with The Times Book Club in London. However, the Directors believed that considerable attention should be paid to the choice of subjects. Eventually, the Company made a yearly subscription of £72 with The Times Book Club for a monthly provision of “modern fiction” as well as books with topics related to Iran. Moreover, a membership fee was considered necessary to

⁷⁰¹ For instance, Company Directors maintained that marriage would impose restrictions on the mobility of junior staff and that provision of married quarters should occur “gradually,” commensurate with the Company’s pace of development, financial resources, and expediency. Referring to the failure of the Abadan Cinema, Company Directors maintained that, due to the limited population of employees, a future cinema should not be provided on a permanent and continued basis. Company officials also were interested in encouraging local amateur performers rather than recruiting a professional Orchestra from India. Welfare expert also suggested that in addition to football, cricket, golf, and tennis, other forms of recreation such as gymnasia, swimming, and squash racket courts, be provided to keep employees busy during rainy months, such as November and December. Company Director believed than any new forms of amusement should be provided only when there is enough demand for it among employees. In their view, variety and contrast were the dominating features in the popularity of games amongst the staff. H. E. Nichols to T. L. Jacks, February 19th, 1925. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.2*, BP Archive ArcRef 54498, P.266-274

encourage readership and preservation of books.⁷⁰² Based on these premises, a system of libraries was instituted in the areas of operation and the Abadan Gymkhana Library opened in November 1925.⁷⁰³

The welfare expert also recommended providing religious services to the European staff. Unlike companies that used religion as a tool to cement stronger ties with employees, the Anglo-Persian was not yet prepared to pursue this policy on accounts of diversity of denominations amongst the European staff. As discussed in the previous chapter, it was the policy of the Company to avoid polarization of the European personnel through religious or social institutions. Moreover, the management was afraid of the intention of Muslim clerics in establishing religious schools and appointing religious scholars (*mujtahid*) to Abadan or the Fields. Muslim religious institutions were perceived as a threat due to their capacity to mobilize workmen. This explains why Company officials in retrospect regretted the approval of the Rangooni Mosque at Abadan. In the words of a Director, it was “ill-conceived and a step which should never have been taken.”⁷⁰⁴

Despite Company opposition, a group of Europeans began to organize informal religious gatherings on their own initiative. As a result of the increased pressure from the staff, John Cadman officially recognized “religious needs” as one of the major components of “social needs” and called for the establishment of religious institutions along with facilities for married life in Iran. In his report to the Board of Director, Cadman even related religious activities to the well-being of the staff. However, he stressed avoiding sectarian

⁷⁰² H. E. Nichols to T. L. Jacks, February 19th, 1925. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.2*, BP Archive ArcRef 54498, P.266-274

⁷⁰³ H. E. Nichols to T. L. Jacks, July 28th, 1926. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.2*, BP Archive ArcRef 54499, P.651

⁷⁰⁴ H. E. Nichols to T. L. Jacks, February 19th, 1925. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.2*, BP Archive ArcRef 54498, P.266-274

activities. In justifying this policy, Cadman made references to best practices in other parts of the Empire. For instance, he alluded to how religious observance had worked out in the British military forces.

As mentioned earlier, before 1924, the Company completely neglected the Iranian workmen's social needs. For instance, in the Fields, there existed four clubs for Europeans, two clubs for Indian clerical staff, and one club for Armenians. However, no clubs were provided to Iranian clerks, and they had to apply for membership to Indian clubs.⁷⁰⁵ In 1926, Cadman recommended providing spaces for recreation and social activities of Iranian clerical staff.⁷⁰⁶ Plans were developed to build a club for Iranian clerks in the Fields and to provide sports services, such as "pleasure ground" (entertainment grounds), for Iranian employees at Abadan. In supporting their application to the Iranian Government for acquisition of new land at Abadan, the Company's agent in Tehran noted that, "The Company now has many thousands of employees at Abadan, the great majority of them Persians, and that is essential and in the interests of their welfare and health that an area for their recreation should be allotted to them. Up to the present, no such area has been available at Abadan, and it is urgently needed."⁷⁰⁷ New football and hockey grounds were also laid out for artisans adjacent to the new Artisans' Quarters.⁷⁰⁸

As a result of the new paternalistic policy, the Company expanded the range of entertainment options for the first-class personnel. In 1924, for instance, a new golf course,

⁷⁰⁵ "Social Service Department: Fields," April 2nd, 1926, *Sir John Cadman's Visit to Persia and Iraq 1926*, BP Archives, ArcRef 71183

⁷⁰⁶ John Cadman, Spring 1926, "Visit to Persia and Iraq," BP Archives, ArcRef 71403, p.28

⁷⁰⁷ F. S. Greenhouse to The Ministry of Finance, 22nd August 1927, *Article 4: Land Acquisition, Abadan, Lots 1-14*, BP Archives, ArcRef 100497

⁷⁰⁸ "Abadan Township Reorganization Scheme. Report of Messrs. Temple and Wittet. Various Minor Recommendations," August 30th, 1926. *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

six tennis courts and squash courts were built on the northwestern side of the Bungalow Area. By 1929, sports activities such as swimming, rugby, association football, hockey, golf, tennis, cricket, squash were played at Abadan. Certain outdoor games, such as soccer, hockey and rugby, were played only in cooler months. To increase social cohesion among Europeans, inter-departmental leagues, inter-center tournaments, trophies, and matches were organized. Most games, however, were played among the staff members of the same grade. At Abadan, teams were usually arranged according to certain characteristics of the first-class personnel, such as marital status (Married vs. Single Golf Teams), departmental association (Inter-Departmental Athletic Sports or Inter-Departmental Swimming Gala), and nationality (England vs. Scotland football matches). Occasionally, similar games were played between members of the second-class personnel. For instance, in 1929, the final game of the hockey cup held in honor of the Chairman was played between Abadan clerks and Fields Armenian clerks. The finale of the same tournament in 1930 was played between the Abadan Athletic Club and the Field Unity Club, representing the clerical staff at Abadan and the Fields, respectively. Very rarely, however, were inter-group matches played between Europeans and the clerical staff. For instance, in 1929 cricket and tennis matches were held between the Gymkhana Club and the Abadan Athletic Club. Within the circle of the wives of the senior staff tennis and golf matches were played.⁷⁰⁹

The Company vigorously continued the policy of drawing employees to the Abadan Gymkhana Club. After all, it was used a tool to socialize junior employees into the corporate culture. New activities were organized to increase the rate of patronage. With the presence of 13 staff wives at Abadan, dance party was held every alternate Saturday. The

⁷⁰⁹ *Anglo-Persian Oil Company Limited: Annual Report for year ending 1929*, BP Archive ArcRef 54371

management also encouraged community organizations and amateur groups to play musical performances.⁷¹⁰ For instance, a Jazz Band consisting of 12 staff members performed regularly at the Club. In April 1925, the area between the Gymkhana Club and the river was turfed to provide a pleasant “rendezvous” during the summer months.⁷¹¹ New extensions were also made to the Gymkhana Club. A cinema hall was added which was equipped with a panatrope set and hosted a wide range of cultural nights, theatrical performances, and events by community organizations such as Abadan Dramatic Society.⁷¹² The Gymkhana Hall was large enough to accommodate more than 150 scots who in January 1926 gathered to celebrate the annual supper of the Caledonian Society of Abadan.⁷¹³ Replications of popular plays were performed by local amateur groups at the Club. For instance, “Tilly of Bloomsbury” and “A Little Bit of Fluff,” both popular British comedies in the early 1920s, were performed by the Basra Amateur Dramatic Society and the comedy play “The Dover Road” was performed by the Thespian Society of Abadan.⁷¹⁴ In September 1926, a new club known as the Sailors’ Institute, was built in the Bawarda neighborhood on the lines of the Abadan Gymkhana Club for the use of Europeans residing in that area as well as the crews of the British Tanker Company.⁷¹⁵

⁷¹⁰ For instance, until the early 1920s, amateur performance groups were recruited from Basra to entertain European employees in Khuzestan. In response to the increased requests in Abadan and the Fields for a more professional orchestra, the Deputy Chairman contemplated experimenting with a professional pianist that could serve multiple purposes. Such an artist could not only act as a nucleus for an amateur orchestra but also as an inspiration for a range of musical performances and entertainment events. “Social Service Department: Fields,” April 2nd, 1926, *Sir John Cadman’s Visit to Persia and Iraq 1926*, BP Archives, ArcRef 71183

⁷¹¹ “Social Items,” May 1925. *General Manager’s Monthly Report, Abadan, 1925*, BP Archive ArcRef 5483

⁷¹² *Anglo-Persian Oil Company Limited: Annual Report for year ending 1929*, BP Archive ArcRef 54371

⁷¹³ “Social Items,” January 1926. *General Manager’s Monthly Report, Abadan, 1926*, BP Archive ArcRef 5484

⁷¹⁴ “Social Items,” April 1925. *General Manager’s Monthly Report, Abadan, 1925*, BP Archive ArcRef 5483

⁷¹⁵ “Social Items,” September 1926. *General Manager’s Monthly Report, Abadan, 1926*, BP Archive ArcRef 5484

In tandem with the expansion of entertainment amenities, the Company increased its control over social activities through various mechanisms. For instance, the Directors instituted an oversight body, known as the Executive Committee, to coordinate different clubs and “side shows.” The Committee was chaired by the Assistant General Manager and consisted of representatives from each club appointed by the Company.⁷¹⁶ The Company’s excessive control over social life at Abadan raised outrage among European employees. Club patronage decreased to the extent that Company officials attributed this to the comfortable conditions of bungalows. This trend also affected the libraries. For instance, the use of the Fields library reduced by half in 1926. The Welfare Officer attributed this decline to “non-arrival of fresh and regular supplies of new fictions” as well as the excessive rate of membership. All this notwithstanding, the Company insisted on the policy of control and segregation. For instance, Indian clerks were prohibited from using the staff library on the grounds that this might further dampen the use of the library by European employees.⁷¹⁷

A welfare professional, who was sent to Iran in 1928 to evaluate the impacts of social services, found out that British employees had developed “slight resentment” towards the Company. The staff accused the Company of exercising control over leisure activities and interfering with employees’ private lives. British employees also proposed that the Club Committee be appointed by club members and the position of “club master” be banished. Employees also expressed interest in establishing their own private clubs, because the Abadan Club evoked “too much of the character of an institute.” In concluding

⁷¹⁶ H. E. Nichols to T. L. Jacks, March 11th, 1926. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.2*, BP Archive ArcRef 54499, P.431

⁷¹⁷ “Social Service Department: Fields,” April 2nd, 1926, *Sir John Cadman’s Visit to Persia and Iraq 1926*, BP Archives, ArcRef 71183

his survey, the welfare expert made several recommendations to address major social needs at Abadan. He also detected a decline of “morale” among the staff which, in his opinion, was caused by the absence of a church and religious observance.⁷¹⁸

Company officials, however, unanimously, believed that the time was not ripe to relax control over the institutions of social welfare on grounds of security, procurement, and management capacity within the staff. The Chief Medical Officer, for instance, believed that the Abadan Gymkhana Club must not be left to employees without ex-officio representatives of the Refinery management, since such experiments at the Fields Club had allegedly failed.⁷¹⁹ Other Company officials opposed the idea of sanctioning private clubs. For instance, the ex-colonial officer and the Chief of the APOC Security Branch believed that, “we want one homogenous unit in different centers, and not a number of unmixable atoms.” Colonel Medlicott also called for bridging social gaps among employees by introducing mixed sports tournaments and social events, such as “Paul Jones.”⁷²⁰ Similarly, the Chairman also disagreed with “the idea of giving any encouragement to class consciousness,” particularly amongst Europeans by sanctioning private clubs. However, Cadman suggested a Club Secretary for social work and a Padre of “latitudinarian views”

⁷¹⁸ European employees also asked for improving social conditions and married accommodation at Abadan. They suggested that only two summers should be included in the first contract, and local leave to regional destinations such as Basrah, Karachi, and Bombay, and even short trips in southwest Iran should be encouraged in order to provide the employees with an opportunity to get out of the “oil atmosphere” for a while. Employees also demanded more public spaces and shops and taxi services at Abadan. Sir John Cadman, *Kittermaster Report*, 13th February 1928, BP Archives, ArcRef 68934, “Persia: Miscellaneous”

⁷¹⁹ Dr. Young cited two reasons to justify the absolute control exercised by the company over social services—though he did not admit such interference existed. First, due to the absence of “free market” in Iran, the company had to import, pay for, and provide “everything.” Second, Iran was an “unsettled” country in terms of the enforcement of law and order which required the company to take over the Europeans' affairs. In other words, local Iranian police were deemed unfit to handle the potential disputes amongst the European staff. Dr. M. Y. Young, 9th February 1928, “Short Digest of Mr. Kittermaster's Recommendations,” *Persia: Miscellaneous*, BP Archives ArcRef 68934

⁷²⁰ Colonel H. Medlicott, *Kittermaster's Report*, 7th February 1928, BP Archives, ArcRef 68934, “Persia: Miscellaneous”

be appointed in Abadan and sanctioned the construction of buildings for religious services.⁷²¹ As a result, the Company approved the construction of a church room at Abadan and recruited a chaplain from Basra to attend to the spiritual and religious needs of the European personnel.⁷²²

4.3.2.1 Restaurant and Works Canteen. In the wake of frequent epidemics and the growing concerns regarding staff hygiene, the Company devised plans to extend its control over food supply systems and to consolidate messing. In the early years, employees were granted messing allowances for foodstuffs and cooks. As mentioned earlier, junior bachelors dined together in bungalows and usually shared a cook, kitchenware, and dining room. In the 1920s, Company medical officers rendered separate cooking arrangements unhygienic and difficult to screen for quality control.⁷²³ Moreover, junior bachelors living in single rooms in Slide Valves always complained about the quality of service and cooking and quarreled over dining schedule.⁷²⁴ These factors led the Company to contemplate building a central restaurant on the site of No.2 Bungalow. The cost of the restaurant was to be compensated through messing allowances. Designed on the lines of “English business

⁷²¹ The APOC Chairman recognized the welfare expert’s recommendations with reservations, arguing that the company should not authorize programs based on present staff establishment as there might be reductions in personnel within the next two or three years. However, Cadman suggested, among other things, that the half-pay system should be introduced for the leave of non-administrative grades. Sir John Cadman, *Kittermaster Report*, 13th February 1928, BP Archives, ArcRef 68934, “Persia: Miscellaneous”

⁷²² E. H. O. Elkington to Sir John Cadman, December 7th, 1928. *EHO Elkington- Personal Correspondence from Persia*, BP Archive ArcRef 71527; John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.173

⁷²³ Dr. Young, *Note on Social Services*, 27th January 1928, BP Archives, ArcRef 68934, “Persia: Miscellaneous”

⁷²⁴ Dr. Young, *Short Digest of Mr. Kittermaster's Recommendations*, 9th February 1928, BP Archives, ArcRef 68934, “Persia: Miscellaneous”

houses,” the Restaurant opened in May 1926.⁷²⁵ To publicize and celebrate the inauguration of “the finest step in social welfare,” an Indian regiment band was invited from Basra to play music outside the restaurant, while more than 219 staff members gathered to dine.⁷²⁶

Upon erecting the central restaurant, the Company eliminated kitchens from all bungalows and most dining rooms were converted into sitting rooms. The Restaurant catered primarily for junior bachelor staff, but gradually was patronized by senior members as well as crews of the Company’s maritime transport arm, the British Tanker Company. Iranian and Indian clerical staff were also allowed to use the Restaurant. However, a clear line was drawn between the first-class personnel’s dining area and the section where non-Europeans were permitted to dine. The Restaurant provided two messing options: table d’hote meals and a la carte system. The Works Canteen was also built on the same site to serve the staff on shift duties. The Restaurant and Canteen collectively catered three meals per day for more than 200 employees. The former also served private parties and special events. The staff consisted of three European personnel including a manager, a French chef, and an assistant chef, and 95 “native” personnel including 37 waiters, 25 cooks and cooks’ mates, and 33 kitchen, pantry, and lavatory boys.⁷²⁷

The food supply for the Restaurant and Canteen was under the supervision of the Company Public Health Department. Foodstuffs, including fresh fish, meat, vegetables, and produce, were provided daily by a local merchant, and dairy produce was supplied

⁷²⁵ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.169

⁷²⁶ “Social Items,” May 1926. *General Manager’s Monthly Report, Abadan, 1926*, BP Archive ArcRef 5484

⁷²⁷ “Restaurant and Works Canteen,” *The Anglo-Persian Oil Company Limited (APOC): Persian Compendium: Central Staff Department*, BP Archives, ArcRef 37034

from Khorramshahr before the Company established its own dairy farm at Abadan. Tinned and bottled foods, drinks, bread, and cigars were purchased from the Company Provision Store. Tinned vegetable and foods were consumed only when fresh produce was not available in sufficient quantities.⁷²⁸ The Restaurant project met some of its objectives. In 1928, two years after its opening, the Chief Medical Officer reported that there was a marked reduction in cases of dysentery amongst Europeans. However, employees resented that attendance at the Restaurant was compulsory and demanded flexibility with messing.⁷²⁹ Moreover, contrary to the initial calculation, the Company did not save money as a result of the centralization of cooking and messing system. In fact, due to high overhead costs, the Restaurant and Canteen soon became money-losing institutions. In the light of the Great Depression, Company officials began to reduce expenses associated with social services. Plans were devised to turn the Restaurant into a self-supporting entity. For instance, in 1931 Company officials cut the Restaurant and canteen staff in half, but eventually had to cover the loss by increasing the servant allowance rate by £12.⁷³⁰

4.3.3 Model Schools and Technical Training

In the early 1920s, the Company began to subsidize several schools in its operation areas in Khuzestan as well as in other major cities, such as Isfahan and Tehran. In the light of the political restructuring in Iran and with a view to repairing its public image and securing

⁷²⁸ "Restaurant and Works Canteen," *The Anglo-Persian Oil Company Limited (APOC): Persian Compendium: Central Staff Department*, BP Archives, ArcRef 37034

⁷²⁹ Dr. Young, *Short Digest of Mr. Kittermaster's Recommendations*, 9th February 1928, BP Archives, ArcRef 68934, "Persia: Miscellaneous"

⁷³⁰ In 1931, the Restaurant staff included 18 waiters, 10 cooks, and 11 chokras. In this year, the restaurant served 65 people for launch and 150 people for dinner. The cost of three meals a day was roughly £7. For instance, in the 1932 estimate, the servants' allowances per bungalow increased from £70 to £82 due to the loss on the restaurant. "Notes of Meeting Held at Abadan on 17th November 1931, on Abadan Estimates for 1932," November 17th, 1931. *Visit to Persia and Iraq November/December 1931: Notes of meetings Held at Abadan and Alwand*. BP Archives, ArcRef 69295

political influence in Tehran, the Company decided to provide “model education institutions” in Khuzestan. The Company’s new paternalistic efforts in providing educational services took different forms after 1924. Not only did the Anglo-Persian continue to financially support select educational facilities; it also planned to expand the scope of educational services for its existing and prospective employees. Moreover, in response to the request of the Iranian Government, the Company agreed to send a group of Iranian students to Europe for further technical trainings.⁷³¹

In January 1926, Company officials prepared an Education Scheme with a maximum yearly Education Grant of £10,000 (equivalent to 51,000 tomans) for educational development in Southwestern Iran. As in the case of other social welfare programs, a British Supervisor, a trained expert in the field of education, was appointed for the oversight of the Scheme. The Education Scheme was designed to remain in conformity with the new education policies of the Iranian Government. Therefore, Company officials submitted the proposed program to the Provincial Director of Education for review and approval. Based on the agreement with the Iranian Government, the Company agreed to provide funding and, while retaining representatives on the School Committees, left the management of the educational facilities to the Iranian Director of Education.⁷³²

Almost half the Education Grant was spent on five schools in the Company’s centers of operations—two at Ahwaz, two in the Fields area, and one at Abadan. At the latter location, the Company was committed to contributing up to £800 per year to the

⁷³¹ In 1929, an examination was held in Tehran under the supervision of the Ministry of Education and a Company representative and two students were selected to proceed to Birmingham for university education. John Cadman, 1926, *Report by Sir John Cadman: Visit to Persia and Iraq, Spring 1926*, BP Archives, ArcRef 68386, p.41

⁷³² “Notes Taken at a Conference on Education Held at Abadan,” January 15th, 1926, *Sir John Cadman’s Visit to Persia and Iraq 1926*, BP Archives, ArcRef 71183

State-run elementary school, Pahlavi School, which was built in Abadan Town after the Central Government took over the political administration of Khuzestan. In early 1925, the Abadan School accommodated roughly 150 pupils, of whom 35 were the children of the Company's Iranian workmen. The rest of the students were comprised mainly of the sons of local merchants and government officials. Under the Education Scheme, the Company agreed to finance the extensions to the school to serve up to 300 students and to cover the tuition fees for 150 children of its low-paid laborers.



Figure 4.1 A view of Ferdowsi School, a model elementary school designed and built by the Company in Bawarda, circa 1931. Classrooms were organized around a central courtyard and were surrounded by an arched verandah.

Source: BP Archives, ArcRef 36152

In the early 1930s, the Company erected a model elementary school, on the lines of British primary schools, within its territory in the neighborhood of Bawarda to the south of Abadan Town. The school was designed to accommodate up to 250 pupils. In order to draw elite teachers and headmasters from major cities to Abadan, Company officials decided to provide accommodation to the school staff. In 1931, plans were developed to build

permanent housing for teachers, who were previously accommodated in a wooden bungalow, on the model of second-class quarters.⁷³³ Two married and six bachelor-type bungalows were built in the school's compound at an estimated cost of £3000.⁷³⁴ The Schools' curricula were determined by the Iranian Government. For instance, a drill instructor from the Iranian Army would provide students with regular physical training.⁷³⁵ The schools sponsored by the Company also promoted the Central Government's rhetoric of Iranian nationalism. For instance, the Deputy Chairman suggested that reading lessons offered to Iranian students should "instill a Persian patriotism, and a pride in their own country and its people."⁷³⁶ Similarly, the new primary school at Bawarda was named after the prominent Iranian poet Ferdowsi who had become a pivotal figure in the cultural revitalization campaign promoted by the Shah and his administration in the 1930s.

Besides improving basic education, the Education Scheme also envisioned the training of Iranian youths to turn them into skilled artisans and clerks. For this program, however, the Company assumed direct control and acted independent of the Iranian Government. In the aftermath of the Indian strikes in the early 1920s, the Company had already launched the first round of apprentice training scheme. At Abadan, a workshop, also known as the "Technical School," was established to train fifty apprentice artisans.

⁷³³ "Outline of Educational 1932 Estimates," 4th December 1931, *Visit to Persia November/December 1931, Staff Matters*, BP Archives, ArcRef 96431

⁷³⁴ Due to the predominantly Arab population, harsh climatic conditions, and low standard of education, Abadan was considered one of the least desirable posts by Iranian school teachers. Since teachers' salaries were regulated by the central Government, good accommodation was the only incentive that the company could offer to attract educators to Abadan. "Notes of Meeting Held at Abadan on 19th November, 1931," November 19th, 1931. *Visit to Persia and Iraq November/December 1931: Notes of meetings Held at Abadan and Alwand*. BP Archives, ArcRef 69295

⁷³⁵ "Education in Khuzestan, Notes on the Present Activities of the Company" February 1st, 1926, *Sir John Cadman's Visit to Persia and Iraq 1926*, BP Archives, ArcRef 71183

⁷³⁶ "Stuart Memorial College, Isfahan" June 4th, 1926, *Sir John Cadman's Visit to Persia and Iraq 1926*, BP Archives, ArcRef 71183

These men were selected from the local labor and were given instructions on how to use basic mechanical tools. The Iranians trained under this program replaced Indian handymen, the lowest grade of the class of artisan.⁷³⁷

In the late 1920s, based on the educational program proposed by a team of labor specialists, the Company developed a “reconstituted scheme” to replace 500 Indian artisans with Iranians. The scheme was designed to train skillful turners, electricians, and fitters out of a homogenous group of Iranian youths. The targeted population aged between 14 and 16, earned an elementary education, featured sound physical body, and possessed some basic mechanical skills. Since there were not sufficient young people in the locality who would meet all these criteria, the Company had to widen its recruitment net. Besides top graduates of Abadan elementary schools, apprentices were drawn from a larger pool of youths from the interior. In 1931, around 95 apprentices who met all the basic qualifications were being trained at Abadan. The Reconstituted Scheme envisioned the training of up to 200 apprentice artisans through an intensive two-year learn-and-work program, including one year of training at apprentice shops, followed by one year of work experience in one of the Refinery departments. During this period apprentice artisans were put under constant supervision of Company inspectors and department heads. After completion of the training period, the apprentices were put on the respective department’s payroll and became part of the Company’s labor structure. The scheme would cost £45 per apprentice per year. Each apprentice was paid a stipend between four and six krans a day which was equal or lower than the average pay rate for a manual laborer. The scheme also

⁷³⁷ “Notes of Meeting Held at Abadan on 19th November, 1931, on Abadan Estimates for 1932,” November 19th, 1931. *Visit to Persia and Iraq November/December 1931: Notes of meetings Held at Abadan and Alwand*. BP Archives, ArcRef 69295

called for providing proper accommodation to each apprentice with “a minimum charge for board and lodging.”⁷³⁸

The Education Scheme also included provisions for training existing and prospective Iranian employees to fill clerical roles. In the early 1920s, the Company recruited from the graduates of the secondary schools that it financially sponsored. However, the majority of the recruits filled low-ranking clerical positions, such as tally clerks, telegraphists, and telephonists.⁷³⁹ Following the increased pressure from the Iranian Government and with a view to training Iranians to fill intermediate clerical positions, the company adopted the same two-year training model that it used for artisan apprentices. Like other welfare programs, economy was the main driving force behind the scheme. In fact, training local clerks was cheaper than recruiting clerks from India. Moreover, the Company could brag about its commitment to the Iranianization of the workforce.

The clerical staff consisted of six grades, including Office Boy, Boy Clerk, Junior Clerk, Grade 1 Clerk, Grade 2 Clerk, and Grade 3 Clerk. The apprentices, or learner-clerks as they were called, were recruited in the first three grades. They were taught English instruction during working hours and arithmetic, bookkeeping, typing and shorthand at night classes.⁷⁴⁰ The apprentices were required to have secondary education. Learner-clerks were mostly Armenians or younger sons of small property-owners with a large family from Iran’s interior. In 1931, more than 300 pupils were under training for clerical positions at Abadan. The major supplier of learner-clerks was the Stuart Memorial College,

⁷³⁸ “Outline of Educational 1932 Estimates,” 4th December 1931, *Visit to Persia November/December 1931, Staff Matters*, BP Archives, ArcRef 96431

⁷³⁹ “Situation in Khuzistan,” *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1st April 1924 to 31st March 1925 (General Section)*, BP Archives, ArcRef 54361

⁷⁴⁰ “Outline of Educational 1932 Estimates,” 4th December 1931, *Visit to Persia November/December 1931, Staff Matters*, BP Archives, ArcRef 96431

a Christian missionary secondary school in Isfahan. Since the 1920s, the Company made a yearly contribution of £3500 to this school and in return nominated a group of students for secondary education. In 1931, more than 100 graduates of the Stuart Memorial College were employed as clerks and foremen by the Company. At Abadan alone, 30 Stuart College alumni filled various clerical ranks. In the early 1930s, the Company ceased its financial support and the practice of identifying nominees to the Stuart College on account of low economic return. In fact, due to the relatively low salaries paid by the Company, the majority of the graduates preferred to take government jobs in Isfahan or Tehran.⁷⁴¹

Similar to the artisan training scheme, accommodation was a critical component of the clerical training program. A housing type on the lines of a “hostel” was developed to be erected in the New Artisans’ Village (See section 4.4 Abadan Township Reorganization Scheme). It was a model of accommodation that would not raise the apprentices’ standard of living, nor would put it too low. Several scenarios costing between £2,600 and £6,000 were reviewed by Company officials to house apprentice artisans and learner-clerks. Even the conversion of the Slide Valves in the Bungalow Area into apprentice quarters was discussed. At the end, it was decided to provide housing to thirty-two boys, who were among the most destitute of all the apprentices.⁷⁴² The Apprentice Hostel was designed not only as an accommodation place, but also as a model educational center for training Iranian youths for artisanal and clerical positions. Other than spaces for lodging, the Hostel included other provisions, such as recreation and study room, dining room, classrooms,

⁷⁴¹ “Notes on The Stuart Memorial College, Isfahan,” 4th December 1931, *Visit to Persia November/December 1931, Staff Matters*, BP Archives, ArcRef 96431

⁷⁴² “Notes of Meeting Held at Abadan on 19th November, 1931,” November 19th, 1931. *Visit to Persia and Iraq November/December 1931: Notes of meetings Held at Abadan and Alwand*. BP Archives, ArcRef 69295

gardens, and football pitch. All daily activities of apprentices were under constant control of an Iranian teacher appointed by the Company. Every daily activity in the Hostel had educational purposes. For instance, collective gardening was part of the curriculum to discipline the youths and nurture esprit de corps.

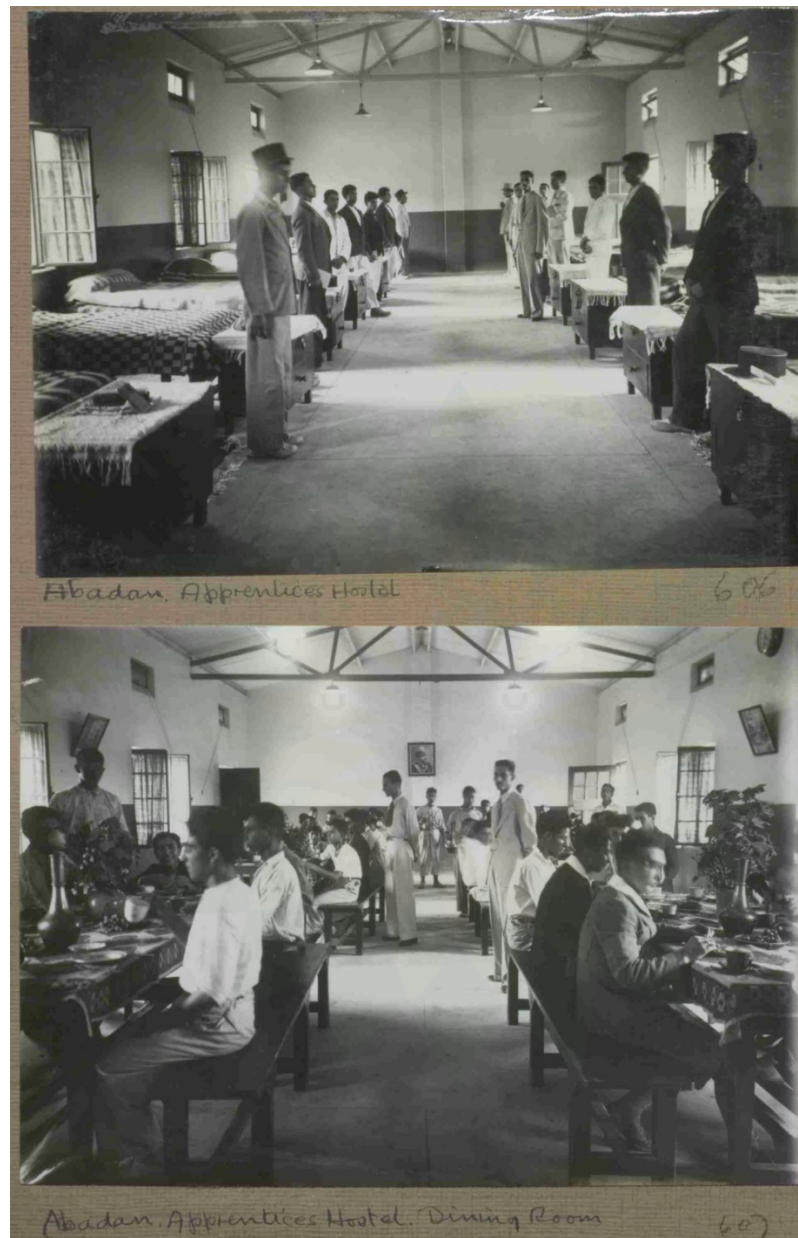


Figure 4.2 Abadan Apprentice Hostel, circa 1931. Top: Accommodation Block; Bottom: Dining Block.

Source: BP Archives, ArcRef 36152

Company officials also planned to provide “Continuation Classes” for more than 200 Iranian clerks and artisans who had already finished primary schools and intended to pursue the secondary-level education or learn technical subjects.⁷⁴³ In 1926, Continuation Classes, conceptualized on the lines of Provincial Technical Schools in Britain, were to be held at the Abadan Pahlavi School. Such classes would offer a wide range of subjects, including Reading, Writing, Shorthand, Arithmetic, English, Accountancy, Typewriting, and Elementary Engineering.⁷⁴⁴ At first, senior clerks were asked to teach night classes. However, it was found that recruiting teachers would yield better results and could equally be economical. In 1931, four teachers were recruited at 120 Tomans (1200 Krans) per month. These men were tasked with teaching day classes in arithmetic, Persian, and English to learner-clerks and apprentice artisans. The teachers were also responsible for teaching night classes and supervising the apprentice quarters. The Company planned for four types of night classes: classes in Persian for Europeans; commercial classes for clerks, English for clerks, foremen, and apprentices; and Persian for apprentices and artisans.⁷⁴⁵ Yearly graded examinations in English were held for the clerical staff and apprentice clerks. The Company also encouraged Europeans to learn Farsi. At major operation centers, examinations on Persian language were held every year.⁷⁴⁶ To accommodate the increased population of apprentices and employees in day and night classes as well as examination

⁷⁴³ “Notes Taken at a Conference on Education Held at Abadan,” January 15st, 1926, *Sir John Cadman’s Visit to Persia and Iraq 1926*, BP Archives, ArcRef 71183

⁷⁴⁴ “Proposed Scheme For Educational Development in Khuzestan,” January 15st, 1926, *Sir John Cadman’s Visit to Persia and Iraq 1926*, BP Archives, ArcRef 71183

⁷⁴⁵ “Outline of Educational 1932 Estimates,” 4th December 1931, *Visit to Persia November/December 1931, Staff Matters*, BP Archives, ArcRef 96431

⁷⁴⁶ *Anglo-Persian Oil Company Limited: Annual Report for year ending 1929*, BP Archive ArcRef 54371

sessions, the Old Dispensary and the Old Labor Office were converted into the Educational Center and were equipped with desks and blackboards.⁷⁴⁷

4.3.4 Re-Organization of Healthcare Spaces

The need for re-organization of medical spaces manifested itself in 1924 in the Fields and one year later in Abadan. Following their visit to Abadan Island in October 1924, town planning and public health specialists F. C. Temple and G. Wittet (See section 4.4) made a trip upcountry to evaluate Masjid-e-Sulaiman from a sanitation standpoint. The advisors called for reorganizing the Fields Hospital on the lines of the Tata Hospital at the company town Jamshedpur in India. In particular, they stressed the major shortcomings at the Fields Hospital, such as poor ventilation across the building, insufficiency of the wards, congestion in the out-patient department, and inadequacy of bathrooms. Medical officers launched a rebuilding program according to the recommendations of Temple and Wittet. Since the Company's Medical Department was controlled by a central management, the experiences at the Fields Hospital set a precedent for the re-arrangement of the medical spaces at Abadan and other centers. Prior to 1926, when a professional architect was engaged to redesign the Company's medical facilities in Southern Iran, the blueprints for the medical buildings were prepared by the Refinery Civil Engineering Department based on the sketches made by the Company's medical officers.

The poor ventilation throughout the Fields Hospital was one of the first problems that drew attention. In fact, hot stagnant air built up under the verandah roof was drawn into the wards and was driven down by the ceiling fans on the patients. To address this

⁷⁴⁷ "Outline of Educational 1932 Estimates," 4th December 1931, *Visit to Persia November/December 1931, Staff Matters*, BP Archives, ArcRef 96431

problem, mechanical ventilation was added to the verandah walls. Furthermore, suction fans and ventilators at the ceiling and floor levels, respectively, were installed to facilitate the flow of air.⁷⁴⁸ The improvements at the Fields Hospital were based on the post-germ theory and the latest medical practices of the day, which not only necessitated the separation of aseptic and septic zones, but also called for the creation of specialized medical spaces. For instance, in July 1924, the Fields Hospital was officially divided into medical and surgery sections, with one medical doctor in charge of each branch. Furthermore, standard medical principles of the day required that aseptic operating theatre be separated from both the septic surgery room, which catered for the “mass of infected cases,” and the out-patient zone, which was considered “thoroughly septic.” This had spatial implications for the layout of the Fields Hospital. As a Principal Medical Officer put it, “the front room in the out-patient [department] will be the medical out-patient room. The back one [will be] the surgical out-patient room and [a third] room [will be reserved for] the surgery with a door opening on [to] the verandah.” Moreover, latrines were relocated from inside the hospital building to the outside and separated from the latter by a “covered way” which ensured that the ventilated air from the septic environment would not adulterate the aseptic atmosphere of the wards.⁷⁴⁹ The hand sketches prepared by the Principal Medical Officer for the reorganization of the Fields Hospital are a testament to the subscription of the Company’s medical officers to both the post-germ theory and the colonial pathological conventions. As the experiment with the separation of Clean (aspetic) and Septic wards at

⁷⁴⁸ Dr. E. Jamieson to Dr. M. Young, “Fields’ Hospital,” November 4th, 1924. *Demi-Official Letters from Dr. E. Jamieson, Principal Medical Officer, Persia to Dr. M. Young, Chief Medical Officer*, BP Archives, ArcRef 112928

⁷⁴⁹ Dr. E. Jamieson to Dr. M. Young, “D/O Medical,” November 13th, 1924. *Demi-Official Letters from Dr. E. Jamieson, Principal Medical Officer, Persia to Dr. M. Young, Chief Medical Officer*, BP Archives, ArcRef 112928

the Fields yielded successful results, the Medical Department decided to replicate the same model at the Abadan Hospital. Therefore, one section of the Surgical Block at the Abadan Hospital was scraped, fumigated, and repainted. It was then barricaded off from the other sections and was supplied with new equipment and separate staff. Only “straightforward clean wounds” were admitted to the Clean Ward. Medical officers hoped the new ward would reduce the recovery length of injury cases and prevent them from developing “cold septic ulcers.”⁷⁵⁰

New specialized medical spaces and facilities were gradually added to the Abadan General Hospital in response to the new requirements and the changed labor conditions. For instance, up until 1925, the Medical Department relied on the pathological services of the Baghdad Laboratory to examine specimens. In this year, medical officers called for improving the pathological Laboratory and X-Ray facilities at both Abadan and the Fields. Specially, laboratory facilities were considered critical in the diagnosis of such diseases as malaria and dysentery with high frequency of incidence amongst the staff. In Abadan, a pathological laboratory was built and equipped with the required apparatus for the examination of the patients’ blood, urine, stools, and sputum. In order to further study local diseases, plans were also developed to add a research room to the Laboratory with tools for entomological work (study of local insects) as well as facilities for experimentation on animals. Furthermore, new spaces had to be provided in the General Hospital to accommodate medical specialists, such as surgeons, dentists, and ophthalmologists, and to be equipped with requisite medical apparatus, such as sigmoidoscopes, laryngoscopes, etc. Similarly, in 1928, a Mental Block was erected in the hospital compound. Medical officials

⁷⁵⁰ Dr. Rennie to Dr. M. Young, September 1st, 1927. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

also began to set new standards for the interior design of specialized medical spaces. For instance, windows were eliminated in the surgical theatre as operations had to be carried out under artificial lighting.

Simultaneous with piecemeal alterations, between 1926 and the early 1930s several scenarios were proposed for the wholesale reorganization of medical spaces at Abadan. For instance, in 1926, when “constructional rejuvenation” was in full swing at the Refinery, the Chief Medical Officer called for the rearrangement of medical facilities. In Dr. Young’s view, the Abadan General Hospital had failed to deliver efficient services on grounds of misplacement, ill-conceived design, and poor construction. Despite its central location and easy accessibility from the laborers’ quarters and Abadan Town, the General Hospital was in close proximity to the works and to the major roads, which created unsuitable environmental conditions for the hospital. In fact, the northerly winds exposed the General Hospital to the odors, fumes, and dust arising from the Refinery. For instance, as soon as the construction of the Hospital was completed, all the bathtubs turned black as a result of the chemical combination of sulfur monoxide in the air and the lead ingredients of the bathing facilities.⁷⁵¹ Moreover, due to the high level of underground water and the lack of proper insulation, the Hospital was always damp and the drainage network dysfunctional.⁷⁵² Medical officials also believed that different sections of the Hospital were highly cramped and that the wards designated for the third-class personnel were not only overcrowded, but also surrounded by an “unsightly” and “depressing” environment. Statistical figures in 1924-1925 showed that around 1,600 cases were treated in the Abadan

⁷⁵¹ Dr. Rennie to Dr. M. Young, September 30th, 1924. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

⁷⁵² Dr. M. Young, January 19th, 1926. “Abadan Hospital,” *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

Hospital, of whom 76 percent were non-European, and out of more than 6000 patients treated in quarters, more than 90 percent were “colored” employees. Moreover, more than 20,000 non-employees used medical services of the General Hospital in one way or another.⁷⁵³ The inadequacy of medical spaces at Abadan become more evident towards the end of the 1920s. Statistical data indicated that the average occupancy rate at the General Hospital was around 70 percent and that during the peak months many “colored” employees and non-employees that required “indoor” medical services were not admitted on account of insufficient accommodation.⁷⁵⁴

Spaces of Healing: Efficiency, Asepsis, and Race

The Chief Medical Officer’s proposal entailed construction of a “combined” hospital with separate quarters for different classes of the workforce, and conversion of the existing hospital into a municipal office and a public school. After examining different potential locations, a site to the north of the General Hospital and in the vicinity of the Bahmanshir River was selected. The proposed land was chosen as it offered several environmental advantages in comparison to the existing site. In particular, owing to its distance from the Refinery, the Bahmanshir River offered a much “purer atmosphere.” Moreover, the water level at the proposed location was remarkably lower than the original site⁷⁵⁵ which was considered a positive factor from the point of view of construction of foundations,

⁷⁵³ The medical staff divided patients into three groups: White or European staff, including British, American, Canadian, and Polish, etc.; Colored or clerical and artisan employees, including Indians, Iranians, Armenians, Iraqis, etc.; and, non-employees dependent on the Company for treatment, including families of employees, shopkeepers, and tribespeople. “Section No. III: Statistics for the Year 1st April 1924 to 31st March 1925,” *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1st April 1924 to 31st March 1925 (General Section)*, BP Archives, ArcRef 54361

⁷⁵⁴ Dr. M. Young, 18th July 1930, *The Re-organization of the Company’s Medical Services in Persia by M Y Young*, BP Archives, ArcRef 68938, p.10

⁷⁵⁵ The underground water table around the proposed site was at least 9 to 10 feet below the ground level.

insulation measures, and drainage of the site. The ample open land surrounding the site could facilitate construction process and future extensions. Dr. Young also suggested that a professional architect should be consulted for the new hospital project.⁷⁵⁶ Such reckoning highlights a watershed in the evolution of hospital design at the Abadan Refinery and reflects the collective awareness among medical officials regarding the importance of architectural design in achieving efficient medical services. As a senior medical officer put it, “every room in a hospital has its special purpose, for which its position and construction have to be designed with care.”⁷⁵⁷

At first, George Wittet, the architect and co-author of Abadan Township Reorganization Scheme (See section 4.4), was proposed. Wittet’s familiarity with Abadan made him stand out amongst other candidates. Wittet suddenly passed away in 1926 and James Mollison Wilson was selected for this task. Jas M. Wilson had served as Director of Public Works under the British Mandate Administration in Iraq, where he had designed several public institutions including the Basra Hospital. His service was continued after the independence of Iraq and he became the consulting architect both to the Government of Iraq and to the Iraq petroleum Company. Before his tenure in Mesopotamia, Wilson had worked for the celebrated architect Sir Edwin Landseer Lutyens in Britain and in India. In the latter context, he was part of the team that designed the British colony’s new capital, New Delhi. His name had come up during the Cairo Conference in 1924 when Company officials began to screen professional town planners with “common sense and experience in laying out native buildings” for the reconstruction of the Abadan Village. Wilson was

⁷⁵⁶ Dr. M. Young, January 19th, 1926. “Abadan Hospital,” *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

⁷⁵⁷ Dr. E. Jamieson, March 1929. “Abadan Hospital,” *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

regarded as a suitable candidate thanks to his extensive experience in both India and Mesopotamia. Furthermore, his prolific portfolio spoke to his ability to deliver high-quality work under severe financial restrictions.⁷⁵⁸

Wilson was commissioned to develop a series of preliminary sketch plans and to prepare material estimates for the combined hospital based on the instructions of the Medical and Refinery departments. The spatial program developed for the new combined hospital aimed to increase the efficiency of the building, at both medical and administrative levels, and to incorporate the principles of the post-germ theory. Wilson's design for the new medical institution consisted of eight wards and provided for 180 beds in total. It included a series of specialized medical spaces, such as X-Ray laboratory, pathological institute, operating theatres, and heatstroke wards. Wilson also proposed using the Plenum Ventilating System in the new hospital. However, Company officials suggested that rather than using a cost-intensive mechanical system, "thick bricks" should be used in the exterior walls to reduce transmission of heat from outside. Aseptic, nonporous construction materials were also recommended for the interior. For instance, medical officials required that wards, dispensaries, and other major spaces be covered up to seven feet from the ground level with glazed tiling. Floors were to be covered with some type of water-proof material from the family of "Ruberoid" or other impervious substances, such as "Doloment."⁷⁵⁹ To increase the efficiency of the nursing staff, a separate bungalow was to be provided for the matron and nurses within the hospital compound. The new hospital also

⁷⁵⁸ "Notes of Discussion at Conference in Cairo," March 23rd, 1924. BP Archives, ArcRef 71403, *Notes on a Visit to Persia and Mesopotamia, November and December 1919, and Reports on Persian Organization 1924-1927*. P.25

⁷⁵⁹ W. C. Mitchell to J. M. Wilson, November 29th, 1926. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

consisted of several accessory buildings, including separated Lines for clerks and local workmen, medical store, recreation rooms for different classes of the workforce, disinfecting station, garage, mortuaries, and dhobi house (washing room)— all to be constructed out of the Company’s standard steel-framed structure.⁷⁶⁰

The idea of building a new hospital on the shore of the Bahmanshir River, or what came to known as the “Bahmanshir Scheme,” was delayed as the Company’s application for land acquisition faced considerable opposition from public opinion and some departments of the Iranian Government in Tehran.⁷⁶¹ In the meantime, Company officials began to weigh other scenarios. In 1927, following the removal of the Company’s headquarters from Khorramshahr to Abadan, Company officials sought new uses for the offices and residential quarters in the former center. The London Management suggested that the hospital compound could be relocated to Khorramshahr. Despite the environmental merits that Khorramshahr could offer, medical and engineering staff opposed this proposal on practical, structural, and financial grounds. For instance, the Chief Medical Officer maintained that placing the hospital nine miles away from Abadan, given the physical

⁷⁶⁰ Although the Chief Medical Officer’s initial estimate for the combined hospital was around £50,000, Wilson’s provisional design was estimated at £120,000 of which £110,000 represented the cost of the hospital proper, and the rest was the cost of stores and accommodation for the “native” staff. S. G. Bennett to J. M. Wilson, August 26th, 1926. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

⁷⁶¹ The application to acquire land was submitted to the Iranian government in 1926. While the request received the initial approval of the Council of Ministers, it also appeared in major newspapers in Tehran and eventually faced the objection of the *Majles* (Parliament). The deputies believed that the Company had no right per the D’Arcy Oil Concession to receive land for purposes other than extraction and production of oil. Company officials argued that construction of a new hospital was necessary for welfare and health of employees and residents of Abadan. By 1928, when the Ministry of Finance eventually approved the transfer of the respective plot to the Company, the Board of Directors in London had adopted the financial stringency policy in response to the global depression in oil prices and decided to consider other scenarios that entailed minimal capital expenditure. T. L. Jacks to Prince Firuz Mirza Minister of Finance, 27th August 1928, *Article 4: Land Acquisition, Abadan, Lots 1-14*, BP Archives, ArcRef 100497

barriers between the two centers, would not only depopularize the medical institution among the Company's local employees and the residents of Abadan, but also would put patients in critical conditions at risk. The new arrangement also required additional capital expenditure on motorized transportation and medical carrier services between Abadan and Khorramshahr. Furthermore, medical officers unanimously believed that no rehabilitation measures could adapt the Khorramshahr offices to the "highly specialized requirements of the present-day medicine and surgery."⁷⁶²

As in the first scenario, J. M. Wilson prepared a preliminary design for a hospital compound at Khorramshahr. Wilson's sketch plans had a symmetrical layout and consisted of four blocks of pavilion-style wards for Third-Class personnel that surrounded a large administrative block, the latter being a retrofitted version of the Company offices. Each medical block, which was made out of the Company's standard steel-framed structure, consisted of two wards of 14 beds each. The hospital proper consisted of three wards for medical cases, one wards for ophthalmic cases, and four wards for surgical cases. Side wards were also provided for special cases, such as mental, female, and suspected infectious patients. Medical officers provided textual and graphic comments on the Wilson's design. For instance, a senior Medical Officer suggested that an additional "midway block" should be added to the "native wards" and that sterilizing rooms and medicine rooms should be provided in the surgical wards, among other recommendations.⁷⁶³

⁷⁶² Dr. M. Young, March 8th, 1927. "Abadan Hospital Scheme," *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

⁷⁶³ Dr. E. Jamieson to Dr. M. Young, December 24th, 1929. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

Drawing on this scenario, medical officials proposed an in-between scheme and suggested that medical services should be divided between Abadan and Khorramshahr, with the latter turning into a “cottage” hospital accommodating Europeans, clerks, and senior Iranian staff, and the former catering for Iranian artisans, wage-earners, and the general public. In proposing the new scheme, Company officials inspired from the existing medical system in the metropole. While general hospitals in Britain were erected in urban areas to meet the medical needs of city dwellers, cottage hospitals were built in the countryside to serve rural communities. In Iran, however, this model was modified to fulfill new functions. Here, unlike Britain, racial motives were the major driving force behind the scheme. The site of the Abadan Hospital was considered “perfect in dealing with the native population.” As a Medical Officer suggested, “The environment does not affect [locals] as it does our covenanted staff and possibly clerical staff, so that a move to [Khorramshahr] would advantage the latter.”⁷⁶⁴ Undoubtedly, Khorramshahr offered a more salubrious climatic environment than Abadan. Under the guise of “the recognized practice in the tropics,” the scheme was developed to further racial divide within the workforce and within the medical staff. In addition to segregating the patients along ethno-occupational lines in two distinct geographies, the proposed arrangement was intended to protect both British staff and British patients against any possible contact with the Iranian medical personnel, whose number was rapidly increasing in the late 1920s.⁷⁶⁵ In other words, this arrangement was a reaction to the Iranianization of the staff within the Medical Department. Moreover, under the proposed scenario, British nurses at the Abadan Hospital would only assume

⁷⁶⁴ Dr. E. Jamieson to Dr. M. Young, February 7th, 1930. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

⁷⁶⁵ Dr. E. Jamieson to Dr. M. Young, December 16th, 1929. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

supervisory responsibilities, while, at the cottage hospital, “sisters” were to perform conventional nursing duties and to look after patients with special needs, including midwifery cases which were steadily on the rise.⁷⁶⁶ This scenario had its opponents among Company officials. The Chief Medical Officer, for instance, warned that the apparent distinction between Europeans and Iranians would cause political troubles for the Company. Moreover, in Dr. Young’s view, this scenario meant reverting to the older model of dual medical administration with predictable managerial challenges.⁷⁶⁷

4.3.4.1 Medical Program. After several years of deliberations, the London Management in February 1930 adopted the foregoing scenario as the core element of the Company’s official policy on the reorganization of the medical system at Abadan. A Medical Program was also adopted by the Board of Directors which consisted of four components: reconstruction of the Abadan hospital for the labor on the same site, conversion of the Company’s former headquarters at Khorramshahr into a cottage hospital for Europeans and clerical grades, construction of an out-patient dispensary at Abadan, and erection of an isolation hospital at Bawarda. The estimated cost for this grand scheme was around £150,000. While the building program developed for the reorganization of the medical spaces was spread over the course of four years, medical officials believed that the new Out-Patient Department and the cottage hospital at Khorramshahr had to be given a higher priority compared to other components.⁷⁶⁸

⁷⁶⁶ Dr. E. Jamieson to Dr. M. Young, March 8th, 1930. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

⁷⁶⁷ Dr. Young, 8th March 1927, “Persia: Miscellaneous,” *Abadan Hospital Scheme*, BP Archives, ArcRef 68934

⁷⁶⁸ Dr. M. Young to Dr. E. Jamieson, July 5th, 1930. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

Labor Hospital

Under the new Medical Program, the Abadan General Hospital was to be redesigned and reconstructed on the same site at the estimated expenditure of £67,000. Not only was the new Labor Hospital intended to provide medical services to Iranian and Indian workmen, their families, and other residents of Abadan; it also aimed to serve as the base hospital for the Company's centers of operations in Southwest Iran, which in the early 1930s extended from Kermanshah to Mishun. J. M. Wilson designed the new Labor Hospital compound. Wilson's sketch plan epitomizes the evolution of healthcare design at Abadan by reinterpreting both the aseptic design features and the colonial-pathological conventions that characterized the old General Hospital. As Figure 4.3 indicates, the new Labor Hospital similar to the old General Hospital was conceptualized as a constellation of individual buildings dispersed across the site. Wilson's design, however, was grounded in rational principles and showed a higher degree of order in organization of space and alignment of buildings. It consisted of several major sections, such as the in-patient hospital, or the main Hospital Block, the Out-patient Dispensary, the Administrative Block, and the residential quarters for the medical and nursing staff. The hospital also included several auxiliary buildings, such as animal house, medical stores, mortuary and postmortem building, *dhobi ghat* (laundry), and servants' quarters. The main Hospital Block, which was placed at the center of the compound, was designed on the lines of the pavilion-ward model and provided accommodation for 120 patients. It consisted of four single-story, double-ward blocks, a patients' dining room, operation theatres, heat stroke wards, and a utility room for the cooling system. All the buildings in the main Hospital Block were linked via "connecting corridors" to avoid exposing patients and staff to dust

and heat. Out of the nine medical officers stationed at Abadan, Iranian doctors were to be accommodated at the old Doctors' Bungalow to the north of the in-patient department. However, Wilson reserved a site to the west of the nurses' quarters for a new Doctors' Bungalow.⁷⁶⁹

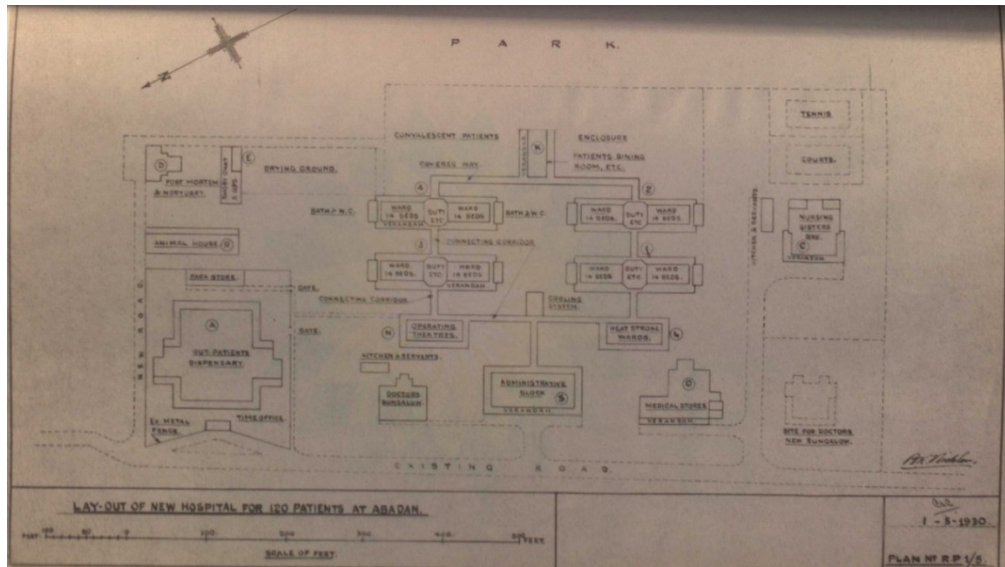


Figure 4.3 J. M. Wilson’s sketch plan for the New Labor Hospital, May 1930.
 Source: BP Archives, ArcRef 68938

Wilson employed a symmetrical layout to enhance the level of efficiency in the new hospital. As Figure 4.4 illustrates, each medical block was comprised of two symmetrical wards organized around the central entrance hall, providing for 30 beds in total. The Duty Room, in which the shift nurse was stationed, was situated in the middle of the block to maximize visual control over the patients. The Administrative Block, the utility room, the dining room, and the water fountain were all centrally located to facilitate efficient accessibility from different wards. Asepsis was also manifested through various

⁷⁶⁹ Dr. E. Jamieson to Dr. M. Young, February 7th, 1930. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

design considerations. For instance, bathroom facilities were placed at either end of each block and were separated from the aseptic environment of the wards by a “cut-off passage.” Each block featured a 10-foot-wide verandah. A 30-foot distance was maintained between the parallel blocks to ensure penetration of sun light and natural passage of air.

The whole compound was surrounded by expanded metal fencing. Wilson retained the old Administrative Block as one of the major entrances to the compound. The white-washed building, however, was to be rehabilitated to serve as the new research and diagnostics center. As figure 4.5 shows, the building’s interior was modified, based on the recommendations of medical officers, to accommodate the X-Ray department on the ground floor and the pathological and bacteriological laboratories on the first floor. Wilson initially intended to design a mechanical cooling system for the entire Hospital Block. However, due to budget constraints, he was forced to limit the provision of cooled air to the heat stroke wards and the operating theatre.⁷⁷⁰

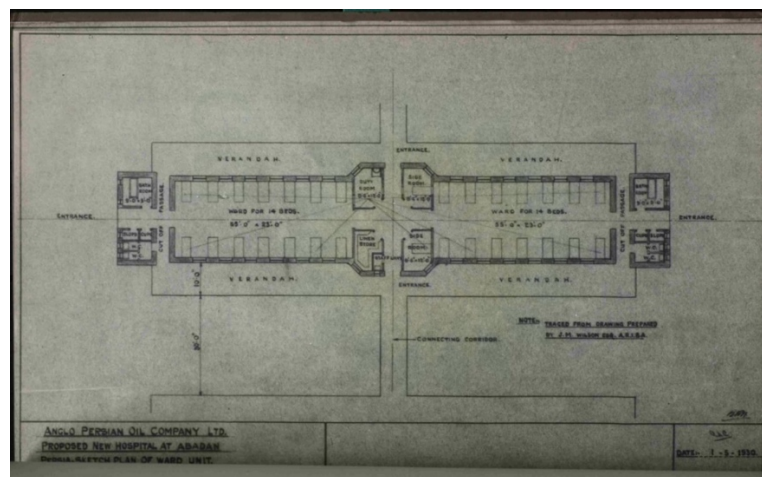


Figure 4.4 Sketch plan prepared by J. M. Wilson for the Labor Ward, May 1930.
Source: BP Archives, ArcRef 53827

⁷⁷⁰ Dr. E. Jamieson to Dr. M. Young, March 24th, 1930. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

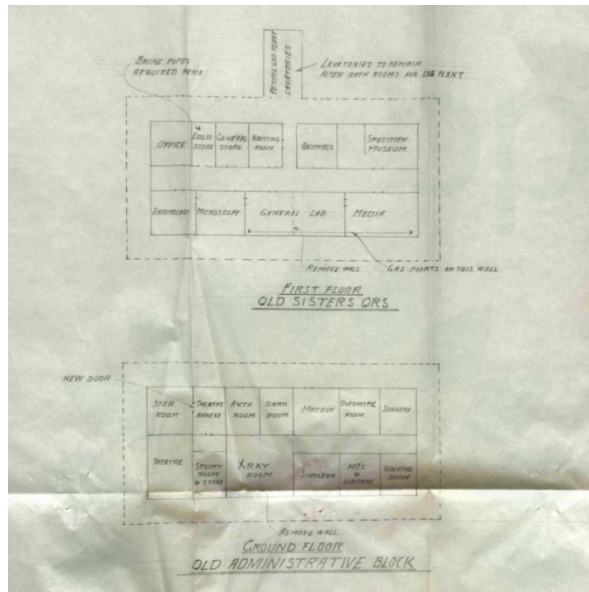


Figure 4.5 Hand sketches by a senior Medical Officer to make the Administrative Block fit for the Pathological and Bacteriological Laboratories (top) and the X-Ray Department (bottom), March 1930.

Source: BP Archives, ArcRef 62403

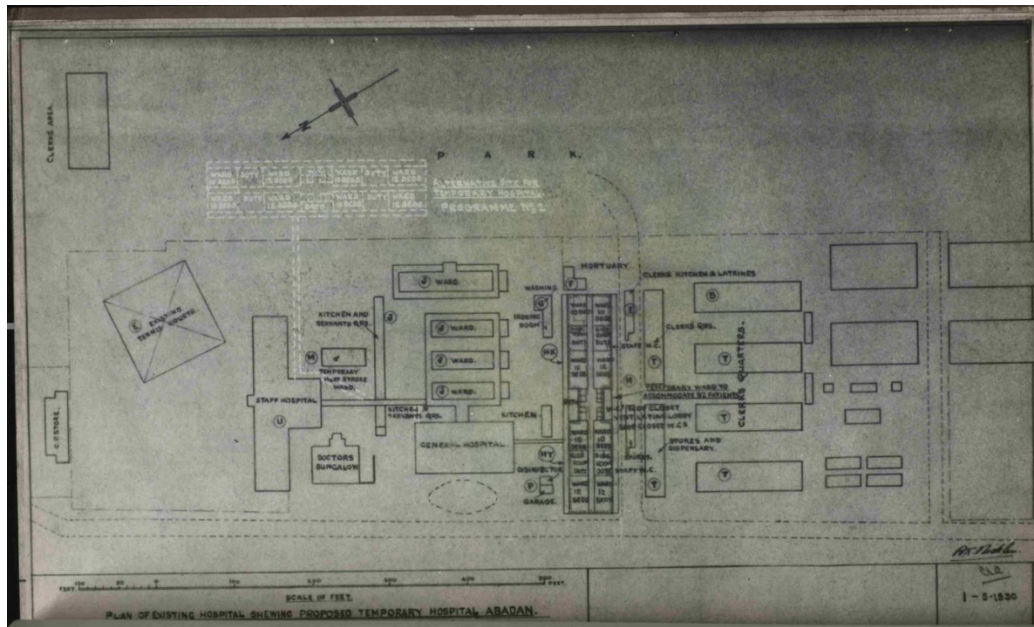


Figure 4.6 Program of Work for the Reconstruction of the Abadan Hospital, May 1930. Wilson proposed two alternative sites for the erection of a temporary hospital during the reconstruction period. As the plan indicates, His preferred site was in the south of the Hospital compound between the Labor Block and the Clerks' Lines.

Source: BP Archives, ArcRef 53827

Wilson also developed a detailed program of work for the reconstruction of the Abadan Hospital. His proposed development plan called for erection of a temporary hospital block for accommodation of Iranian laborers during the demolition and rebuilding phases. The temporary hospital was to be constructed out of the Company's standard steel-framed structures and would provide four wards for accommodation of 92 patients. Wilson proposed two alternative sites for the temporary hospital. As Figure 4.6 shows, his preferred site was in the south of the hospital compound between the old Labor Block and the Clerks' Lines.

Staff Hospital

The Medical Program also called for converting the general offices at Khorramshahr, at the estimated cost of £56,000, into a cottage hospital for accommodation of senior European and clerical patients as well as the staff of the British Tanker Company. The plan was to retain the steel structure of the former Company offices and implement appropriate alterations to provide for "50 bed-cases in well-arranged wards."⁷⁷¹ J. M. Wilson prepared an adaptive reuse plan for the building based on the instructions of medical officials. As Figure 4.7 reveals, Wilson added three new wings to the existing structure, which connected to the two-story building via the existing verandah, to achieve a symmetrical layout and accommodate the hospital's spatial program. As in the Abadan's new Labor Hospital, asepsis and the colonial-pathological conventions governed the design of the new Staff Hospital. For instance, as Figure 4.7 illustrates, the verandah and cut-off passages separated septic and aseptic medical zones. Moreover, similar to the old staff hospital at

⁷⁷¹ Dr. M. Young, 18th July 1930, *The Re-organization of the Company's Medical Services in Persia* by M Y Young, BP Archives, ArcRef 68938, p.16

Abadan, the cottage hospital was spatially engineered to reinforce the hierarchy within the first-and second-class personnel. It consisted of two separate sets of wards, kitchens, dining rooms, recreation rooms, and mortuaries for Europeans and clerical staff. Unlike the new Abadan Labor Hospital, however, the cottage hospital at Khorramshahr was designed on the lines of small-size wards. As Figure 4.7 shows, the new Staff Hospital consisted of single-bed and multiple-bed wards with a maximum of 5-6 beds in each room with no constant gaze of the shift nurse. Each room included almirahs to store patients' clothing. The new Staff Hospital was also equipped with the Plenum ventilation system and with separate lifts for service and patients.

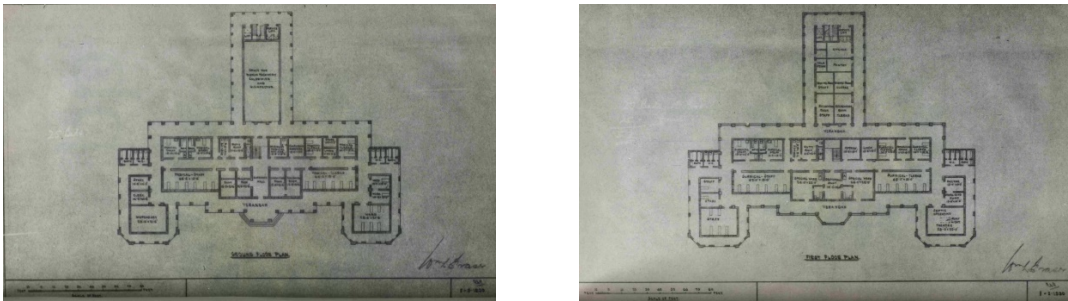


Figure 4.7 Sketch plans prepared by J. M. Wilson for the conversion of the Khorramshahr Offices into the Staff Hospital, May 1930. Ground floor Plan (Left) and First Floor Plan (Right). Verandah and cut-off passages separated septic zones from aseptic spaces and allowed for uninterrupted flow of air across the hospital.
Source: BP Archives, ArcRef 62403

Out-Patient Department

The increased daily congestion at the dispensaries was a common problem at both the Fields and Abadan. The “morning sick parade” clogging up the entrance halls and the chaos that ensued became a major source of anxiety for medical officials (See Figure 4.8).⁷⁷² For

⁷⁷² Dr. E. Jamieson to Dr. M. Young, “D/O Medical,” December 11th, 1925. *Demi-Official Letters from Dr. E. Jamieson, Principal Medical Officer, Persia to Dr. M. Young, Chief Medical Officer*, BP Archives, ArcRef 112928

instance, in October 1925, the average daily patients requiring medical attendance at the Abadan General Hospital numbered 450. Throughout this year, more than 55,000 patients were treated at the Abadan Dispensary, of whom more than 80 percent were non-European employees.⁷⁷³ The dispensary at the Abadan Hospital located on the ground floor of the Administrative Block was comprised of one small surgery room, one dispensary, and one small consulting room, and could not meet the increased demand. To address overcrowding, a second dispensary was erected in 1926 near the Refinery's new Time Office and Gate. It was built out of the Company's standard steel-framed module and eventually replaced the older dispensary at the Abadan Hospital. Staffed by one medical officer, one compounder, one ward orderly, and one *farrash*, the Works Dispensary was intended to keep laborers within the refinery and to expedite the immediate and rapid attendance to the needs of more urgent cases.⁷⁷⁴ Its location also facilitated medical examination of new local workmen prior to engagement.

⁷⁷³ "Section No. III: Statistics for the Year 1st April 1924 to 31st March 1925," *Anglo-Persian Oil Company Limited: Operations in Persia and Iraq: Annual Report, 1st April 1924 to 31st March 1925 (General Section)*, BP Archives, ArcRef 54361

⁷⁷⁴ H. E. Nichols to Management Committee, "Dispensary at Abadan," November 12th, 1925. *Miscellaneous Papers Prepared for Management Committee*, BP Archives, ArcRef 87231



Figure 4.8 The “Morning Sick Parade” in front of the Main Entrance of the Abadan General Hospital, circa 1926. As the picture shows, the number of patients seeking medical attendance at the Abadan Dispensary was so high that the line extended into the roundabout in front of the hospital.

Source: BP Archives, ArcRef 36152

Abadan Dispensaries epitomized the Company’s discriminatory practices in the delivery of basic medical services to different classes of the workforce. For instance, the Works Dispensary was spatially engineered to reinforce the hierarchy among the second- and third-class employees. Consulting and examination rooms for clerks were separated from the rooms in which Iranian laborers received medical services. Moreover, two separate dispensaries were also constructed for the first-class personnel and Europeans: one at Bawarda near the Isolation Hospital — which was under the charge of the Iranian Port Health Officer and catered mainly for the staff of shipping companies— and one in the Bungalow Area which was geared towards Bungalow residents and their servants. Unlike Europeans and clerks who received medical examination at their quarters, Iranian laborers and their families had to appear in person at the Works Dispensary and go through an arduous and highly controlled procession to receive minimal medical services. A report prepared by the Medical Department described the “method of work” as follows: “On

checking in at the Time Office, [employee] receives his disc, showing his number. He then proceeds to his work and reports sick to his Job Master who gives him a gate pass. The gate pass consists of two portions, one of which he takes to the Time Office...The other portion of the gate pass he takes to the Dispensary, where a clerk notes his name and number and gives him his Dispensary Treatment Card. The cards are divided into medical and surgical, and the queues are controlled by two Persian police[men]. The case is then examined by a European Doctor, Assistant Surgeon or Sub Assistant Surgeon, the first mentioned seeing all new cases and later cases which have been returned to duty.” Upon initial examination, four scenarios faced the Iranian workmen: a large percentage of the patients were marked “Duty” and were sent back to the refinery on account of malingering; some were given “Medicine” and were sent back to work; and, some were given medicine and were allowed to leave for “Quarters” until the following day, when they had to go through the same procedure. Only three percent of the patients were sent to the General Hospital for further treatment. This process continued until the word “Duty” was marked on the employees’ Dispensary Treatment Card.⁷⁷⁵

Public Opinion also became sensitive about the shortage of medical services and the Company’s discriminatory paternalism at Abadan. For instance, in 1927, a major Iranian newspaper shed light on the ill-treatment of Iranian laborers at the Abadan Hospital: “The Persians who go to the present Company Hospital for treatment, must stand around like the Persian Jews of old [times], until such time as all of the Indians, Iraqis, and the Jews have been attended to, and, then, if their Doctors’ precious time may permit, they might cast an eye on them too....Should a man receive a simple injury to the eye with a

⁷⁷⁵ “Medical Services, Abadan General Hospital and Attached Dispensary,” 1928, *The Anglo-Persian Oil Company Limited: Persian Compendium*. BP Archives, ArcRef 37027, p.10

piece of iron, the doctor takes the eye out at once...the unfortunate man has asked why and by whose permission they have taken his eye out, and what he should do in the future. [Company officials] simply tell him to take 6,000 krans and clear out, because he is no longer of any use to the Company. Anyone whose foot aches, the foot, [Company officials] say should be amputated and so the operation is simply performed.”⁷⁷⁶

The chaos and inefficiency in the treatment of laborers raised questions among medical officials about the logic on which the Works Dispensary operated. Statistics showed the loss of more than 126,745 aggregate working days at the dispensary in the year 1929. Moreover, as the population of Abadan swelled in the late 1920s, the number of outpatient cases exponentially increased. By 1929, the average daily outpatients at the dispensaries had jumped to 1000. This figure reached 1200 in the first months of 1930 when the population of Abadan soared to more than 70,000. The increased loss of labor due to the lengthy and ineffective medical services at the dispensary and the disproportionately large number of out-patients compared to in-patient cases, led medical officials to rethink the organization of the dispensary. The Chief Medical Officer believed that a great deal of inefficiency was caused by putting the dispensary close to the Refinery Gate and Time Office which, in his view, was the legacy of the “Nielson regime,” known for its idiosyncratic paternalistic policies. Moreover, in the light of the 1929 strike at Abadan, it was considered unwise to concentrate a large number of workers near the Refinery’s Main Gate.⁷⁷⁷ As a result, Medical officials contemplated relocating the dispensary to the hospital compound. At first, plans were devised to convert the old staff

⁷⁷⁶ Translation Made from *Habl-al-Matin* [Newspaper], “Don’t Trouble Oh Ye People of Abadan,” August 2nd, 1927. *Correspondence from V: Soviet Activities, Organization, etc.*, BP Archive ArcRef 129909.

⁷⁷⁷ Dr. M. Young, *The Re-organization of the Company’s Medical Services in Persia* by M Y Young, 18th July 1930, BP Archives, ArcRef 68938, p.4

hospital into an out-patient department. After lengthy deliberations, it was decided that the staff hospital did not have enough capacity to accommodate the growing number of daily patients.⁷⁷⁸

Inspired by the Maude Dispensary at Baghdad, Company officials eventually decided to design a new Out-patient Department at Abadan. Upon a careful examination of the former institution, medical officers formulated a spatial program and drafted a rough layout that in their view would satisfy the needs of the Company and avoid the inefficiencies that they had observed at the Baghdad Dispensary. The proposed layout, in particular, was planned to cut time wastage — the major rationale behind all the Company-sponsored medical services. While the Baghdad Dispensary had a linear configuration, the proposed Out-Patient Department at Abadan was organized around a large central waiting hall with seating accommodation for 900 patients. The new dispensary was to play a pivotal role in the reorganization of the medical services at Abadan. It was intended to provide both curative and preventive measures and to screen and dispatch serious cases to the General Hospital. Unlike the older Works Dispensary, the new Out-Patient Department was staffed by four medical officers, each handling patients of the same illness category. The older method of work was also modified to ensure “continuity of treatment” to the workmen and to maximize the total number of patients that a medical officer could “thoroughly” and “expeditiously” handle on a daily basis. To this end, each medical doctor was put in charge of a special treatment section and was responsible to track each patient throughout the treatment process.⁷⁷⁹

⁷⁷⁸ Dr. E. Jamieson to Dr. M. Young, March 24th, 1930. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

⁷⁷⁹ Dr. M. Young to Dr. E. Jamieson, 18th July 1930. *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

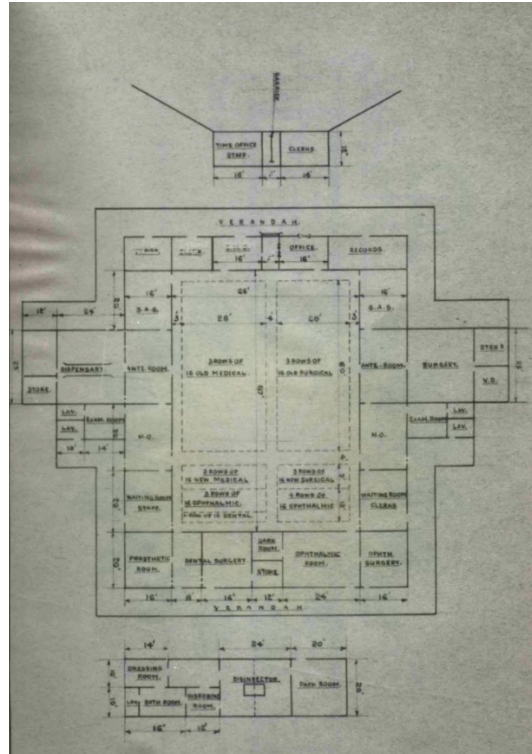


Figure 4.9 Sketch Plan prepared by J. M. Wilson for the Abadan Out-Patient Department, May 1930. *Source: BP Archives, ArcRef 53827*

J. M. Wilson was tasked with designing the Out-Patient Department based on the instructions and visions of medical officers. As Figure 4.3 illustrates, Wilson placed the new Dispensary at the northern corner of the Labor Hospital Compound with a short setback from the adjacent roads. As Figure 4.9 shows, the Time Office framed the Dispensary gateway that funneled the patients into the compound. A barrier separated the entrance and exit passages. This rather narrow entrance served as one of the two access points to the entire Hospital Compound. In fact, with the exception of heat-stroke cases and visitors, who could use the entrance in front of the Administrative Block, the general admittance of all patients was made through the Dispensary where facilities for changing and storing cloths, bathing, and surgical dressing were provided.⁷⁸⁰ As the sketch plan

⁷⁸⁰ "Out-Patients Dispensary and Works Hospital-Abadan," 1931, *Reorganization of medical Services at Abadan*, BP Archives, ArcRef 77460

shows, after going through the examination procedure, patients who required hospital treatment were sent to the Disinfection Unit which was located on the opposite side of the Dispensary. “Cleaned” cases then were taken through a “connecting corridor” from the Dispensary to the main Hospital Block.

As Figures 4.9 and 4.10 illustrate, the proposed Out-Patient Dispensary included medical and surgery departments as well as special treatment sections, such as dental, ophthalmic, skin, throat and venereal— all organized around a central waiting hall. The increased rate of eye and skin diseases among workmen was a direct consequence of exposure to sulfur dioxide in the air produced by the Refinery. To expedite handling of the sick, patients were divided into five categories based on the type of illness. Each patient was given a distinctive colored pass and was guided by railed-off passages to the section of the waiting hall dedicated to the respective illness category. Moreover, medical and surgery rooms directly faced the central hall. Wilson avoided corridors and provided ante-rooms (small waiting spaces) next to every medical room. This arrangement was intended to eliminate bottlenecks in the building and to streamline the movement and circulatory flow of patients from the waiting hall to the examination and treatment rooms. Moreover, to expedite the movement of the medical staff, doors were placed between contiguous rooms.⁷⁸¹ Nevertheless, as in other medical buildings, Wilson’s design recreated the Company’s institutionalized system of control and segregation. As Figure 4.10 indicates, different classes of the workforce were examined and treated in separate rooms.

⁷⁸¹ Dr. E. Jamieson to Dr. M. Young, 1930. “Memorandum: New Out-Patient Department, Abadan,” *Hospital- Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

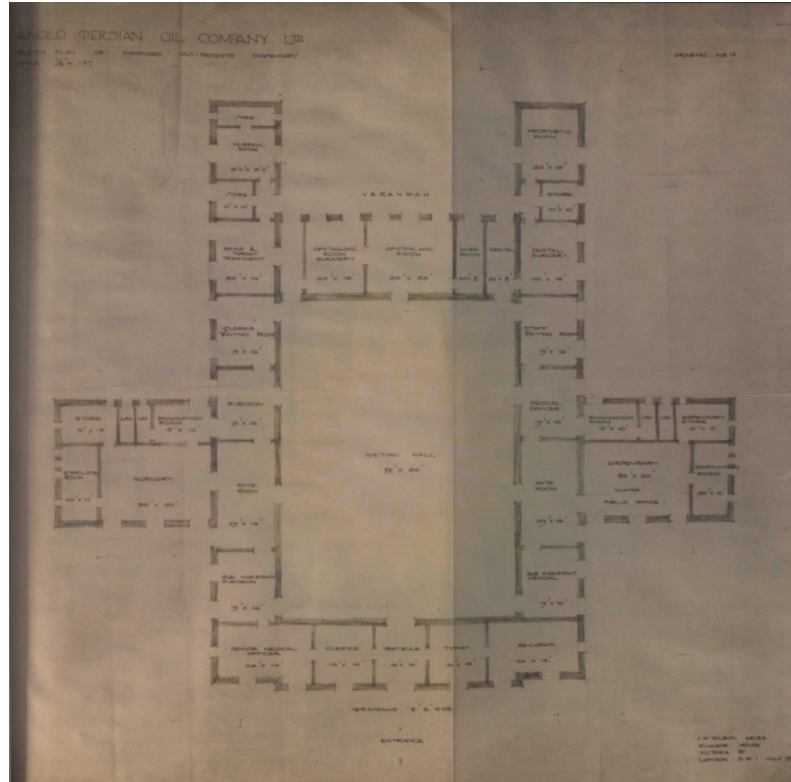


Figure 4.10 One of Wilson’s alternative schemes for the Abadan Out-patient Department, July 1930. Natural ventilation, efficient lighting, and streamlined circulation were achieved through symmetrical arrangement of medical sections around a central waiting hall.

Source: BP Archives, ArcRef 68938

In designing the new Out-Patient Department, Wilson followed the recommendations of medical officers, as long as such specifications did not jeopardize architectural standards and functionality of space. For instance, medical officers had suggested that 5.25 square feet be designated per person in the central hall for the purpose of seating accommodation and that a 3-foot gangway be provided around the walls. Wilson, however, decreased the seating space per person and, in order to facilitate circulation and meet the architectural standards, increased the width of the gangway to 4.5 feet. Besides efficient circulation, appropriate ventilation was another feature of Wilson’s design. The latter objective was achieved through symmetrical arrangement of rooms and alignment of openings. For instance, as Figure 4.10 shows, he aligned the doors and windows to allow

proper ventilation across each room. Moreover, the central hall and surrounding medical rooms were lit and naturally ventilated by clerestory windows. Ventilation was also supplemented with a mechanical system including ducts and fans. Like other buildings in the Hospital compound, the Out-Patient Department was also surrounded by verandahs with an optimum height of 8.5 feet to protect the rooms against excessive sun radiation.⁷⁸² All these design considerations attest to Wilson's full awareness of the best design practices in climatic conditions similar to Abadan's.

Isolation Hospital

A fourth element of the Medical Program entailed construction of an isolation hospital compound, at the estimated cost of £32,000, on a site near the Company's old isolation hospital at Bawarda. As Figure 4.11 illustrates, the proposed hospital consisted of two sections: infectious diseases hospital and isolation encampment. The new Isolation Hospital Compound was administered by the Anglo-Persian Oil Company Medical Department in collaboration with the Iranian Health Authorities. Similar to other medical facilities provided by the Company at Abadan, the proposed hospital was a segregated institution with separate buildings for different classes of the workforce and for different population groups.

The Infectious Diseases Hospital was situated next to the Bawarda Tank Farm behind the existing Isolation Hospital. It was designed to play a central role in addressing both sporadic and endemic diseases— such as smallpox, measles, dysentery, and typhoid— which broke out frequently at Abadan. The Hospital was administered by the Company's

⁷⁸² J. M. Wilson, July 14th, 1930. "Hospital at Abadan: Proposed New Outpatients Dispensary," *Hospital-Dr. M. Young and Dr. E. Jamieson, Correspondence on Medical Facilities at Mohammerah and Abadan*, BP Archives, ArcRef 62403

Medical Department and catered for the European and clerical staff and their families, who in 1930 numbered 2000. One road separated the zones designated for infectious cases from the areas where “contact” cases were accommodated. The former was subdivided into the wards constructed out of mud covered Nissen Huts. The patients’ area included the wards for first-and second-class employees in addition to other medical facilities, such as disinfector building, refuse destructor, dispensary— among others. The Hospital also consisted of quarters for the medical staff. A separate block was earmarked for smallpox due to its “high degree of infectivity.”⁷⁸³ Moreover, as Figure 4.11 shows, male and female contacts were accommodated in separate quarters. The whole area was enclosed by corrugated unclimbable sheet fencing.⁷⁸⁴

⁷⁸³ Dr. M. Young, 18th July 1930, *The Re-organization of the Company’s Medical Services in Persia* by M Y Young, BP Archives, ArcRef 68938, p.23

⁷⁸⁴ “Out-Patients Dispensary and Works Hospital-Abadan,” 1931, *Reorganization of medical Services at Abadan*, BP Archives, ArcRef 77460

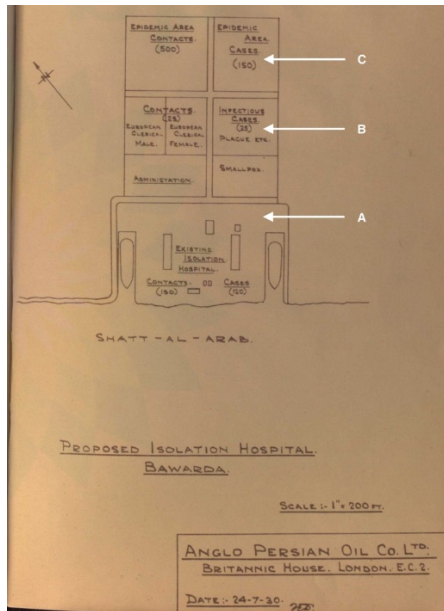


Figure 4.11 Site Plan of the New Isolation Hospital Compound at Bawarda south of Abadan, July 1930. It consisted of Infectious Diseases Hospital for the third-class personnel and the general population administered by the Iranian Department of Health (A), Infectious Diseases Hospital for Europeans and Clerical Staff administered by the A.P.O.C. Medical Department (B), and Isolation Encampment for accommodation of all classes of the workforce (C).

Source: BP Archives, ArcRef 68938

In response to the request from the Iranian Government, the Company decided to hand over the existing isolation hospital at Bawarda, with the exception of the hospital ships,⁷⁸⁵ to the Iranian Department of Health. Under the Iranian administration, the old isolation hospital would serve as part of the Infectious Diseases Hospital for accommodation of Iranian artisans, laborers and the general public. As Figure 4.11 shows, it included two buildings providing 120 beds for infected patients and a shelter for 150 contact cases.⁷⁸⁶

⁷⁸⁵ One of the hospital ships had submerged in the river a few years earlier and the second one required extensive repair.

⁷⁸⁶ Dr. M. Young, 18th July 1930, *The Re-organization of the Company's Medical Services in Persia* by M Y Young, BP Archives, ArcRef 68938, p.19

The second component of the new Isolation Hospital was the isolation camp, also known as the “epidemic area,” which was located at the easternmost section of the compound. The encampment was controlled by the Company and was intended to be used during the outbreak of regional epidemics, such as cholera and plague. It was designed to provide accommodation for different classes of the workforce. Therefore, each section of the proposed isolation encampment was sub-divided into three fenced zones. It was decided to put up sarifas for accommodation of 150 infectious cases and 500 contact cases. These reed huts were to be burned down after the epidemics were gone. The Camp was also equipped with kitchen, latrines, and basic facilities, such as water, electricity, and drainage.⁷⁸⁷ In 1928, the Iranian Port Health Directorate took over the administration of the quarantine station at Abadan.⁷⁸⁸ In the absence of a quarantine facility with appropriate accommodation for the European staff, the Company decided to erect a quarantine station near the site of the Isolation Hospital. The proposed quarantine station, which was designed based on the standards adopted by the Iranian Government, provided accommodation for the immigrants arriving at Abadan from the districts in which infectious diseases had occurred. While the international quarantine code of the day recommended dividing quarantine patients into two categories, Company officials created three classes of immigrants similar to the three-tier system that governed the categorization of employees.

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⁷⁸⁷ Dr. M. Young, 18th July 1930, *The Re-organization of the Company's Medical Services in Persia* by M Y Young, BP Archives, ArcRef 68938, p.25

⁷⁸⁸ In the wake of the increased presence of the Central Government in the region, the Iranian Quarantine Authorities also took over the management of the quarantine station at Bushire which was previously controlled by the Government of India.

⁷⁸⁹ Dr. M. Young, 18th July 1930, *The Re-organization of the Company's Medical Services in Persia* by M Y Young, BP Archives, ArcRef 68938, p.19

4.3.4.2 Economic Depression and Suspension of the Medical Program. In 1931, in the wake of the Company's new fiscal policy following the depression in the global oil market, the A.P.O.C. Production Department in London overhauled the 1930 Medical Program. The layout of the Labor Hospital was re-evaluated, and some modifications were made to minimize capital expenditure. For instance, it was decided to build only the north wing of the main Hospital Block, as the Company was gearing up for a drastic cut in labor strength. A Company Director also suggested that a special paint instead of tiling be used to cover the walls which "could be made in any desired color and could be washed." Moreover, the main Hospital Block was redesigned as a combination of two-story buildings and the Heat Stroke Block was rearranged such that it could serve as a conventional ward during the cooler months. It was also decided to retain the old staff wards and convert it into administrative offices, laboratory, etc. It was suggested that the medical and nursing quarters should remain intact. The Mental Block, however, was to be dismantled and re-assembled near the dispensary to serve as the Animal House.⁷⁹⁰

A group of senior officials called for more drastic administrative and medical reforms to cut expenses. For instance, some called for medical staff layoffs or for reconsideration of the quality of medical services. Some argued for formulating "standard treatment," based on the guidelines that were applicable to General Practitioners in the metropole. The Principal medical officer advocated a revision in the Company's policy of offering treatment to non-employees. The employment of junior Iranian medical officers was also regarded as a policy that could effect economy. The Company set the salaries of

⁷⁹⁰ "Out-Patients Dispensary and Works Hospital-Abadan," 1931, *Reorganization of medical Services at Abadan*, BP Archives, ArcRef 77460

the Iranian officers on a lower scale than their British counterparts.⁷⁹¹ In other words, the Company used the Iranianization of the medical staff to its advantage. However, some officials, including the Chief Medical Officer warned that, “Economy can only be regarded as true economy if it does not interfere with efficiency.”⁷⁹²

Similarly, the layout and the spatial program of the proposed cottage hospital was modified in the light of the Company’s new fiscal policy. For instance, the number of bed cases was cut in half based on the data collected on the rate of occupancy in the old staff wards at Abadan. Here, the application of science manifested itself in the form of evidence-based design. The statistical data compiled between 1928 and 1930 in the Abadan staff wards suggested that the total number of beds occupied by Europeans and clerks never exceeded 24, with the exception of peak periods when this figure reached 27. Based on this analysis, it was proposed that the new Staff Hospital at Khorramshahr should provide for 36 beds for accommodation of medical and surgical as well as special cases. Moreover, a new formula was invented for the allocation of beds and reinforcement of the labor hierarchy: “two European patients for every clerk, and two medical cases to each surgical case.”⁷⁹³

In 1931, the Production Department also re-examined the layout of the dispensary. Although the Department’s assessment suggested that the central hall was too large in the wake of possible diminution of the labor strength, it was decided to approve Wilson’s final

⁷⁹¹ Dr. M. Young to Dr. E. Jamieson, February 19th, 1931. *Letter to Dr. E. Jamieson, Principal Medical Officer, Iran, from Dr. M. Young, Chief Medical Officer, January to December 1931*, BP Archives, ArcRef 112930

⁷⁹² Dr. M. Young to Dr. E. Jamieson, February 4th, 1931. *Letter to Dr. E. Jamieson, Principal Medical Officer, Iran, from Dr. M. Young, Chief Medical Officer, January to December 1931*, BP Archives, ArcRef 112930

⁷⁹³ “Out-Patients Dispensary and Works Hospital-Abadan,” 1931, *Reorganization of medical Services at Abadan*, BP Archives, ArcRef 77460

sketch plan.⁷⁹⁴ As Figure 4.12 shows, unlike other iterations, this scheme featured a much larger entrance hall and a complete verandah. Furthermore, entrance and exist passageways were separated to facilitate movement of patients. The original estimate for the building was £19,000, but the Production Department managed to bring this figure down to £18,000 by replacing Terrazzo flooring, as suggested in Wilson’s scheme, by a cheaper material called Sal Ferricite.⁷⁹⁵ The Production Department also approved the original plans developed for the Isolation Hospital in the 1930 Medical Program.

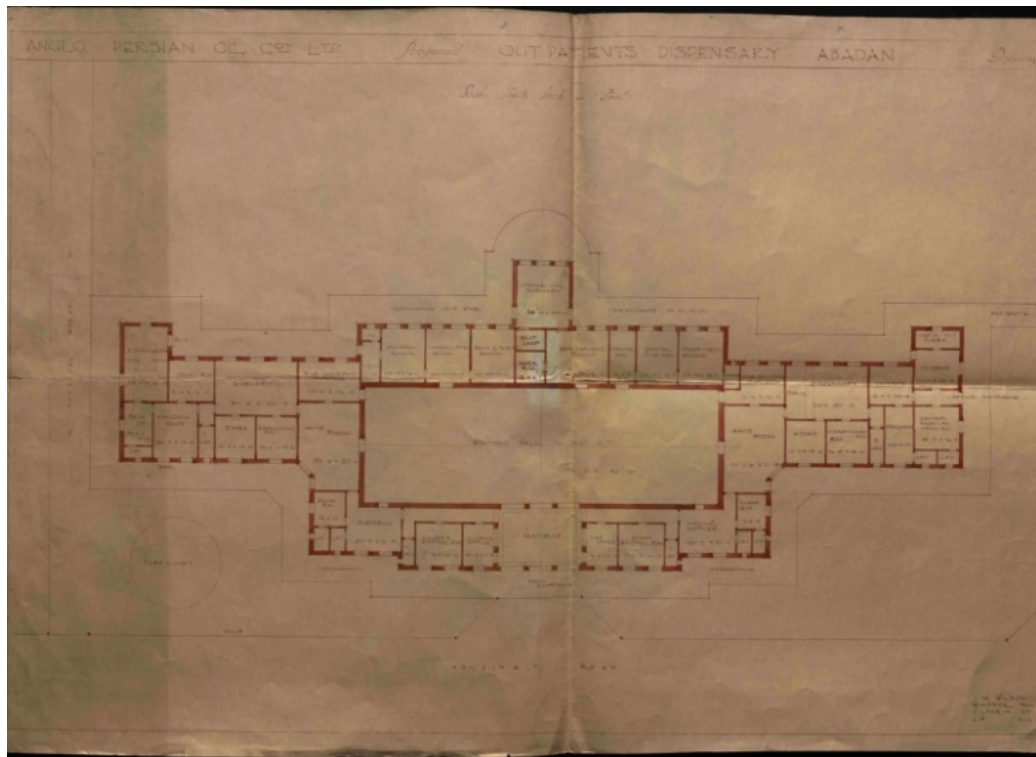


Figure 4.12 Wilson’s final sketch plan approved for the new Out-Patient Dispensary, 1932. Unlike other iterations, this scheme featured a much larger entrance hall and a complete verandah. Furthermore, entrance and exist passageways were separated to facilitate the movement of patients.

Source: BP Archives, ArcRef 62517

⁷⁹⁴ “Out-Patients Dispensary and Works Hospital-Abadan,” 1931, *Reorganization of medical Services at Abadan*, BP Archives, ArcRef 77460

⁷⁹⁵ James Jameson to J. M. Wilson, April 22nd, 1932, *Correspondence with Architects J. M. Wilson, H. C. Mason and Partners*, BP Archives, ArcRef 68848



Figure 4.13 A view of the Abadan Out-patient Department from the Refinery looking east, June 1932. Inspired by the environmental control strategies employed in colonial buildings in India, Wilson used varied elevations for different spaces to facilitate ventilation through clerestory windows and protect the interior against Abadan's blazing sun.

Source: BP Archives, ArcRef 36152

In the wake of the renewal of the Oil Concession in 1933, the Company launched an extensive construction program at Abadan. As part of this building program, J. M. Wilson, in 1935, prepared a new set of plans for the reconstruction of the Abadan Hospital, which included, among other features, a new staff hospital, new quarters for the nursing and medical staff, and a new laboratory.

4.4 Urban Reforms and Emergence of a Polycentric Oil City

Industrial restructuring takes place in space. As Margaret Crawford notes, “changing location or reorganizing space creates new spatial settings that renew possibilities for industrial growth and expansion.”⁷⁹⁶ In 1926, the Company launched a rebuilding program at the refinery which came to be known as “constructional rejuvenation.”⁷⁹⁷ This program was aimed at re-organizing the physical configuration of the oil installation which, at that time, was reportedly comprised of “war relics and post-war improvisations.” Re-organization of the works included the re-arrangement of unloading facilities and handling of stores, building roads and completion of railroad, improving older benches with fractionating columns, and replacing distillates, among other things.⁷⁹⁸ Industrial restructuring was not restricted to the production site. In order to enhance industrial productivity and efficiency, the company introduced spatial reforms across the entire petro-scape. This included multiple development plans and rebuilding programs that helped reshape Abadan’s urban structure and turned it into a polycentric settlement. In the following section, I explore the urban reformation and the subsequent spatial transformation of Abadan during this period by analyzing the plans developed for each section of the tripartite city.

4.4.1 Abadan Township Re-Organization Scheme

“I was horrified during my visit to Abadan by the filthy conditions that existed. Pools of stagnant water on which floated greasy, oily substances met one’s eyes at every turn...I

⁷⁹⁶ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.6

⁷⁹⁷ John Cadman, January 1925, “Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924,” BP Archives, ArcRef 68331, p.31

⁷⁹⁸ John Cadman, 1926, “Abadan,” *Report by Sir John Cadman: Visit to Persia and Iraq, Spring 1926*, BP Archives, ArcRef 68386, p.14

*was struck by the extremely insanitary conditions of the whole place in general and the so-called bazaar in particular, especially the sheds and shelters occupied by Indians which might justly be called hotbeds of disease.”*⁷⁹⁹

4.4.1.1 Challenges and Goals. The need for improving public health at Abadan manifested itself in the early 1920s. As discussed in the previous chapter, overcrowding, inadequate healthcare facilities, poor sanitation infrastructure, and housing shortage characterized the settlement abutting the Refinery. While on his tour of inspection at Abadan in May 1924, Eissa Khan Feiz, the Iranian Imperial Commissioner to the APOC, was shocked at “the lamentable lack of hygiene” in the Native Village and the bazaar area. Unlike the Fields which between 1913 and 1924 had transfigured from a section of the “Dante’s Inferno” into a neat place with clean air and no sign of oil in the environment,⁸⁰⁰ social and physical conditions in Abadan had deteriorated during the same period. In fact, the Imperial Commissioner was instructed by the Iranian Government to visit the island and investigate the complaints sent to Tehran regarding the state of affairs at Abadan. In a bitter letter, the Imperial Commissioner criticized the Company for neglecting the “crying evil” at Abadan and suggested that the sanitary arrangements at the Refinery should be put on a par with the Fields.⁸⁰¹

⁷⁹⁹ Eissa Khan to The Anglo-Persian Oil Company, May 5th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁸⁰⁰ *The Financial News*, “Modern Development of Persia,” December 24th, 1924, *Lectures, Speeches, and Articles by Sir John Cadman, 1919-1931*, BP Archive ArcRef 106592

⁸⁰¹ In response to the Imperial Commissioner, John Cadman attributed the unsatisfactory state of affairs at Abadan to the rapid growth of the refinery during the War and post-War years. For instance, Cadman maintained, between 1914 and 1924, the output of petroleum products spiked from 6 million gallons per month to 60 million gallons per month. As a consequence, the number of employees increased from 1500 to 9000 during the same period. Sir John Cadman to Eissa Khan, May 13th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

The Imperial Commissioner's visit to Abadan took place only a few months after frequent epidemics hit the island and resulted in high mortalities among Indians and Iranians.⁸⁰² Between 1923 and 1924, various outbreaks of cholera, smallpox, plague, typhoid, and dysentery were recorded in Abadan and other parts of Khuzestan. Company statistics show that in three consecutive weeks in 1923, roughly 2000 people perished. This number was equal to three percent of the total population of Abadan. While only three Europeans died from the waves of epidemics, the Refinery Village and the Sheikh's Bazaar accounted for 10 percent and 90 percent of the total fatalities, respectively. Identifying the Sheikh's Village as the "hotspot of disease," Company officials blamed the Abadan Village for spreading the epidemics.⁸⁰³ Iranian officials, however, pointed the finger at the Indians of the Company's Village. For instance, the Imperial Commissioner claimed that plague and cholera were not native to Iran yet imported by "Indians of lower classes who flocked to Abadan for purposes of livelihood."⁸⁰⁴

The investigations by the Company's Chief Medical Officer, however, suggested that poor quarantine measures at the Port of Abadan and inadequate healthcare provisions in the Native Village and the Abadan Village were real causes of the severity of casualties. The investigation revealed that cholera epidemic arrived in Abadan by a mail vessel from India. Moreover, out of 947 cases of cholera infection, 883 patients died, the majority of

⁸⁰² In April 1923, plague epidemic hit Abadan, taking 118 lives in three weeks. During this period, Chittagonians were blamed for spread of the disease by refusing to cooperate with medical officials. 166 deaths were reported in May. The wave of epidemic outbreaks culminated in August, when cholera outbreak resulted in 843 casualties. Dr. Jamieson, August 24th, 1923, "Dr. Jamieson's Casualty Report," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸⁰³ Sir John Cadman to Eissa Khan, May 13th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁸⁰⁴ Eissa Khan to The Anglo-Persian Oil Company, May 5th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

whom either passed away before admission to the Isolation hospital or “refused treatment.” While 64 cases of death occurred in the Company’s Village, fatalities in the Abadan Village numbered 817. In fact, soon after the outbreak of epidemics, Company officials put the Abadan Village “out of bounds.” The curfew cut off the village’s access to vital resources, such as medical services, clean water, and food supplies, which might explain the disproportionately higher rate of mortality in the Abadan Village than the Native Village.⁸⁰⁵

Overwhelmed by the sheer number of fatalities, the Company took immediate actions to check the spread of epidemics. For instance, a municipal engineer was appointed, and the medical staff was increased at Abadan.⁸⁰⁶ However, these measures did not make a considerable impact and Company officials in Iran and London began to recognize the need to develop a comprehensive plan for the improvement of housing and sanitary conditions at Abadan. The comprehensive plan aimed to ensure that no menace would threaten the continuity of operations at Abadan. After all, as John Cadman once put it, “the economic value of good health conditions in such a country as Persia can hardly be exaggerated.”⁸⁰⁷ In fact, Company officials realized that frequent outbreaks of epidemics would cause economic harms to the Company in terms of loss of labor pool, disruption of daily refinery work, disconnection of communication and commerce with other ports and cities, loss of employee efficiency due to the negative psychological impacts of epidemics, and the tainted perception of Abadan that epidemics had fostered in public opinion.

⁸⁰⁵ Dr. Young, October 1st, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸⁰⁶ *Anglo-Persian Oil Company Limited: Annual Report: April 1923 to March 1924*, 1923. November 1924, BP Archive ArcRef 54364, pp.194-7

⁸⁰⁷ John Cadman, 1925 “Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924,” BP Archives, ArcRef 68331, p.75

Moreover, signs of “uneasiness” were observed in high offices in Tehran and Iraq and even in London.⁸⁰⁸

4.4.1.2 Visions and Solutions

Palliative and Prophylactic Schemes

In the aftermath of the 1923 epidemics, Company officials took a series palliative and preventive sanitary measures to check the spread of infectious diseases in Abadan. For instance, following the outbreak of plague, medical officers launched an inoculation campaign, and, reportedly, in one year vaccinated more than 4,500 people. Moreover, all Company bungalows, coolie lines, servants’ quarters, kitchens, public latrines, slaughterhouses, as well as a group of residential compounds in the Abadan Village, where Company employees resided, were fumigated with sulfur and then limewashed with sulfur dioxide. Company officials, in collaboration with the Sheikh administration, identified more than 30 reed huts in the Sarifa Area in the Abadan Village, where infected patients resided, removed all inhabitants and their belongings to the Quarantine Hospital, sprayed the huts with fuel oil to catch fleas, destroyed the huts and buried them in the center of the compound. As a result, open spaces were created in the middle of the Abadan Village. However, resettlement in these areas were prohibited.

Company officials also launched a propaganda campaign in Abadan to raise public awareness about the epidemics. Tindals, maistries (headmen), and the heads of the Abadan Village were briefed about the causes and the spread of epidemics and were asked to disseminate information among inhabitants. Posters in different languages were published

⁸⁰⁸ Dr. Young, October 1st, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

in the bazaar. Guards were placed in the cemeteries to avoid burials without prior examination of the corps or the approval of the Company Sanitation Office. Moreover, a professional rat catcher with full equipment was recruited from India and traps with Barium Carbonate baiting were installed across the plague-ridden area in the Abadan Village. Between April and July 1924, more than 12,000 rats were destroyed.⁸⁰⁹

Prophylactic schemes were also implemented to prevent the reoccurrence of outbreaks. These measures included: anti-fly measures, food inspection in the bazaars and the Company Provision Stores as well as soda water factories, construction of three new incinerators in the Abadan Village and four new incinerators throughout the Company's Area, renovation of the butchery, construction of additional multi-seater water flush and dry flush latrines, oiling of stagnant pools of water, and construction of concrete invert drains as well as surface drains.⁸¹⁰ Company medical officers claimed that these measures enhanced public health in Abadan. The official figures provided by the Company's Medical Department showed a decrease in the rate of mortality from 524 in the first half of 1924 to 234 in the second half of the same year.⁸¹¹

The 1927 Cholera Epidemic

Despite the Company's so-called sanitary measures in Abadan, another cycle of epidemics hit the oil town in four years. In July 1927, cholera broke out at Bombay and Basra and then spread to the ports of Khorramshahr and Abadan. It gradually spread to Ahwaz and

⁸⁰⁹ Dr. Rennie, July 1924. "Anti-Plague Measures at Abadan," *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

⁸¹⁰ "Medical Department," *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.87-88

⁸¹¹ "Medical Department," *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.87

began to threaten the oil fields. At Abadan alone, the epidemic affected 281 dwellers of the Abadan Village, of whom 236 cases died.⁸¹² However, the statistics issued by the Company indicated that minimal mortality had occurred in the Company's territory. Contrary to the various reports stating that the epidemic had commenced in the Company's Area, the Chief Medical Officer blamed Abadan Town for the spread of the disease. The Chief Medical Officer noted that, "...Until Abadan Town has been thoroughly cleansed, I do not believe that we shall be free of epidemics altogether."⁸¹³ Regardless of the origin of the epidemic, the outbreak of cholera at Abadan was a great shock to Company officials. Drinking water, vegetables, and infectious cases from either Basra or India were regarded as the potential causes of the epidemic.

To contain the cholera epidemic, the medical staff launched a "wholesale inoculation campaign" at the Abadan General Hospital. 7000 doses of anti-cholera vaccine were ordered from London. In attacking the epidemic, Company medical officers draw on the experiences of the Colonial Government of India. Besides the conventional treatment methods of the time, such as Essential Oils and Hypertonic Saline solutions, a new medicine, known as bilivaccine was experimentally used. Developed by Ukrainian-French biologist Alexandre Besredka at the Pasteur Institute in Paris, bilivaccine was a prophylactic anti-cholera vaccine which instead of hypodermic needle could be taken by the mouth. At this time, bilivaccine had gained popularity among British officials in India. It reportedly cut the spread of cholera epidemic in Pondicherry in India in the course of

⁸¹² "Administration Reports 1925-1930" [76r] (156/418), British Library: India Office Records and Private Papers, IOR/R/15/1/714, in Qatar Digital Library
<https://www.qdl.qa/archive/81055/vdc_100023399363.0x00009d> [accessed 4 August 2019]

⁸¹³ Dr. M. Young to Dr. Rennie, November 10th, 1927. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

three weeks.⁸¹⁴ Although it was intended to be used for the Europeans at Abadan, the medical officers were instructed to first test it on the local population.⁸¹⁵

The Cholera outbreak was contained in the course of three weeks at Abadan. The Chief Medical Officer attributed this achievement to the efficiency of sanitary measures taken at Abadan between 1924 and 1927. The story of how the Company managed to check the spread of epidemics served as a good material for the Company propaganda machine. At the Chairman's suggestion, the account of the feat appeared in the A.P.O.C. magazine *The Naft*. It featured photographs of three elements of the Company's sanitation infrastructure at Abadan, including the water installation at Bahmanshir (See section 4.4), the Quarantine river boats at Bawarda, and the special canteen, "where food was sold cheaply to the natives."⁸¹⁶ In reality, however, the medical staff failed to inoculate the majority of workmen at Abadan and Ahwaz. In the words of a Senior Medical officer, "It was difficult to arrange for all workmen to get off [work] for inoculations here and would have been still more so to get them away three days running. Most of them would not have carried out the three days treatment without supervision."⁸¹⁷ It seems that a large portion of the 26,000 vaccines provided to the Medical staff were used for inoculation of Europeans and the Company's tanker staff. Despite the instruction from London regarding the continuation of inoculation, the Medical officers in Abadan reserved the remaining stock of vaccines for a future outbreak.

⁸¹⁴ Dr. M. Young to Dr. Rennie, September 8th, 1927. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

⁸¹⁵ Dr. M. Young to Dr. Rennie, August 4th, 1927. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

⁸¹⁶ Dr. M. Young to Dr. Rennie, September 15th, 1927. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

⁸¹⁷ Dr. Rennie to Dr. M. Young, September 30th, 1927. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

Following the cholera outbreak of 1927, Company officials introduced new measures at Abadan. For instance, a water extension scheme was adopted to supply filtered drinking water to non-European quarters. A proposal was also put forward by the Medical Authorities to erect a slaughterhouse and a closed market in the Abadan Bazaar to control the meat and vegetable supplies.⁸¹⁸ The Company also instituted the Public Health Department on the basis of the British Standards of Efficiency which were tailored to meet the local circumstances and customs. It was headed by the Principal Medical Officer of Health and staffed by three British Health Inspectors, five Indian Assistant Health Inspectors and clerks, two Iranian apprentice Health Inspectors, and a number of “native” sweepers and lime-washers. The Public Health Department was in charge of inspecting and maintaining sanitary conditions in the Company’s territory and Abadan Village. It also provided technical health-related assistance to the Abadan Municipality and to local Iranian authorities. The Department’s scope of work included: general conservancy in the Bungalow Area, in the Refinery, and in Abadan Township — such as sweeping the roads, compounds, dry latrines, handling the refuse to incinerators, and cleaning septic tanks; food inspection in the Company’s Store, in the Restaurant, and in the Iranian Bazaar; infectious disease monitoring— such as inspecting ships and notifying authorities about cases of infectious disease; anti-rat, anti-fly, and anti-mosquito measures; vaccination and

⁸¹⁸ The proposal called for handing over the Slaughterhouse and the Closed market to local merchants provided they agree to operate under the supervision of the Health Department. This proposal was rejected as the Company’s policy in this period was to provide financial and technical assistance to the Abadan Municipality to effectively run the existing slaughterhouse and avoid granting monopolies to local merchants. *“Minutes of Conference Held in General Manager’s Office,”* February 24th, 1928. *Minutes of Conferences Held During General Manager’s Visit to Persia/Iraq, January 1928*, BP Archive ArcRef 67582

inoculation of the staff; cemeteries and burials management; and, general inspection of the Abadan schools, the bazaar, and shipping.⁸¹⁹

Environmental Modifications

In the early 1920s, the insanitary environment in Abadan had caught the attention of medical officers. Colonial practices and the principles of the post-germ theory underpinned the improvement proposals. At first, medical officials focused on colonial-type environmental control strategies at the intermediate level to enhance public health. For instance, only three major sources of infection were identified in the Refinery Area and the Abadan Village: public latrines, *nullahs*, and alleys. In the colonial settings, human excreta, cleanliness of the urban environment, and waste disposal were regarded as the intermediate environmental factors affecting health and morbidity.⁸²⁰ Therefore, as mentioned in the previous chapter, medical officers recommended replacing the pail system in the Native Village with a centralized system of public latrines built of “pucca bricks” with “automatic flushing arrangements” and recommended adopting a septic tank model similar to the Bungalow Area. Medical officers also suggested that the nullah (canal) running between the Company’s Village and the Sheikh’s territory be dried and filled up, and called for replacing other earthen canals and drains with brick sewers or pipes.⁸²¹ Similarly, alleys in

⁸¹⁹ *The Anglo-Persian Oil Company Limited, Persian Compendium: Abadan Refinery: Public Health, 1928*, BP Archives, ArcRef 37060

⁸²⁰ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge, 1976), p.110

⁸²¹ The system of *Nullah and bund* was an indigenous technique of drainage, irrigation, and tidal control which was widely practiced in the date gardens throughout Abadan Island to desalinate and fertilize the soil. Before commencement of operations in 1908, the Company adopted this method for reclamation of ground and protection of the oil installation against flooding. Nullahs were also used for the discharge of refinery effluent into the Shatt. F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211

the Abadan Village were viewed as dumping grounds which were the “first danger spots” during epidemic outbreaks.⁸²²

Moreover, plans were developed to institute a “Sanitary Committee” that would convene at least once per month and propose recommendations to the Abadan Medical Officer for the improvement of public health conditions at Abadan. The proposed Sanitary Committee would consist of the Medical Officer, a Civil/Sanitary Engineer along with representatives of different classes of employees, including a Senior Chemist, a Senior Engineer, a Senior Indian Clerk, the Sheikh’s representative in Abadan (Sheikh Musa), and two hand-picked members of the Indian staff from different ethnic groups (jat).⁸²³

Following the 1923 epidemics, however, the focus shifted to the roots of infections and the means of contagion. Moreover, macro-level environmental reforms were formulated. For instance, the Principal Medical Officer stipulated that achieving “efficient sanitation” in five key areas—including housing, water supply, food supplies, sewage disposal, and quarantine hospital— could remedy the causes of epidemics.⁸²⁴ For his part, the Chief Medical Officer maintained that plague and smallpox were caused by the general insanitary conditions, specially overcrowding, while cholera, typhoid, and dysentery were water-borne diseases spread by infected water or vegetables.⁸²⁵ The transition from the

⁸²² Dr. Jamieson, November 23rd, 1922, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸²³ Strick, Scott & Co. to Dr. Jamieson, December 21st, 1922, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸²⁴ Dr. Jamieson regarded Housing as a determinant of public health, maintaining that overcrowding and clustering of buildings in the Native Village were the major housing problems that have led to the spread of epidemic diseases among the workforce. Dr. Young also considered overcrowding as the major source of spread of cholera and plague. Dr. Jamieson, August 23rd, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸²⁵ Dr. Young, October 1st, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

intermediate to the macro-level environmental analysis also changed the manner in which medical officers formulated plans for the physical and spatial reorganization of Abadan. While in the early 1920s, medical officials entertained the idea of rebuilding the Native Village on the same spot, after the 1923 epidemic, they provided a radically different proposal. In their view, the soil and the Shatt were “a continual source of infection which may eventually lead to epidemic diseases becoming endemic.” Thus, the ideal solution was tearing down and rebuilding the Native Village on a new site “some distance away from the river, in the desert.”⁸²⁶

Medical officers regarded housing as a determinant of public health and suggested that the rate of occupancy per room should be revised in the new quarters. For instance, they suggested that in new Clerks’ quarters, only one man should live in each room, and no more than 6 men should be allowed to dine together in a messing room; in new Coolie quarters, no more than four laborers should be assigned to each room and better ventilation than a single door should be provided. Furthermore, medical officials believed that kitchens and bathrooms should be located at either end of each block. Moreover, it was recommended new buildings be sufficiently spaced.⁸²⁷

Figure 4.14 depicts the earliest environmental modifications proposed in the Native Village in the aftermath of the epidemics in 1923. As the plan shows, medical officers envisioned the reconstruction of the Native Village and the Hospital on a new site between the Abadan Village and the Bawarda Tank Farm. The palliative schemes also included a

⁸²⁶ Dr. Young, October 1st, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸²⁷ Dr. Jamieson, August 23rd, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

new water supply system and elimination of the nullah separating the Native Village from the Abadan Village.⁸²⁸

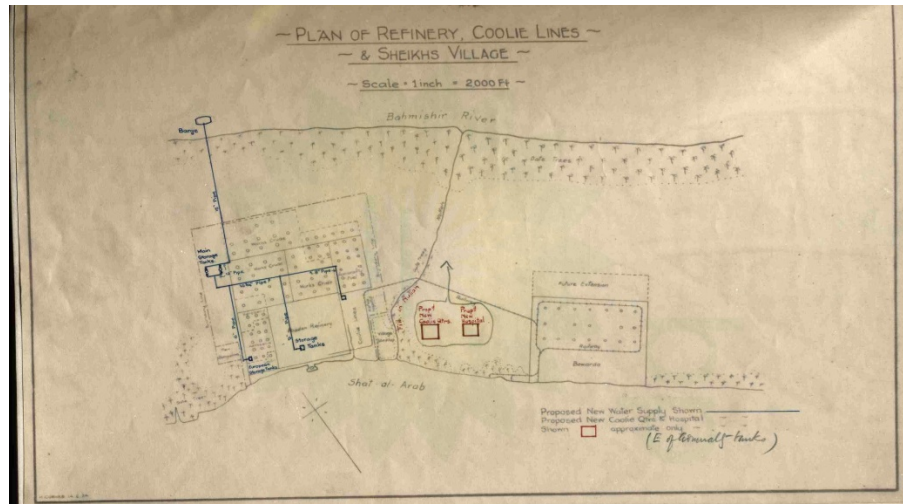


Figure 4.14 Plan of the Abadan Refinery showing environmental reforms devised to improve public health in Abadan, circa 1923. As the plan vividly indicates, the proposed reforms included provision of a new water supply system from the Bahmanshir River, elimination of the earthen waterways (*nullahs*), and reconstruction of the Native Village and the Hospital on a site between the Abadan Village and the Bawarda Tank Farm.
Source: BP Archive ArcRef 70209

4.4.1.3 The “Omnibus” Scheme. Based on the palliative schemes and proposals put forth by medical officers, the Refinery Management devised a comprehensive plan in 1923 that entailed radical measures across Abadan. Similar to other Company-sponsored social welfare programs, professional opinions were solicited on the proposed comprehensive plan. In this case, Sanitation Engineer F. C. Temple and Architect G. Wittet, were recruited to review the plan. The team of town planners had several years of experience in the company town of Jamshedpur, the site of Tata Iron & Steel Company in Bengal in northeast

⁸²⁸ Based on this scheme, the company contemplated reconstructing coolie lines A to H in the estimates prepared for the year 1924. £20,000 was estimated for the construction of 8 coolie lines. Meanwhile, the construction of a new bungalow (Bungalow No.40) was estimated at roughly £3,800, equal to a married clerks’ quarters.

India.⁸²⁹ The product of marrying the comprehensive plan with Temple and Wittet's recommendations was Abadan Township Re-Organization Scheme, also known as the "omnibus" plan, which consisted of several elements including model villages, new gateway to the Refinery, new market, a water supply scheme, sanitation reforms in the Abadan Village, quarantine facilities, as well as plans for drainage, sewerage, and road systems. The Scheme's total cost was estimated around £750,000 with a three-year implementation timeline.⁸³⁰

The Omnibus Scheme drastically reorganized the spatial structure of Abadan. Besides addressing Abadan's major public health challenges, such as housing, overcrowding, clean water and food supplies, and general sanitation, the Scheme helped imprint the Company's ideal social order onto Abadan's urban form. In other words, Abadan Township Reorganization Scheme marked the culmination of social engineering efforts that characterized the Company's spatial practices and paternalistic programs since the inception of operations in Abadan. Moreover, the Scheme made Abadan's layout comprehensible to Company officials and served as a new instrument of labor control.

⁸²⁹ James Alexander Jameson, 1936, "Housing in Persia" *Abadan and Fields: Housing, Extensions, etc.*, BP Archives, ArcRef 67525

⁸³⁰ John Cadman, Autumn 1924, "Visit to Persia," BP Archives, ArcRef 71403, p.45

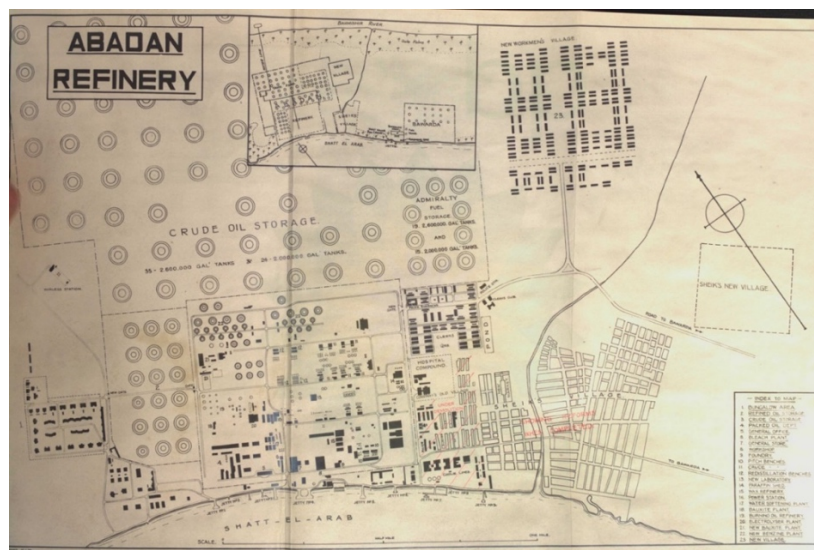


Figure 4.15 Map of Abadan showing urban reforms under Abadan Township Re-Organization Scheme, 1924. The reforms included, among others, demolition of the Native Village, partial clearance and street widening in the Abadan Village, two “model” villages, and a “model” bazaar.

Source: BP Archive ArcRef 70211

Figure 4.15 depicts the major components of the Omnibus Scheme. As the plan shows, the Scheme called for the entire demolition of the Native Village and the partial clearance of the Abadan Village. The demolition expenses were to be divided “on the most advantageous terms” between the Company and the Sheikh. The plan also envisioned three new model villages for the resettlement of clerks, artisans, and manual workmen.⁸³¹ Abadan Township Re-organization Scheme also called for restructuring Abadan’s major social and economic lifeline, the bazaar. As discussed in the previous chapter, the Abadan Bazaar stretched from the Abadan Village to the Refinery Gate. Under the Omnibus Scheme, the entire bazaar was demolished and relocated to a new spot and reorganized on

⁸³¹ Jas Jameson, January 7th, 1924, “Abadan Refinery: Accommodation for Clerks and Artisans,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

new principles. In order to facilitate the transition, a new road network connected the new model villages and the new bazaar to the new refinery gate.

Model Villages: Sanitation, Standardization, and Social Order

Aimed to improve employees' living and working conditions, decrease labor turnover, and deter unionization, model company towns were designed to alleviate the harshness of industrial life through social and physical planning. As such, model company towns marked the transition between the older styles of paternalism and the professionalized welfare methods of "new" company towns. As Margaret Crawford notes, in model towns, symbolic form and order would overshadow the "demands of industry" or regional circumstances.⁸³² Abadan Township Re-organization Scheme included two "model" villages planned on "up-to-date" and "sanitary" principles for accommodation of roughly 10,000 inhabitants. The population density in the model villages was set at 80 persons per acre which was less than half the population density in Abadan prior to the urban reformation.⁸³³

Each village was divided along ethno-occupational lines. Similar to model company towns, these villages combined economic logic with some elements of social and physical planning grounded in the Company's desired labor hierarchy and a discourse of

⁸³² Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.2-12

⁸³³ Temple and Wittett suggest that the incidence of population should not exceed 100 per acre at the very most and should be lower if possible. As the population of the entire town was estimated at 30,000 and considering the total area to be approximately 200 acres, Temple and Wittett argued that roughly 10,000 persons should be relocated. So, they concluded, the company's new villages would accommodate the surplus of the population. F. C. Temple and G. Wittett, 1924, "Abadan Town Planning Report," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.12

public health.⁸³⁴ The model villages were designed to accommodate all Abadan labor, including Indians, Iranians, Armenians, and Iraqis who were on the Company's payroll. After much discussion, it was decided that free accommodation be provided to direct employees, including clerical staff and skilled and semi-skilled workmen, who were brought to Abadan from outside. The goal was to reinvigorate the existing labor order, to exercise "complete control" over municipal and sanitary affairs, and to enforce evacuation of quarters upon termination of employee contracts.⁸³⁵ The Iranian coolie labor and local contractors were the only workforce groups that were excluded from the new housing program.⁸³⁶

⁸³⁴ Margaret Crawford notes that model company towns also included a "discourse of benevolence," which rooted in the ideals of Christian stewardship. Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.2

⁸³⁵ H. E. Nichols to T. L. Jacks, January 26th, 1925, "Abadan New Village Administration," *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁸³⁶ T. L. Jacks to H. E. Nichols, February 12th, 1925, "Abadan New Village Administration," *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

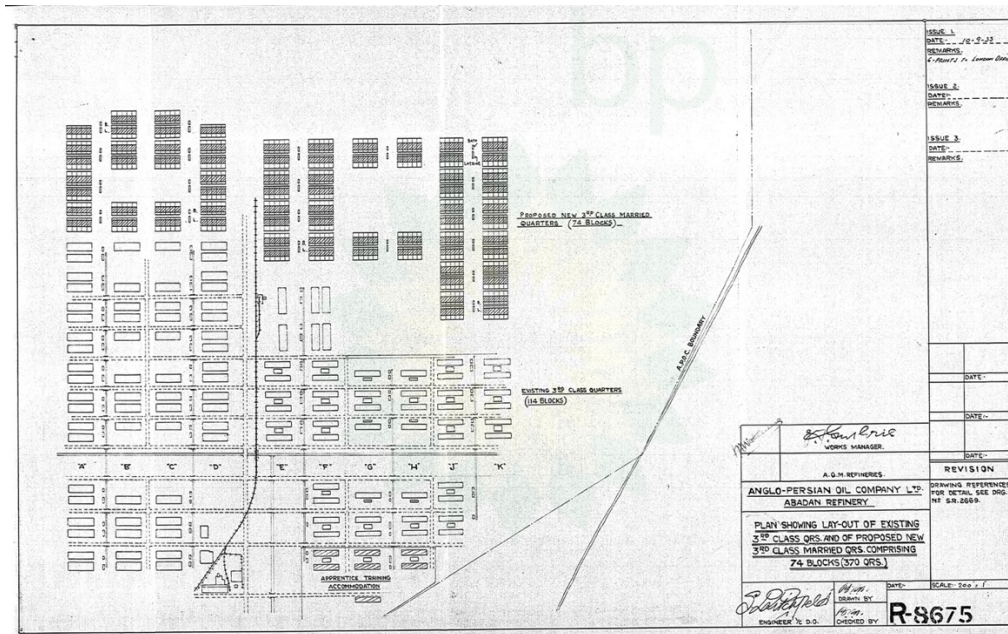


Figure 4.16 Site plan of the New Workmen’s Village, 1933. The Village was designed to accommodate roughly 9000 people and featured a uniform grid of roads and alleys. As the plan shows, the rail line separated Artisans’ Married Quarters from Single Quarters. The latter represented an “updated” version of older coolie lines.
 Source: BP Archives, ArcRef 53924

The Omnibus Scheme envisioned a “model village” for accommodation of approximately 7500 Iranian and Indian artisans and their dependents on the “untouched ground” to the southeast of the Refinery. The New Workmen’s Village (No. 23 in Figure 4.15), or the Bahmanshir Village as it was later called, was surrounded by open land and connected to the Refinery via one roadway. This ensured maximum control over the village in case of strikes. As Figure 4.16 illustrates, the Village featured a uniform grid of roads to minimize development costs. The general layout included a 25-foot-wide, electricity-lit main street intersected by 16-foot-wide secondary roads. It consisted of roughly 300 lines of dwelling units laid out in an orderly setting.⁸³⁷ A back-service alley was also provided

⁸³⁷ T. L. Jacks to Sequat-ul-Mulk Governor General of Khuzestan, July 23rd, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

in the middle of each block that served as an infrastructural conduit, accommodating sanitary facilities, such as public baths, water fountains, dry latrines, and a “proper system of drainage.” In order to break the monotony of the layout, block orientation changed alternately. The layout also introduced a variety of “line and aspect,” which gave “relief to the eye” and partially screened the back-service alleys.⁸³⁸ The New Workmen’s Village was an enhanced version of old coolie lines and native houses erected fourteen years earlier in the Native Village. However, unlike coolie lines which varied in layout and size, the new “lines” were uniform and standardized. With a view to minimizing costs, expediting construction process, and enhancing sanitation, a system of “standard shed” was adopted. Standardization and rationalization of design and construction drew inspiration from Fordism, the third wave of capitalist organization of production that characterized the interwar era.⁸³⁹



Figure 4.17 Artisans’ Single Quarters under construction, October 1924. Artisans were provided with the minimum level of housing standards. Each block was divided into ten rooms measuring 10 feet by 20 feet and featured a door on one side and a window on the other side, and no verandahs were provided.

Source: BP Archives, ArcRef 68331

⁸³⁸ F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.12

⁸³⁹ Margaret Crawford, *Building The Workingman's Paradise: The Design of American Company Towns* (Verso, 1995), p.6

Each shed was designed as a standard “pucca brick” block, 120 feet long and 24 feet wide, made of standardized steel framework and burnt brick, and partitioned from inside into multiple housing units to accommodate various classes of employees.⁸⁴⁰ Bachelor and married artisans were accommodated in separate quarters. As Figure 4.17 indicates, the structure of each standard shed consisted of 10 steel trusses, 24 feet in width, spaced at 12-foot intervals and supported on steel purlins and covered with 4 inches of mud. The floors were raised 1 foot and 6 inches above the ground level and paved with brick or concrete.⁸⁴¹ The standard shed became a new building prototype widely used in various Company budget projects over the next decade. As Figures 4.17 and 4.18 illustrate, the standard shed served as the bachelors’ artisan block. It was divided into ten rooms, 10 feet by 20 feet each, accommodating 40 men. The shed also covered the living quarters in the married artisan blocks which consisted of ten double-room units. In married quarters courtyards were attached to the standard shed. Each courtyard, or compound, was screened by seven-foot “purdah” wall. The latter component was provided to ensure privacy in married quarters and was a reinterpretation of the Iranian traditional domestic architecture. Abadan Township Reorganization Scheme also envisioned other amenities in the New Workmen’s Village, including a primary school for 100 students, public water hydrants, public cookhouses, a narrow gauge for refuse wagons to incinerators, and motors and pumps for drainage (See Figures 4.19 and 4.20).⁸⁴²

⁸⁴⁰ Works Manager Abadan, January 7th, 1924, “Village Construction and Sanitation,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸⁴¹ Jas Jameson, January 7th, 1924, “Abadan Refinery: Accommodation for Clerks and Artisans,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸⁴² Works Manager Abadan, January 7th, 1924, “Village Construction and Sanitation,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

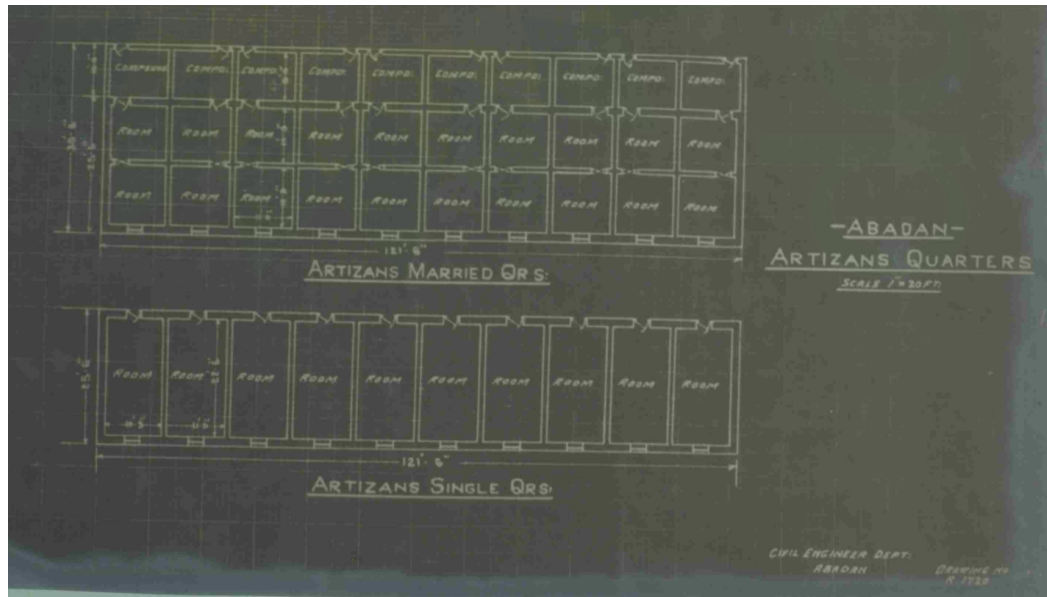


Figure 4.18 Layouts of Artisans' Married Quarters (Top) and Artisans' Single Quarters (Bottom). The workmen's quarters were made of the "standard shed." As the plans show, Married Quarters consisted of two rooms and a compound (yard) accommodating 10 families. Bachelor Quarters consisted of 10 rooms accommodating 40 workmen.
Source: BP Archives, ArcRef 53916



Figure 4.19 A view of Artisans' Married Quarters in the New Workmen's Village, circa 1935. Public water fountains were provided at regular intervals along the back-service alleys. Water fountains became social hotspots as they were frequented by housewives and children during the day.
Source: BP Archives, ArcRef 229351



Figure 4.20 A view of a Back-Service Alley in the New Workmen’s Village, circa 1935. The alleys served as infrastructural conduits accommodating the sanitary facilities, such as surface drainage, water hydrants, bathing cubicles, and dry latrines.

Source: BP Archives, ArcRef 229351

The Omnibus Scheme also envisioned a smaller model village for resettlement of approximately 500 Indian, Iranian, and Armenian clerks, foremen, and shift engineers on a site near the Refinery’s new gate. Since the majority of the clerical staff at the time were Indians, the Clerks’ Village was also called the Indian Lanes. As Figure 4.21 shows, the Clerks’ Village was located off the road connecting the new Refinery Gate to the new Market. The village framed the square facing the new Main Gate which was consciously designed large enough “to avoid possible crowding at the Gate in normal times,” and retain “a clear space around the Gate if labor troubles should ever arise.”⁸⁴³ The Village was comprised of rows of “lines” made of the standard shed. Similar to the New Workmen’s Village, single and married employees were accommodated in separate blocks.

⁸⁴³ F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.11

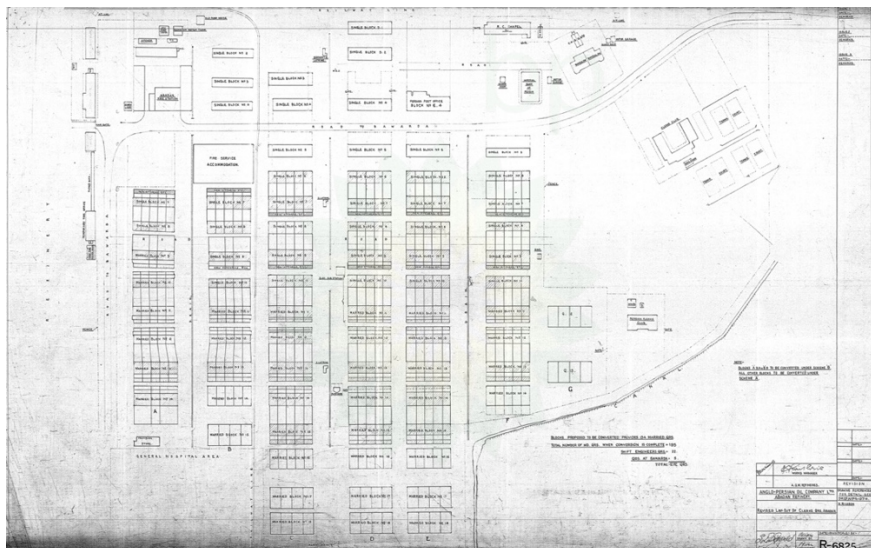


Figure 4.21 Site plan of the New Main Gate and Clerks' Quarters. Designed to accommodate approximately 1000 inhabitants, the Clerks' Village featured a uniform gridiron layout. Unlike the Workmen's Village, sanitation infrastructure, such as surface drainage, servants' latrines and pump houses, lined the main streets.

Source: BP Archives, ArcRef 53924

Similar to other paternalistic programs, clerical staff enjoyed higher housing standards than the third-class personnel. For instance, population density in single clerks' lines was one-fifth of the density in single artisans' quarters. As Figures 4.22 and 4.23 reveal, single clerks' quarters consisted of eight units, accommodating 8 men. Each block included two dining rooms, and walls were protected by verandahs. Married clerks' blocks were divided into five units. Each unit was designed as a self-contained residence consisting of separate living, cooking, and washing quarters organized around a central courtyard.

The housing types diversified over time. For instance, in 1931, European-type bungalows were designed for accommodation of Iranian married clerks and assistant engineers.⁸⁴⁴ As Figure 4.21 shows, in 1933, J. M. Wilson was also commissioned to

⁸⁴⁴ The estimated construction cost was £700 per man which was considered excessive by a Company Director. Company officials argued that construction cost per man should not exceed £250 and for that

redesign the clerical quarters and prepare plans for conversion of the bachelor quarters into married types. Initially, dry latrines were provided in the village. However, in 1929, following the 1927 epidemics all toilets were converted into a water-borne sewerage system equipped with septic tanks.⁸⁴⁵ The Clerks' Village also included servants' quarters, post office, cinema hall for Iranians, fire station, security barracks, church, the branch of the Imperial Bank of Persia, athletic club, and Clerks' Provision Store. In 1931, the Refinery Management instituted the Township and Welfare Department to oversee the provision and maintenance of housing, utilities (water, light, drainage, sewerage, etc.) and social services in the Workmen's Village and the Clerks' Village.⁸⁴⁶



Figure 4.22 New Single Clerks' block under construction, October 1924. Each block consisted of eight rooms and two dining rooms, accommodating 8 men. Each room featured two windows and one door opening onto a verandah.

Source: BP Archives, ArcRef 68331

purpose work should be contracted to local builders. "Accommodation," 26th February 1931, *Visit to Persia, February to March 1931*, BP Archives, ArcRef 71853

⁸⁴⁵ *Anglo-Persian Oil Company Limited: Annual Report for year ending 1929*, BP Archive ArcRef 54371

⁸⁴⁶ "Abadan Staff," 24th February 1931, *Visit to Persia, February to March 1931*, BP Archives, ArcRef 71853

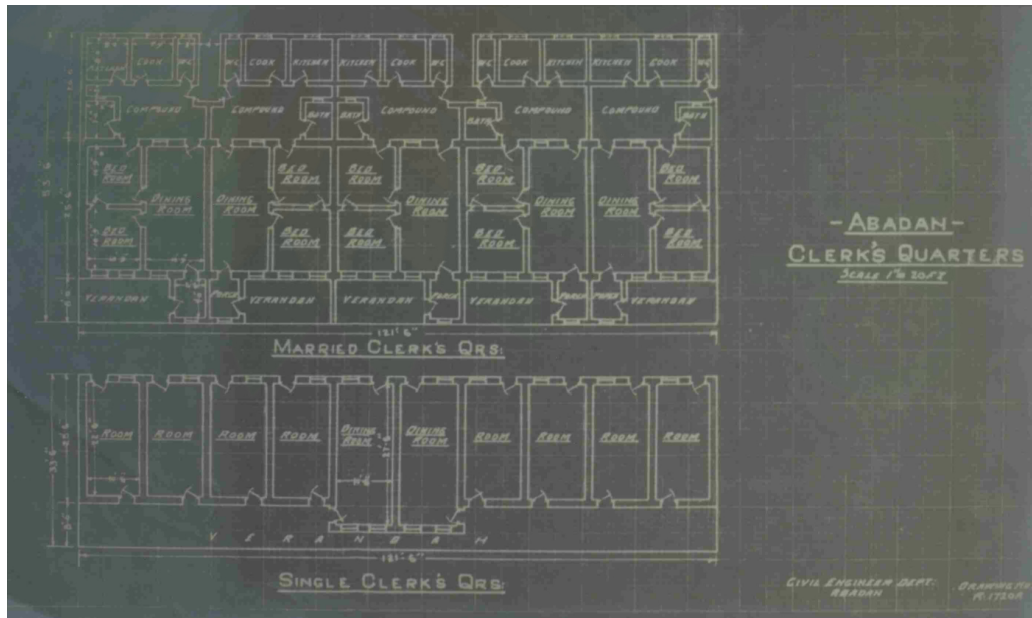


Figure 4.23 Layouts of Clerks’ Married Quarters (Top) and Clerks’ Single Quarters (Bottom), 1924.

Source: BP Archives, ArcRef 53916

Despite all the “modern” amenities, the new model villages were not met with the full approval of the workforce. For instance, a group of senior clerks chose to stay in the old bazaar quarters rather than move to the new Clerks’ Village, partly because the new quarters were not equipped with electric light and fans. Some clerical staff, including shift engineers, demanded “more roomy accommodation.”⁸⁴⁷ The Company’s favorite labor group, Chittagonians, were the only residents of the Company’s old village who refused to move to new quarters. In 1926, after two years of negotiations, some relocated “by their own consent” from the old Chittagonian Lines on the foreshore to the new quarters in the New Workmen’s Village. However, more than 250 Chittagonians were still unwilling to move out.⁸⁴⁸

⁸⁴⁷ “Department of Labour,” *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.60

⁸⁴⁸ “Security,” October 1926. *General Manager’s Monthly Report, Abadan, 1926*, BP Archive ArcRef 5484

Bahmanshir Water Supply Scheme

In Company officials' pathological universe, overcrowding and poor housing conditions would facilitate the outbreak of plague and smallpox, while pathogenic germs in drinking water and vegetables were regarded as the major cause for the spread of cholera epidemics and the infectious diseases from the families of typhoid and Gastritis.⁸⁴⁹ To address the latter public health challenge, Abadan Township Re-Organization Scheme called for providing a new water supply system from the Bahmanshir River. As mentioned in the previous chapter, the Shatt was the major source of water supply for the Abadan Refinery and the agricultural settlements on the western bank of the island. The constant discharge of effluent, garbage, and sewer from the Refinery and the surrounding villages as well as the leaks from the oil tankers increased the level of pollution in the Shatt. Moreover, heavy chemicals, such as waste bleach liquor, from the refinery slowed down the self-purification effects of the river, consolidated the pollutants within the vicinity of Abadan, and made the water inappropriate for human consumption.⁸⁵⁰ As a result, Company officials began to consider drawing water for both domestic uses and boiler feed from the Bahmanshir River. Bahmanshir water was deemed less polluted than the Shatt because there was "no village of importance on the eastern bank of the island."⁸⁵¹

The water supply technique proposed by Sanitation Engineer F. C. Temple shaped the foundation of the Bahmanshir Water Scheme. Temple's methodology was predicated

⁸⁴⁹ "Notes of Discussion at Conference in Cairo," march 23rd, 1924. BP Archives, ArcRef 71403, *Notes on a Visit to Persia and Mesopotamia, November and December 1919, and Reports on Persian Organization 1924-1927*. P.21

⁸⁵⁰ F. C. Temple and G. Wittett, 1924, "Abadan Town Planning Report," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.21

⁸⁵¹ John Cadman, January 1925, "Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924," BP Archives, ArcRef 68331, p.50

upon bacteriological and chemical analysis of water as well as the post-germ theory guidelines which had yielded “excellent results” in India.⁸⁵² In particular, Temple’s water purification method was built on the experimental work proposed in the book *Water Supply in the Tropics* by Colonel Clemesha, the Sanitary Commissioner in Madras.⁸⁵³ This method suggested that water should be treated by sedimentation, filtration, and chlorination processes prior to distribution. The apportionment of the treated water among the three classes of the workforce shows how the factors of race and occupational status were played out in the Company’s discriminatory paternalism. For instance, for each European employee regardless of ranking the equal portion of 40 gallons of treated water per day was allocated. For Non-European personnel serving the European community in the Bungalow Area, including Indian and Iranian butlers, cooks, servants, and gardeners, half the standard amount, namely twenty gallons per day, were assigned. For the Company Villages and the Abadan Village, a ration of two gallons per head was designated, which “was less than half the required amount, but better than nothing at all.”⁸⁵⁴

In January 1924, the Board of Directors approved the Bahmanshir Water Scheme. Although the water scheme was presented as the first step in improving sanitary conditions at Abadan, the refinery was the main beneficiary of the scheme. Almost sixty percent of the one million gallons of water supplied through this scheme was used to feed the boilers, twenty-five percent was dedicated to the Abadan General Hospital and the villages and the

⁸⁵² Dr. M. Young to Dr. Rennie, September 4th, 1924. *Letters to and from Dr. Rennie*, BP Archives, ArcRef 62400

⁸⁵³ Madras 1922 Hand Book: Indian Science Congress for the Use of Members Attending the Nineth Meeting to be Held at Madras from the Thirtieth of January to the Fourth of February, 1922. (Asian Educational Services, 2005), p.76

⁸⁵⁴ Dr. Young, December 31st, 1923, “Dr. Young’s Sanitation Report,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

remaining fifteen percent was set aside for the European quarters. The disproportionately low share of the Abadan Village and the Company villages with more than 30,000 inhabitants compared to the Bungalow Area with a population of less than 500⁸⁵⁵ is astonishing. Moreover, the chlorination process was only implemented in the section that fed the Refinery and the Bungalow Area.⁸⁵⁶ To execute the water scheme, the Company leased from the Sheikh 4.2 *jareeb*s (acres) of land, equivalent of 1800 feet frontage and 150 feet in depth, plus an additional piece 6.2 *jareeb*s (acres) on the foreshore of the Bahmanshir River.⁸⁵⁷ The India-based firm Paterson Engineering Company was selected to undertake the water supply scheme.⁸⁵⁸ In the early 1930s, with an increase in the incidence of renal colic disease among employees, Company officials began to study the methods to enhance the quality of the Bahmanshir water. For instance, in 1931 Company officials contemplated “bandalling” the Karun river. Bandalling was a technique used to increase the flow of the water from the Karun River into the Bahmanshir River such that the saltwater of the Persian Gulf at high tides would not reach the water intake area on the Bahmanshir river.⁸⁵⁹

⁸⁵⁵ John Cadman, January 1925, “Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924,” BP Archives, ArcRef 68331, p.72

⁸⁵⁶ “Engineering Report on Bahmanshir Scheme,” January 1924. *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸⁵⁷ T. L. Jacks to H. E. Nichols, 22nd March 1926, *Article 4: Land Acquisition, Abadan, Lots 1-14*, BP Archives, ArcRef 100497

⁸⁵⁸ “Some Matters Suggested for Sir John Cadman’s attention While in Persia,” February 11th, 1926, *Notes Required on Return to London for report, etc.*, BP Archives, ArcRef 71183/006

⁸⁵⁹ “Notes of Meeting Held at Abadan on 12th November, 1931, on Abadan Estimates for 1932,” November 12th, 1931. *Visit to Persia and Iraq November/December 1931: Notes of meetings Held at Abadan and Alwand*. BP Archives, ArcRef 69295

Public Garden: From the “Plague Spot” to the Healthfield

Company medical officials believed that the Native Village had accumulated plague germs as a result of successive epidemics, and the best remediation was to wipe out the “hut-in-compound” village.⁸⁶⁰ Building on this conviction, Abadan Township Re-Organization Scheme called for the demolition of the entire Native Village as well as the northern part of the Abadan Village. The cleared land was to be kept open— with the exception of the eastern section designated for the extension of the General Hospital— and used as the protective air space against the spread of fire and epidemics from the Abadan Village to the Refinery area.⁸⁶¹ The open land was to be naturally sanitized by the sun rays “eradicating all the microbes and diseases.”⁸⁶² Company officials conceived of this space as a “hygienic zone” or “safety zone” which in their view was necessary for enhancing health and sanitation at Abadan.⁸⁶³ Under the Omnibus Scheme a “drainage canal” was also dredged to the south of this area that functioned as the “cordon sanitaire” between the Abadan Village and the Company’s territory.

In 1926, the Native Village was evacuated, slated and then raised to allow for natural drainage. This open land was reserved for football and hockey grounds and tennis courts around the new Clerks’ Club.⁸⁶⁴ In 1927, in the wake of public outrage and political consequences of destruction, demolition, and displacement in the Native Village, Company

⁸⁶⁰ Dr. Jamieson, August 23rd, 1923, “Sanitary Conditions at Abadan and Schemes for Improvement,” *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁸⁶¹ F. C. Temple and G. Wittett, 1924, “Abadan Town Planning Report,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.12

⁸⁶² Letter from the General Manager of the A.P.O.C. to the Governor of Khuzestan, 24 July 1924 (31/4/1303); IRA: 240-15694

⁸⁶³ T. L. Jacks to Sequat-ul-Mulk Governor General of Khuzestan, July 23rd, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁸⁶⁴ “Abadan Township Reorganization Scheme. Report of Messrs. Temple and Wittet. Various Minor Recommendations,” August 30th, 1926. *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

officials developed plans to convert the “hygienic zone” into a public garden. John Cadman named it the Green Way Garden (*Bagh-i-Sabz-Rah*). The garden was intended to attract the local residents of Abadan and also to serve as a green scenery for the General Hospital and the new Clerks’ quarters. The public garden was scheduled to be officially inaugurated during the Chairman’s visit in 1927.⁸⁶⁵ As Figure 4.24 shows, the Garden’s layout consisted of a straight central lane intersected in the middle with a circular walkway. As a public space catering for Iranians, the garden was first landscaped with indigenous species. In the beginning, Tehran Poplars were planted which, given the climatic conditions of Abadan, proved unsuccessful. In 1928, poplars were replaced by Cerus and Persian Lilac. Moreover, Terminalia saplings were planted around the central circle. By 1928, more than 70 saplings of different species were planted throughout the Park.⁸⁶⁶ The turfing of the 28-acre public Garden was completed in 1930 and trees and shrubs were planted from the Company nursery which was supplied from India and Ceylon. In planting the public park, the Company also experimented with manure and species which were not indigenous to the region.⁸⁶⁷

⁸⁶⁵ John Cadman, 1926, *Report by Sir John Cadman: Visit to Persia and Iraq, Spring 1926*, BP Archives, ArcRef 68386, p.19

⁸⁶⁶ “The Park,” *Anglo-Persian Oil Company Limited: Annual Report for Year Ending 1928*, BP Archive ArcRef 54372

⁸⁶⁷ *Anglo-Persian Oil Company Limited: Annual Report for the year ending 1930*, BP Archives, ArcRef 54374



Figure 4.24 Aerial view of the Public Garden looking north, circa 1926. Replacing the Coolie Lines and Native Houses of the early years, the Public Garden along with the canal to its south served as the “Hygienic Zone” between the Abadan Village and the Company’s premises.

Source: BP Archives, ArcRef 36152

4.4.1.4 Petro-Violence: Demolition, Rebuilding and Public Resistance.

“... I believe that the Company is trying to turn Abadan into a city like Masjid-i-Sulaiman, where no one except the company owns houses, shops and estates... [The Company] aims to retain a total control over the town...and tries to undermine the town by restructuring it, by building new houses and a bazaar.”⁸⁶⁸

“...The Company and Sheikh Khaz'al are forcibly removing people and demolishing houses and shops. Inhabitants are feeling insecure and agitated. We fled Abadan and took refuge in Bushire, waiting for your urgent action. If you hesitate, all we have built in Abadan over eighteen years will vanish...”⁸⁶⁹

⁸⁶⁸ The Khuzestan Karguzar to the Ministry of Foreign Affairs, 16 June 1925 (26/Khordad/1304); IRA: 240-9253

⁸⁶⁹ Telegram from six residents of Abadan to the Parliament, the Prime Minister, and the Ministries of Public Works and Foreign Affairs, 2 October 1924 (10/Mizan/1303); IRA: 240-15694

The process of demolition and reconstruction of the Native Village had considerable political and social implications. In fact, Abadan Township Reorganization Scheme was launched within the context of the new power dynamics that emerged in early 1920s and gained momentum in later part of 1924, when the Iranian government officially occupied Khuzestan and toppled the Sheikh's regime. Given the changing political environment in the region and the growing hostility between the Iranian Government and the Company, the Omnibus Scheme turned into a highly contested urban reform program and came to symbolize the power struggle over oil. Implementation of the Scheme also resulted in the displacement of thousands of people. However, for their part, residents of Abadan played a major role in politicizing the reforms by initiating protests, by resisting the Company's spatial coercion, and by staking claim to the urban space. In particular, Iranian inhabitants helped incorporate Abadan's urban affairs into the broader nationalist and anti-Company campaign that gathered steam in the later part of the 1920s.

Public Opposition and Government Involvement

As discussed in the previous chapter, besides Coolie Lines and Native Houses—which were built and owned by the Company — approximately 500 privately-owned houses and 110 shops existed in the Native Village. In order to keep the racial balance of the Village, the Company never allowed any particular ethnicity to become the dominant group and, as a result, Iranian, Iraqi, and Indian inhabitants owned approximately equal shares of the building stock.⁸⁷⁰ In the beginning, the Company partnered with the Sheikh to initiate the demolition process. However, because of the potential political consequences, both parties

⁸⁷⁰ "Security Department," *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.81

were hesitant to execute the plan.⁸⁷¹ Eventually, the Sheikh employed an authoritarian strategy. Ten-day eviction notices were served on the houses and shops located within the Abadan Village's demolition zone. Moreover, no promises of compensation were made.⁸⁷² Even the Karguzar, who was opposed to the forcible eviction of people, was warned against interfering in the matter on the grounds that the Sheikh was the sole proprietor of the entire island.⁸⁷³

Unlike its counterpart, the Company's strategy was diplomatic. The Sheikh's delegates, on behalf of the Company, began negotiating with the owners and promised to make compensation for the expenses people spared on the buildings; however, the matter of "pricing" caused disagreements.⁸⁷⁴ For instance, a house with a market value of 1800 rupees was priced at 300 rupees.⁸⁷⁵ As a result, the allegations of secrecy and deception were made against the British corporation and people completely rejected the proposed compensation formula.⁸⁷⁶ Once again the Company was accused of prohibiting the renovation of buildings in order to pressure the inhabitants into selling their properties. The residents' Representatives reported that the landlords were prevented from repairing 200 houses and 100 shops that were destroyed by the rain.⁸⁷⁷ The Company rejected the figures as "grossly exaggerated" and "misleading," claiming that only 12 small houses were rendered uninhabitable by the rain and were beyond repair. Company officials also

⁸⁷¹ "...the company intends to wait until the Sheikh finds a way to undertake the plan and the Sheikh is waiting for the company to take the lead and demolish the buildings and take all the consequences" Karguzar to the Ministry of Foreign Affairs, 15 May 1924 (25/2/1303); IRA: 240-15694

⁸⁷² Report from the Khuzestan Agency to the MFA, 22 Aug 1924 (31/05/1303); IRA: 240-15694

⁸⁷³ Telegram from the Khuzestan Agency to the MFA, 06 Aug 1924 (15/05/1303); IRA: 240-15694

⁸⁷⁴ Karguzar to the Ministry of Foreign Affairs, May 15, 1924 (25/2/1303); IRA: 240-15694

⁸⁷⁵ "Report prepared by Ahmad Akhgar for the Parliament," June 1924 (Saratan, 1303), Page 1

⁸⁷⁶ Abdullah Atigh to the Ministry of Public Works, July, 29, 1924 (7/5/1303); IRA: 240-15694

⁸⁷⁷ The Ministry of Foreign Affairs to the Ministry of Public Works on 29 May 1924; IRA: 240-15694

maintained that, for “sanitary” reasons, rehabilitation was not permitted and that those buildings will be demolished as soon as the new model villages were completed.⁸⁷⁸ The Company also allegedly prevented people from trading their properties, with a view to dampening the market value of the structures. For instance, a resident filed a telegraphic complaint claiming that not only has the Company restrained him and his brother from selling their houses, it has also confiscated their properties and asked for a monthly payment of forty rupees as the municipality tax.⁸⁷⁹

While no agreement was reached over the compensation mechanism, in June 1924, six-month notices were served on 260 shopkeepers, merchants, and landlords in the Native Village, asking them to evacuate their properties by the end of the year.⁸⁸⁰ This move triggered a wave of public protest. Rumors were already circulating in Abadan that the Company was developing plans to expel Iranians from the Native Village and build a canal to separate the Refinery from the Abadan Village.⁸⁸¹ The uncertainty regarding resettlement options also placed people in a dilemma. The Karguzar reported that, “... what will cause utmost hardship to the residents is [the question of] where they could reside after leaving the Village. There is no available land close to the Abadan Village where they could move to. Moreover, the Sheikh's guards prohibit any construction on empty lands within the Abadan Village...”⁸⁸²

⁸⁷⁸ The A.P.O.C. to the Ministry of Public Works, 14 June 1924 (25/3/1303); IRA: 240-15694

⁸⁷⁹ Telegraph from a resident (Hassan son of Ghulam Shah) to government officials, 5 May 1925 (15/2/1304); IRA: 240-15694

⁸⁸⁰ The residents of the Native Village received eviction notices that read: “*The company is in need of the lands on which you have erected buildings in six months from the date on this notice, so, hereby, you are asked to move out by the first day of December 1924.*” Telegraph from the residents' attorney to Tehran, June, 30, 1924 (9/Saratan/1303); IRA: 240-15694

⁸⁸¹ Karguzar to the Ministry of Foreign Affairs, 16 June 1925 (26/Khordad/1304); IRA: 240-15694

⁸⁸² Karguzar to the Ministry of Foreign Affairs, 22 Aug 1924 (31/05/1303); IRA: 240-15694

Hundreds of complaints were sent to the Iranian officials in Khuzestan and Tehran. Telegraphic circulars and petitions were also dispatched to the *Majles* (the Iranian Parliament), the Prime Minister, the Ministries of Foreign Affairs and Public Works, as well as to the Tehran Press. In Khorramshahr, the Karguzar was “inundated with applications for support and compensation.”⁸⁸³ Iraqi residents of the Native Village also petitioned the Iraq authorities against the eviction measures.⁸⁸⁴ In communicating with the executive and legislative branches of the Iranian government, residents and their representatives utilized religious and nationalist rhetoric to sharpen their argument and to drag the Iranian Government into the quarrel. For instance, the shopkeepers stipulated that “...if authorities do not step in, all the buildings owned by the Iranians will be demolished and handed over to foreigners.”⁸⁸⁵ Frequent references were made to the Islamic jurisprudence principles, such as the one that read, “people command their lives and their properties,”⁸⁸⁶ to depict the eviction notices as an act of appropriation and to threaten that they might resort to violent reactions.⁸⁸⁷

The inhabitants also accused the Company of “setting fire on the Islamic city,” or causing serious troubles for the new government by planning to “destroy 1000 houses of Muslims, Sayids and Shi'ites.”⁸⁸⁸ People also rendered the eviction notices “illegal,” contrary to “acceptable conventions,” and detrimental to the dignity of the Iranian

⁸⁸³ T. L. Jacks, July 19th, 1924, “Note on an Interview between His Excellency Governor-General of Khuzestan and Myself Following the Former’s Visit to Abadan on 21st of July 1924,” *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁸⁸⁴ “*Local Conditions*,” October 1924. *General Manager’s Monthly Report, Abadan, August-December 1924*, BP Archive ArcRef 5482

⁸⁸⁵ People’s Envoy to the Ministry of Public Works, 30 May 1924; IRA:240-15694

⁸⁸⁶ “الناس مسلطون على اموالهم و انفسهم”

⁸⁸⁷ Telegram from Residents of Abadan to Reza Khan, the Prime Minister. 7 Aug 1924 (16/5/1303); IRA: 240-15694

⁸⁸⁸ Telegram from the Resident of Abadan to the Parliament, 25 August 1924 (03/06/1303); IRA: 240-15694

Government.⁸⁸⁹ People's representatives warned Government officials of inaction: "...huge unrest might ensue [in Abadan], consequences of which will affect both the Government and the Company, and you will be held responsible for ignoring the cause."⁸⁹⁰ With a similar precautionary overtone the residents' envoy⁸⁹¹ stressed the necessity of avoiding the recurrence of the past "unpleasant crises," such as the 1915 pipeline disruption or the 1922 refinery strike.⁸⁹² In an act of defiance, residents and landlords sent the eviction notices back to the Company along with a letter stipulating that, "...our affairs are handled by the Khuzestan Agency [Karguzari] of the Imperial Government of Iran, and only the latter has the authority to issue such notifications."⁸⁹³

As a result of the public outrage, the Iranian Government and public opinion became directly involved in the state of affairs at Abadan, and Abadan Township Re-Organization Scheme found its way into the center stage of the national politics.⁸⁹⁴ In response to recurring petitions from the residents of Abadan regarding "maltreatment" of Iranians by the Company, the Ministry of Public Works decided to institute a committee to make "decisive arrangements" to alleviate the people's grievances. A prominent resident

⁸⁸⁹ "Petition from Residents of Abadan to the Parliament," 27 August 1924 (05/Sonboleleh/1303); IRA: 240-15694

⁸⁹⁰ Mohamad Hadi Tehrani to the Ministry of Public Works, 27, July, 1924 (5/5/1303); IRA: 240-15694

⁸⁹¹ Abdullah Atigh was also appointed the honorary agent of the Ministry of Public Works in Khuzestan province.

⁸⁹² Abdullah Atigh to the Ministry of Public Works, 29, July, 1924 (7/5/1303); IRA: 240-15694

⁸⁹³ Abadan Inhabitants to the A.P.O.C., July, 8, 1924 (14/Saratan/1303); IRA: 240-15694

⁸⁹⁴ In July 1924, the Karguzar in Khorramshahr submitted the official protest of the Iranian Government to the Company, arguing the office of Karguzari should be part of negotiations between the Company and Iranian residents of the Village. Moreover, the Karguzar decided to visit Abadan once a week to handle the complaints. Ministries of Public Works and Foreign Affairs also made representations to the Company's office in Tehran. The Governor-General of Khuzestan was instructed by the Iranian Government to visit Abadan and investigate the complaints on-site. T. L. Jacks, July 19th, 1924, "Note on an Interview between His Excellency Governor-General of Khuzestan and Myself Following the Former's Visit to Abadan on 21st of July 1924," *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

of Abadan, who spearheaded the anti-Company campaign, was also appointed as the Ministry's agent at Abadan.⁸⁹⁵ The Ministry suggested that a commission consisting of the inhabitants' representatives and the Company's delegates be formed at the Khuzestan Agency (Karguzari) to arbitrate between the claimants and the Company and that until the final verdict was reached no measure should be taken in terms of eviction of inhabitants or demolition of houses.⁸⁹⁶ It was decided that the proposed commission be comprised of five members, including representatives from the Ministries of Interior, Finance, Foreign Affairs, and Public Works and the Company's delegate⁸⁹⁷—but no references were made to the inhabitants or their representatives.⁸⁹⁸

Predicting an imminent defeat in the light of the increased involvement of the Iranian Government in the conflict, the Company used different tricks to avoid the

⁸⁹⁵ In a prompt reaction to the announcement, the general manager in Khorramshahr asked the A.P.O.C representative in Tehran to officially protest against the “obstructive interference” by the Ministry of Public Works in carrying out the works at Abadan. Company officials soon launched a campaign to avert the establishment of a committee that could examine the petitions and compensation rates. The APOC representative in Tehran maintained that the continued recognition given by the Ministry of Public Works to the “unsubstantiated” accusations was against the letter and spirit of Articles 3 and 14 of the Oil Concession. Article 3 of the Oil Concession granted the concessionaire the right of acquiring lands or buildings from private entities with the consent of the owners based on mutual agreements and fair price demand. Article 14 required the Persian to take necessary measures to facilitate the carrying out of the Concession. Despite Company's protest, the Ministry considered it necessary to examine the veracity of complaints and find the truth by making inquiries from different sources. The Company always rejected accusations as “unwarranted charges” and tried to convince the Iranian Government to disregard “wild statements” made by “irresponsible busybodies” and get information about the developments at Abadan only through formal channels, such as the Karguzar, the governor, and the Imperial Commissioner. T. L. Jacks to W. C. F. Fairley, September 30th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁸⁹⁶ The Ministry of Public Works to W. C. F. Fairley, August 2, 1924 (11/5/1303); IRA: 240-15694

⁸⁹⁷ Karguzar to the Oil Department of the Ministry of Public Works, August 9, 1924 (18/5/1303); IRA: 240-15694

⁸⁹⁸ In separate petitions to the Prime Minister and the Ministry of Interior, the inhabitants' representative warned against the disastrous outcomes of any arbitration in Khuzestan, for “the influence of the company is obvious, so is the authority of Sardar Aghdas [Sheikh Khaz'al].” He recommended that the commission be held in Tehran where the company's delegate and the inhabitants' representatives were present, and their claims be heard and judged by an independent jury. Mirza Mohamad Hadi Tehrani to the Office of Prime Minister, August 10, 1924 (19/5/1303); IRA: 240-15694

proposed arbitration arrangement. T. L. Jacks, the General Manager, informed the Karguzar that the commission was “unnecessary” on the grounds that the majority of claimants will not be able to produce legal proof in support of their rights to the land. Rendering the majority of residents as squatters, this statement implied that only the individuals with “valid” building permits or property deeds would be compensated and that the Company was not willing to accept application for “ex gratia payments.”⁸⁹⁹ However, the Karguzar reminded that in the Iranian culture occupation of land for a considerable period of time would qualify people for compensation.⁹⁰⁰ The Minister of public Works also argued that the practice of collecting rent and sanitation tax from people by the Company implied that the occupants had a legal right to their properties.⁹⁰¹

Khuzestan Revolution and Implementation of the First Phase

In the summer of 1924, when the political tension between the Iranian Government and the Sheikh was escalating, the Company seized the opportunity to launch a grand demolition program. 150 privately-owned houses and shops in the Native Village were earmarked for evacuation and demolition within the period of three months. The process began simultaneously in the Company’s Area and the Abadan Village by the Sheikh’s forces. In the first stage, 40 properties were identified as part of the immediate clearance area. Of

⁸⁹⁹ Dispatch from T. L. Jacks to the Agent of the Ministry of Foreign Affairs in Khuzestan. 20 August 1924; IRA: 240-15694

⁹⁰⁰ T. L. Jacks, July 19th, 1924, “Note on Interview with the Karguzar in My Office on the 19th of July,” *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹⁰¹ At first, company officials took issue with all these views. However, due to the increased pressure from the Iranian Government, the Company made a concession and accepted any evidence of payment of rent as a proof for a claim for compensation. Furthermore, compensation was paid to landlords in the form of agreement to purchase. W. C. F. Fairley to The General Managers, September 25th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

these, 10 property owners accepted the compensation rates offered by the Company, while the rest were “holding out in the hope of better terms.”⁹⁰² People who resisted and refused to move out reportedly faced severe retribution or even imprisonment.⁹⁰³ Overall, 450 buildings were destroyed in the two neighborhoods.⁹⁰⁴ The displaced people in the Sheikh's Bazaar did not receive any compensation. The Company, however, opted for a different strategy. After leveling a large portion of the Native Village, the indemnification paid to individuals ranged between five and fifteen percent of the properties' market value — the amount still claimed by people to be more than 200,000 rupees.⁹⁰⁵ The Company's Iranian secretary⁹⁰⁶ with the support of the Sheikh's delegates forced the property owners into signing transaction agreements. Abadan's supreme cleric (*Mujtahid*)⁹⁰⁷ and the Sheikh's son were also asked to approve the deals. It was even reported that fake deals were signed without the presence of the actual owners.⁹⁰⁸

The Refinery Municipal Office handled the demolition work. The compensation fees and other clearance expenses were paid from the Municipal Funds, the account in which ground rents and sanitary taxes collected from the houses and shops in the Native Village were deposited.⁹⁰⁹ For the demolition of properties, local coolies were recruited on

⁹⁰² T. L. Jacks to W. C. F. Fairley, December 4th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹⁰³ It was reported that those who did not comply with the demolition plan were sent to the Sheikh's prison in Khorramshahr, known as *Failiyeh*.

⁹⁰⁴ “Petition from the Local residents to the Ministry of Foreign Affairs,” 25 January 1927 (4/Bahman/1305); IRA: 240-9253

⁹⁰⁵ “Telegram from seven residents to the Parliament,” 9 January 1925 (19/Joday/1303); IRA: 240-15694

⁹⁰⁶ Mirza Husayn Shushtari also known as Mirza Husayn khan Munshi (Mustoufi)

⁹⁰⁷ Sheikh Ali Hamadani

⁹⁰⁸ The Khuzestan Karguzar to the Ministry of Foreign Affairs, 25 May 1925 (4/Khordad/1304); IRA: 240-9253

⁹⁰⁹ “Security Department,” *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.81

“acquittance rolls.”⁹¹⁰ In the initial evaluation, company officials had assessed the compensation, or what was termed the “equitable replacement value,” based on the arbitrary estimate of “market value of building materials.” People were allowed to remove the recoverable materials from their condemned buildings. In some cases, the Company provided people with mats to expedite the process of evacuation.⁹¹¹ In addition, people were assigned a plot for resettlement free of charge in the New Village (*Shahr-i-Nau*) which was laid out by the Company to east of the Abadan Village (See Figure 4.15). The site of the new village was owned by the Sheikh. However, the Company subdivided the land, demarcated the plots, and laid out the grid of roads. No design restrictions were enforced in the New Village. The Company also laid water lines, constructed dry latrines and incinerators, and provided sweepers, whereby taking the sanitary matters of the village in its own hands. It was hoped that the “easily accessible” water supply would motivate displaced people to migrate to this new location. The new village was called Ahmadabad after the Iranian Government takeover of Abadan.⁹¹²

A group of displaced residents and Company employees, due to fear of prosecution or losing their jobs, submitted to the unfair conditions. Some others desperately fled Abadan and retreated in Bushire which was located outside the Sheikh's zone of influence. In late October and early November 1924, as Prime Minister Reza Khan was gearing up for the Khuzestan expedition to crack down on the Sheikh, telegraphic petitions from displaced residents streamed to the Government departments and the media in Tehran,

⁹¹⁰ G. F. Elliott to Refinery Accountant. June 25th, 1925, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹¹¹ L. Y. Elliott to Assistant General Manager, November 20th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹¹² G. F. Elliot to N. A. Gass, May 25th, 1925, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

accusing the Company and the Sheikh of ill-treatment of people. For instance, a Kurdish resident of Abadan claimed that the Company has pressured him to undersell his house.⁹¹³ Another resident claimed that, " ...the company has paid 40 tomans [120 rupees] for my house, which I bought myself for 2000 tomans [6000 rupees], and acquired a consent letter from my relative [on my behalf] by the use of torture."⁹¹⁴ In another case, a telegram signed by six former inhabitants accused the Sheikh and the Company of forcible eviction of tenants, obtaining properties by force, and imprisoning people who refused to cooperate.⁹¹⁵ Some asked the Iranian Government to declare the transactions null, and warned that "if you don't stop the Company, Abadan like the islands of Bahrain will separate from Iran."⁹¹⁶ There were also property owners who refused the compensations offered by the Company for their houses. There were twenty-three houses owned by Iraqi Arabs and Jews from Basra, 16 houses owned by Iranians, and two houses owned by Indians whose owners refused the compensations offered by the Company.⁹¹⁷

Petitions accusing the Company of misconduct appeared in the Tehran press, as well. On November 3rd an inquiry made by the resident's Representative appeared in *Tajaddod* (Modernity) Newspaper, giving an account of the situation at Abadan and

⁹¹³ He claimed that he was forced to sell his house which was worth 2,500 Tomans for only 70 Tomans. Ministry of Public Works, October 29th, 1924," Copy of Telegram received from Bushire," *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹¹⁴ "Telegram from a Resident to different government departments and the Parliament," 28 October 1924 (6/Aghrab/1303); IRA: 240-15694

⁹¹⁵ Ministry of Public Works, October 30th, 1924," Copy of Telegram received from Bushire," *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹¹⁶ "Telegram from six residents of Abadan to the Parliament and the Ministry of Public Works," October, 2nd 1924 (10/7/1303); IRA: 240-15694

⁹¹⁷ The majority of Iraqi landlords were Jewish merchants and speculators from Basra who had bought premises at Abadan when property values inflated in 1922-1923. L. Y. Elliott to Assistant General Manager, Mohammerah, "Statement Showing Names of Landlords Possessing Premises in Company's Area Who Have Refused the Compensation Offers For Their Houses," November 20th, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

chastising the Company for such behavior as forcible eviction of people from their properties, confiscation of buildings, and destruction of homes before the expiry of evacuation notices.⁹¹⁸ The Representative had posed two questions to the Company: “...first, which article of the Oil Concession justifies the confiscation of houses and shops in a forcible and unwarranted manner? Second, why did [the Company] demolish the buildings one month prior to the initial deadline indicated in the eviction notices?”⁹¹⁹ William Fairley⁹²⁰, the acting representative of the A.P.O.C. in Tehran, strongly rejected all the allegations, rendered them “unsubstantiated,” and urged the Ministry of Public Works to publicly denounce such “hostile propaganda.”⁹²¹ Fairley linked the outburst of petitions to the residents’ “anxiety” and lack of “clear understanding” of the mechanisms by which Abadan Township Reorganization Scheme was to be implemented.⁹²² He claimed that no complaints were made in the course of the process after people were informed of the economic benefits that the plan would offer.⁹²³ Regarding the confiscation charges, Fairley maintained that all the houses and shops were bought under “mutual arrangement” according to which the company “takes over the premises and makes the payment only after the properties are evacuated.” Trying to gain the upper hand, Fairley criticized the Ministry of Public Works for considering “unverified” petitions and reminded the ministry

⁹¹⁸ “A Question Put up to the Representative of the South Oil Company,” *Tajaddod* Newspaper, November 3rd, 1924 *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹¹⁹ “Petition filed by the resident's envoy in *Tajaddod* Newspaper,” 3rd November 1924 (11/Aghrab/1303) No.57; IRA: 240-15694

⁹²⁰ William Fairley was the company's representative in Tehran from 1922 to 1929. For more on his tenure in Iran see: Harold Peacock, *Mr. Fairley: The Oldest Banker in Glasgow*, (Harold Peacock, 2014), pp.118-125

⁹²¹ Letter from the A.P.O.C's representative in Tehran to the Ministry of Public Works, 6 November 1924 (14/Aghrab/1303), IRA: 240-15694.

⁹²² Fairley wrote: “... the petitions are doubtless the result of initial anxiety displayed by landlords and tenants when the first bazaar rumors of Abadan Town Improvement scheme began to circulate and persons likely to be affected had no clear understanding of what arrangements were going to be made.”

⁹²³ William Fairley to the Ministry of Public Works, 3rd November 1924 (11/Aghrab/1303), IRA: 240-15694

of Articles 3 and 14 of the Oil Concession specifying the guidelines for the land acquisition⁹²⁴ and of the obligations of the Government to the undertaking of the Concession, respectively.⁹²⁵

Removal of Sheikh Khaz'al from Khuzestan: A Turning Point

Reza Khan's expedition to Khuzestan — from November 1924 to January 1925 — which forced Sheikh Khaz'al into submission, gave rise to a series of socio-political transformations on the local and national levels.⁹²⁶ In the wake of the new political environment in Khuzestan, the Ministry of Public Works revisited its old resolution and pushed for the formation of a commission to reach a compromise between the Company and the residents of Abadan along the lines set by “Article 3” of the Oil Concession.⁹²⁷ The Company, however, did not intend to participate in any binding arbitration. Rather, Company officials pursued the policy of “informal” and “friendly” collaboration with local government agents. Moreover, a new transaction procedure was introduced under which deed transfers required the approval of both the Military Governor and the Karguzar.⁹²⁸

⁹²⁴ Article 3 of the D'Arcy Concession reads: “The Government also grants to the concessionaire the right of acquiring all and any other lands or buildings necessary for the said purpose on such conditions as maybe arranged between him and them without their being allowed to make demands of a nature to surcharge the prices ordinarily current for lands situate in their respective localities.”

⁹²⁵ William Fairley to the Ministry of Public Works, 6 November 1924 (14/Aghrab/1303), IRA: 240-15694

⁹²⁶ In the capital, this victory tipped the balance of power in favor of the Prime Minister, setting the stage for his ascendance to the throne. In Khuzestan, the Sheikh's power greatly diminished, and the Military Governor, appointed by the central government, took over the Sheikh's role. With the removal of the Sheikh from the province in April 1925 and the confiscation of his properties, the feudal social system in the region also began to collapse. The British Government, that prior to these events was the main ally and supporter of the Sheikh, suddenly readjusted its policies to the new political structure in Iran— the oil company soon followed suit.

⁹²⁷ With this end in view, letters were sent to the Ministries of War, Interior, and foreign Affairs urging that the Khuzestan Karguzar and the Military Governor should be actively engaged in setting up the commission. The Ministry of Public Works to the Ministry of Foreign Affairs, 6 June 1925 (16/Khordad/1304); IRA: 240-9253

⁹²⁸ T. L. Jacks to F. S. Greenhouse, Anglo-Persian Oil Company. May 8th, 1925, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

The Company insisted that all the deals in the past were fair and in the cases of disputed transactions the Sheikh's delegates were to take the blame, and promised to deal fairly with the remaining landlords and compensate them fully based on the real value of the properties.⁹²⁹ However, Company officials made no concessions to the claims of the displaced residents. Since the Khuzestan Karguzar insisted that some people were forced to undersell their properties, it was agreed that the Company's list of houses and the amounts paid be compared against a similar list that the Karguzar was going to prepare.⁹³⁰

The Karguzar's roster turned out to be quite different from the list provided by the Company. People claimed losses totaling 130,000 rupees, which was far greater than what the Company was willing to pay. After hours of negotiations all agreed that an informal “inquiry committee”—including the Khuzestan Karguzar, the British Deputy Consulate, and a Company's representative—should be established at the Karguzari to meet with the residents from the Company's Area and evaluate precisely the real damages the claimants had incurred.⁹³¹

A New Resolution: The Inquiry Committee

A three-member committee was formed at the Karguzar's office in Khorramshahr and began examining the complaints and compensation claims of people who had been evicted from the Native Village. 139 displaced landlords were identified of whom 20 were Iraqi and Indian subjects. People were asked to present any kind of legal proof describing the buildings they used to occupy. In appraising the demolished structures, the committee

⁹²⁹ The Khuzestan Karguzar to the Ministry of Foreign Affairs, 26 January 1925 (6/Dalv/1303); IRA: 240-15694

⁹³⁰ Ibid

⁹³¹ The Khuzestan Karguzar to the Ministry of Foreign Affairs, 25 March 1925 (5/Hamal/1304); IRA: 240-15694

relied on property deed (*sanad*) values. In the absence of sale documents, local masons were consulted and the value of materials and labor for an average-sized room was taken into consideration.⁹³² A typical brick room was estimated at 175 rupees, and adobe and clay rooms were priced at 88 rupees and 55 rupees, respectively.⁹³³ Overall, 97 individuals were interviewed in seven weeks. Foreign subjects and Company employees, however, did not show up in the hearings. The inquiry committee concluded that the Company owed the displaced residents additional 18000 rupees (equal to 6000 tomans).⁹³⁴

At first, the Company agreed to amicably cooperate with the Karguzar and even to revise the terms of agreements with the property-owners. However, this policy changed

⁹³² It was assumed that owners have taken away the building debris, windows and doors.

⁹³³ Unlike the Company, the Karguzar considered the market value for each building based on the price indicated in the property deed (*sanad*) that the owner presented or according to the “verbal statement” of the property-owner. In the case of properties that had not changed hands, the Karguzar used a standard system of evaluation based on the construction costs estimated for an average-sized room (3’ X 3’) made of a specific construction material. For instance, the value of average size rooms made of mat (sarifa), mud, sundried bricks, and burnt bricks were estimated at ₹55, 88, and 110, respectively. This approach to appraising properties created a considerable gap between the amount of compensation calculated by the Karguzar and the compensation rates assessed by the Company for the same property. For instance, the replacement value paid by the Company for a property comprising five mud rooms was ₹300 while the Karguzar assessed each room at ₹88, recommending a further payment of ₹140 to the owner. For some landlords, the Karguzar suggested extra compensation for forcible eviction, and in some cases recommended a “compassionate gift.” He even recommended paying more compensation to buy out the so-called “agitators.” As a result, the Karguzar’s proposed compensation for the whole buildings was more than twice the amount calculated and paid by the Company. This created disagreement between company officials and the Karguzar. The Karguzar’s proposed rates did not reflect the prices some landlord had paid for their properties. For instance, the market price for one sarifa before 1924 was around ₹100, while the rate assessed by the Karguzar for one sarifa was ₹55. Company officials rejected the Karguzar’s verdicts on various grounds. They argued that in most cases the Karguzar has relied only on the “verbal statement” of the property owners rather than on “documentary evidence,” that the karguzar has not taken into consideration the physical conditions of the properties, that any payment beyond the fair replacement value evaluated for each property should be disregarded, and that the Karguzar has considered the Rent Assessment List of 1923 in re-evaluating the properties but since that date a great deal of alteration and subdivision happened in the Native Village and the list did not reflect that latest status of properties. The List of 87 property-owners complaining against the Company, November 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723. See also: The Khuzestan Karguzar to the Ministry of Foreign Affairs, 2 May 1925 (12/Ordibehesht/1304); IRA: 240-15694. As of this date, for the fifty seven residents interviewed by the committee the total amount of 8128 Rupees was calculated.

⁹³⁴ The Khuzestan Karguzar to the Ministry of Foreign Affairs, 21 May 1925 (31/Ordibehesht/1304); IRA: 240-9253

when the Karguzar announced the findings of the investigation.⁹³⁵ After almost one week, T. L. Jacks, the joint general manager, claimed that Iranian landlords were not entitled to additional compensation, and the Company could not be held responsible for any misconduct on the Sheikh's behalf. Jacks also suggested that the dispute should be handled in Tehran between the representative of the A.P.O.C. and Iranian officials.⁹³⁶ Accusing the Karguzar of mixing personal interests with the investigation and of posing impediments to prospective negotiations with Iranian property-owners, the Company used its political leverage through the British Legation in Tehran to replace the Karguzar by another official who would show more “consideration for the Company’s interests.”⁹³⁷ This campaign eventually paid off and in July 1925 the new Karguzar was sent to Khorramshahr.⁹³⁸

Public Resilience in the Post-Khaz'al Era

Public opposition to the company's intervention in Abadan took momentum after the ouster of the Sheikh. While the inquiry committee was meeting with the claimants at the Khuzestan Karguzari, the Company began to recruit forces from the Military Governor to collect “municipality” taxes from the remaining residents of the neighborhood. Emboldened by the political reorganization in Khuzestan, the Iranian residents of the Native Village stopped paying the monthly ground rents and sanitation taxes from January

⁹³⁵ H. E. Nichols to the General Manager, Anglo-Persian Oil Company, Khorramshahr. March 4th, 1925, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹³⁶ The Khuzestan Karguzar to the Ministry of Foreign Affairs, 29 May 1925 (8/Khordad/1304); IRA: 240-9253

⁹³⁷ Moreover, Company managers believed that only the Military Governor should be authorized to handle the process of evacuation and deed transfer. H. E. Nichols to the General Manager, Anglo-Persian Oil Company, Khorramshahr. June 18th, 1925, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹³⁸ Heshmat-es-Saltaneh replaced Haji Mirza Mehdi Khan Moghadam as the Agent of the Ministry of Foreign Affairs (Karguzar) in Khuzestan. The Ministry of Foreign Affairs to the Ministry of Public Works, 18 July 1925 (27/Tir/1304); IRA: 240-9253.

1925, which by May 1925 had amounted to ₹5000. People claimed that the Village was within the Iranian territory and subject to the Iranian taxation law: "...Lands in Abadan are public domain [now] and we pay taxes only to the Iranian Government or to the [Abadan] Municipality. The company is not entitled to enjoy commercial interests other than oil in Abadan."⁹³⁹ With the introduction of property taxation (*Mustaqilat*) and other financial reforms by the Iranian Government in 1925, residents of Abadan found solid excuse for nonpayment of ground rents and sanitary taxes to the Company.⁹⁴⁰ The occupation of public spaces, or *bast*, which was a traditional form of public protest in Iran, was also used by the displaced. Having been informed of the Company's reluctance to pay extra compensation, a group of former residents of Abadan took refuge at the telegraph house in Khorramshahr, urging the Government to intervene.⁹⁴¹ Claimants agreed to end their occupation only when the new Karguzar made a promise to resume negotiations with the Company on the following day.⁹⁴² People also held daily demonstrations in front of the Khuzestan Agency (*Karguzari*) and questioned the new Karguzar about their claims. There were also reports of several attacks on British subjects in Abadan.⁹⁴³ Meanwhile, the

⁹³⁹ The Khuzestan Karguzar to the Ministry of Foreign Affairs, 14 April 1925 (25/Hamal/1304); IRA: 240-15694

⁹⁴⁰ A conflict of interest between the A.P.O.C. and the financial arm of the central government strengthened the residents' position. Since the deposition of Sheikh Khaz'al from Khuzestan in early 1925, the Ministry of Finance was endeavoring to reintegrate the region into the national economy by imposing centralized regulations and registering all the potential taxable sources in the province, including the shops in the Abadan Bazaar. When shopkeepers complained about the taxes levied by the company, the Ministry of Finance did not hesitate to make an inquiry from the Ministry of Foreign Affairs about the company's legal rights to collect taxes. The Ministry of Finance to the Ministry of Foreign Affairs, 27 June 1925 (6/Tir/1304); IRA: 240-9253. See also F. S. Greenhouse to the General Manager, Khorramshahr. July 25th, 1925. *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

⁹⁴¹ Karguzar to the Ministry of Foreign Affairs, 13 July 1925 (22/Tir/1304); IRA: 240-9253

⁹⁴² Karguzar to the Ministry of Foreign Affairs, 14 July 1925 (23/Tir/1304); IRA: 240-9253

⁹⁴³ Karguzar to the Ministry of Foreign Affairs, 13 July 1925 (19/Amordad/1304); IRA: 240-9253

residents' Representative kept pressing the Ministry of Public Works about the outcomes of the inquiry committee.⁹⁴⁴

Tehran Commission

On the 2nd of August 1925 a new commission convened in Tehran to settle the tax and compensation disputes in Abadan. It was comprised of F. S. Greenhouse, the acting Company Representative in Tehran, Taimurtash, the Minister of Public Works, and the representatives of the Ministries of Foreign Affairs and Interior. As illustrated by the contradictory reports given by British and Iranian participants, the commission could not help eliminate the divergent views over the critical issues. According to F. S. Greenhouse, the commission acknowledged that certain houses in the Company's Area had to be demolished on grounds of public health concerns and that no further inquiries were deemed necessary in the case of houses already been paid for and destroyed.⁹⁴⁵

The Ministry of Public Works, however, stressed the importance of finding a solution to the claims of the displaced people as stipulated under “Article 3” of the Oil Concession.⁹⁴⁶ Furthermore, the committee decided that the Military Governor should consider the arguments of both sides and then propose a reconciliatory plan to soothe the public resentment.⁹⁴⁷ In the case of the tax dispute, Greenhouse claimed, it was agreed that the collected money was spent on the sanitary needs of the Native Village and the commission recommended that the existing charges be continued, and in the case of refusal on the part of residents, a commissionaire be provided by the Military Governor to collect

⁹⁴⁴ Abdullah Atigh to the Ministry of Public Works, 18 October 1925 (26/Meh/1304); IRA: 240-9253

⁹⁴⁵ F. S. Greenhouse to the Ministry of Public Works, 6 Aug 1925 (17/Amordad/1304); IRA: 240-15694

⁹⁴⁶ The Ministry of Public Works to F. S. Greenhouse, 24 Aug 1925 (2/Shahrivar/1304); IRA: 240-15694

⁹⁴⁷ The Ministry of Public Works to F. S. Greenhouse, 12 Aug 1925 (21/Amordad/1304); IRA: 240-15694

the taxes.⁹⁴⁸ The Minister of Public Works, however, offered a different understanding of the manner in which the meeting framed the tax dispute. Taimurtash stipulated that the Company had to demonstrate documentary proof of ownership of the lands in the Native Village before the representatives of the Military Governor begin collecting the ground rents. As for the sanitary charges, the Company was required to report to the Ministries of Interior and Public Works the total sanitary expenses of the neighborhood as well as the fair share of the local residents to be collected by government commissioners.⁹⁴⁹

Doom of the Petitions and the Final Phase of Demolition

Although the Ministry of Public Works formally briefed the ministries of Foreign Affairs and War about the outcomes of the Tehran commission⁹⁵⁰, it is unclear why the Military Governor of Khuzestan failed to work on a reconciliatory scheme—as stipulated by the resolution. The case resurfaced when the new Minister of Public Works replaced Taimurtash, who following the ascension of the new Monarch to the throne was promoted to the Ministry of Court. The fact that following the Tehran commission no dossier existed in the archives of the Ministry of Public Works on the final resolution of the disputes even caused confusion for the commissioner who was preparing a report on the case, leading him to mistakenly assume that “Taimurtash has concluded the case and the complaints were thoroughly dealt with.”⁹⁵¹

⁹⁴⁸ F. S. Greenhouse to the Ministry of Public Works, 6 Aug 1925 (17/Amordad/1304); IRA: 240-15694

⁹⁴⁹ Disappointed with Taimurtash's distinct resolution, Greenhouse lamented that the Minister's suggested procedure would involve considerable delay and would prevent the Company from sanitizing “a small section of its enclosure. Disregarding Taimurtash's account, Company officials presented the Greenhouse's report as the “outcome” of the commission and stipulated that the case of demolished buildings was concluded, but the Company would consult with Iranian officials in its future undertakings.” The Ministry of Public Works to F. S. Greenhouse, 12 Aug 1925 (21/Amordad/1304); IRA: 240-15694

⁹⁵⁰ The Ministry of Public Works to the Ministry of Foreign Affairs, 15 October 1925 (23/Mehr/1304); IRA: 240-15694

⁹⁵¹ Report prepared for the Minister of Public Works, 3 January 1926 (13/Dey/1304); IRA: 240-15694

With the assistance of the new Karguzar and the Military Governor, the Company proceeded “smoothly” and “satisfactorily” with the demolition of the Native Village. Furthermore, thanks to the Tehran negotiations, the question of reviewing the claims and compensations was technically shelved forever. Between August 1924 and March 1925, in addition to 6 artisan blocks, 30 percent of the Company’s Village was leveled. The compensation paid to owners amounted to more than ₹27,500.⁹⁵² On average, 20 structures were purchased and demolished per week. As of September 1925, almost 75 percent of the village was demolished at a total cost of ₹175,000. It was estimated that a further expenditure of ₹60,000 was required to compensate the owners of the remaining structures including 121 houses, 7 masonry shops, and 42 cabin shops.⁹⁵³

In early 1926, the residents' Representative sought to seize the window of opportunity opened up by the establishment of the Pahlavi Dynasty and the changes in the Ministry of Public Works. Urging the new Minister to review the “thick dossier” on the case of conflicts in Abadan, the Representative called for follow-up actions on the compensation scheme recommended by the inquiry committee. The Representative maintained that due to the weakness of the Qajars the residents’ total losses that amounted to 140000 rupees were reduced to 24000 Rupees.⁹⁵⁴ In response to the inquiry of the Ministry of Public Works, the Ministry of War claimed that no record about the case of disputes existed in their archives, and as such no order was given to the Governor of

⁹⁵² “Security Department,” *Anglo-Persian Oil Company Limited: Annual Report: 1st April 1924 to 31st March 1925*, BP Archives, ArcRef 54359, p.81

⁹⁵³ “*Local Conditions*,” *September 1925. General Manager’s Monthly Report, Abadan, 1925*, BP Archive ArcRef 5483

⁹⁵⁴ Petition from Abdullah Atigh to the Ministry of Public Works, 5 January 1926 (15/Dey/1304); IRA: 240-15694

Khuzestan to take actions.⁹⁵⁵ In the following months dozens of petitions were lodged by the residents' Representative to the Ministries of Foreign Affairs and Public Works regarding the claims of the residents of Abadan which as archives show yielded no results. On the last day of December 1927, the Representative pleaded Reza Shah to help break the deadlock: "the remaining buildings on the western side of the town [in the Native Village] have not been purchased by the Company and were left in the state of abandonment...since petitions achieved no results, people have asked the Government to award them the ownership of their properties...so that no one would prohibit them from trading or renovating the buildings."⁹⁵⁶ When asked about the residents' claims, the A.P.O.C. representative in Tehran suggested that the Ministry of Public works should discuss the matter with the local government authorities in Khorramshahr who approved the demolition of huts, as they were viewed as a source of infectious diseases, and also assisted with the compensation scheme. "But it is of course difficult to consider claims submitted some years after all claims have been settled," the representative stipulated.⁹⁵⁷

4.4.2 Improvements to Abadan Town

Since the early 1920s, the Company developed plans to relocate the entire Abadan Village to a new site in the middle of the island within a safe distance from the Refinery. Such schemes looked implausible due to the high rebuilding costs and the initial compensation rates estimated for more than 500 mat huts. As mentioned in the previous chapter, the

⁹⁵⁵ Letter from the Ministry of War to the Ministry of Public Works, 18 February 1926 (29/Bahman/1304); IRA: 240-15694

⁹⁵⁶ Letter from Abdullah Atigh to the Court of Reza Shah, 31 December 1927 (9/Day/1306); IRA: 240-15694

⁹⁵⁷ Letter from F. S. Greenhouse to the Ministry of Public Works, 14 January 1928 (23/Dey/1306); IRA: 240-15694

Sheikh derived large amounts of tax revenue from the Bazaar and different attempts by the Company to take it over from him were not successful. In the end, the Managing Director decided that instead of rebuilding the Abadan Village, the Company should take charge of its sanitation.⁹⁵⁸

Not only did Company officials view the Abadan Village as a public health threat, they were also worried about the Village's fast expansion in every direction, in particular towards the Central Stores and the Bawarda Tank Farm. The Company's land acquisition strategy in the 1920s was also aimed at containing the Village within its existing limits. The proximity of the Sheikh's Village to the Refinery was also regarded by Company medical officials as a risk factor in spreading epidemics. Therefore, various growth management strategies were contemplated to protect the oil establishment. Moreover, the increased Bazaar prices were blamed for the mounting workforce discontents and the demands for higher wages. In the wake of the 1923 epidemics, drastic reforms were prepared to protect the Refinery against the "incursion" of the Abadan Village. Inspired by the colonial conventions, the Chief Medical Officer suggested that a wall be constructed between the Abadan Village and the Company's territory.⁹⁵⁹

The idea of using a physical barrier between the Refinery Area and the Abadan Village morphed into a plan to create an open buffer zone between the two entities. A tentative agreement was made between the Resident Director and the Sheikh, whereby the Company agreed to design a model township south of the Abadan Village and to lay out major roads. Plans were also developed to build "standard" housing units for the new

⁹⁵⁸ H. E. Nichols, April 25th, 1921, *Notes on a Visit to Persia, Mesopotamia and Egypt*. BP Archives, ArcRef 28604/002

⁹⁵⁹ Dr. Young, October 1st, 1923, "Sanitary Conditions at Abadan and Schemes for Improvement," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

village at the Sheikh's expense.⁹⁶⁰ In return, the Sheikh agreed to tear down ramshackle shops and buildings in the Abadan Village and remove the bazaar to the new location. He intended to turn the new township into an Arab Village, similar to a settlement that he had laid out in Ahwaz a few years earlier.⁹⁶¹ As part of this arrangement, the Company had planned to acquire the cleared land in the Abadan Village and use it as a "neutral zone" or "safety zone."⁹⁶² Palliative schemes were also developed to improve public health in the Abadan Village. For instance, the Sheikh agreed to allocate ₹1000 per month to the Abadan Municipality for enhancing sanitary conditions and to hand over the management of public health in the Village to the Company.⁹⁶³ Similar to the Native Village, a European Sanitary Inspector was appointed to the Abadan Village.⁹⁶⁴

Drawing on these efforts, Abadan Township Reorganization Scheme recommended several improvements to Abadan Town. Tackling overcrowding was one of the tools that Temple and Wittet proposed to check the outbreak of epidemics and enhance public health at Abadan Town. The colonial town planners proposed that no more than 10 houses per acre should be allowed in the town. As a result, Abadan Town had to grow outward in specified directions.⁹⁶⁵ As early as August 1924, evacuations were carried out by order of

⁹⁶⁰ Jas Jameson to Sir Arnold Wilson, January 21st, 1924, "Village Construction and Sanitation," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁹⁶¹ Sir Arnold Wilson to Jas Jameson, January 23rd, 1924, "Village Construction and Sanitation," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁹⁶² T. L. Jacks to Sequat-ul-Mulk Governor General of Khuzestan, July 23rd, 1924, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹⁶³ The Sheikh also put 30 sweepers who were in charge of sewage disposal in his territory under the management of the Company. Mohammerah to APOC, October 31st, 1923, "Sanitary Conditions at Abadan and Schemes for Improvement," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁹⁶⁴ Dr. Young, December 31st, 1923, "Sanitary Conditions at Abadan and Schemes for Improvement," *Reports to the Board by Sir John Cadman 1923 to 1924*, BP Archives, ArcRef 70209

⁹⁶⁵ T. L. Jacks to the Director, London. August 3rd, 1926. "Abadan Township Reorganization Scheme. Report of Messrs. Temple and Wittet. Various Minor Recommendations," *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

the Sheikh as part of the plans to improve sanitary conditions in the Town.⁹⁶⁶ Older cemeteries within Abadan Town were closed and existing cemeteries, such as the Christian cemetery, were raised two feet to allow for efficient drainage. No more burials were allowed within the limits of Abadan Town.⁹⁶⁷ Furthermore, Abadan's foreshore within 30 yards of the river was cleared, and hutments and cattle were removed from this area.⁹⁶⁸ The other urban reforms introduced in Abadan Town included a new model market, a "modern" municipality, a new township, road widening, and new urban infrastructure. As I will discuss in this section, interventions in Abadan Town became a political venue on which power struggle over oil manifested itself.

4.4.2.1 Model Bazaar. As discussed earlier, the Omnibus Scheme called for the reorganization of the Abadan Bazaar. As Figure 4.15 illustrates, the site of the new bazaar was selected with a view to diverging Abadan's center of gravity from the "insanitary lower section of the Sheikh's Village" to a site close to the new road connecting the "model" villages to the Refinery's new gate. For the Company such an urban artifact, designed for the sale of "foodstuffs," was "as important as the provision of a good water supply."⁹⁶⁹ The new bazaar was deemed necessary for relieving congestion, improving sanitation, control of prices, and prevention of profiteering in the town. Moreover, the new bazaar was also

⁹⁶⁶ "Staff," August 1924. *General Manager's Monthly Report, Abadan, August-December 1924*, BP Archive ArcRef 5482

⁹⁶⁷ T. L. Jacks to the Director, London. August 3rd, 1926. "Abadan Township Reorganization Scheme. Report of Messrs. Temple and Wittet. Various Minor Recommendations," *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

⁹⁶⁸ T. L. Jacks to the Director, London. August 3rd, 1926. "Abadan Township Reorganization Scheme. Report of Messrs. Temple and Wittet. Various Minor Recommendations," *Abadan Township Reconstruction, 1921-1924*, BP Archives, ArcRef 68723

⁹⁶⁹ F. S. Greenhouse to the Ministry of Public Works, 14 September 1925 (22/Shahrivar/1304); IRA: 240-15694

conceptualized as a model market aimed at socializing the locales into consumption culture and modern ways of life.⁹⁷⁰

In the beginning, the bazaar project was part of a larger sanitation package developed in partnership with the Sheikh. As part of the land purchase agreement between the Sheikh and the Company in March 1924, the former party agreed to spend £11,000 on the construction of the new bazaar and other sanitary improvements to the Abadan Village. In return, the Company agreed to contribute £3,000 to the construction of the bazaar and spend up to £100 per month on the sanitation efforts at Abadan. The Company also agreed to supply purified water to the village, provide street lighting, and surface the major roads.⁹⁷¹ Although by October 1924 the site designated for the bazaar had been leveled by the Sheikh administration and the construction materials were ordered by the Company, the political restructuring in Khuzestan put the project on hold.⁹⁷² The undertaking was further delayed as Company officials decided to wait until the demolition and compensation disputes were completely resolved.⁹⁷³

In late summer 1925, the bazaar project returned to the Company's political agenda — perhaps for several reasons. First and foremost, the rearrangement of the food supply system in Abadan seemed inevitable in the wake of the massive demolition of shops and the disruption of the old monopoly system under the Sheikh administration. In fact, Company officials feared that the acute shortage of major food staples in winter could

⁹⁷⁰ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.148-149

⁹⁷¹ John Cadman, January 1925, "Refinery Minutes: Item 5. Land," *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.4

⁹⁷² "Copy of the Cabinet Ruling No. 7904," 5 October 1925 (13/Mehr/1304); IRA: 240-29099

⁹⁷³ The Khuzestan Karguzar to the Ministry of Foreign Affairs, 29 April 1925 (9/Ordibehesht/1304); IRA: 240-9253

cause further labor discontent and agitation in Abadan.⁹⁷⁴ Moreover, cost of living and rate of manual labor were also believed to be tied to the bazaar prices. Company officials hoped that the transfer of power and the abolition of monopolies would lower the cost of living for Indians and local employees and eventually cut the rate of coolie labor. In June 1925, only a few months after the introduction of the new regime in Khuzestan, food prices at Abadan dropped to a level equal to the rates at other major cities in the region. Despite a momentary decrease in food prices, new factors began to counterbalance the changes. For instance, in the early 1925, the Ministry of Finance introduced a five-percent property tax at Abadan. At the same time, the Iranian Parliament passed a new law authorizing the monopoly of tea and sugar by the Central Government.⁹⁷⁵ At the local level, factors such as crops failure, military looting, and Arab tribal disturbances following the Sheikh's removal to Tehran as well as new dates taxation were reported to have had adverse impacts on food costs.⁹⁷⁶

Under these circumstances, the Company decided to get permission from the Iranian Government to build the new bazaar on its own initiative. However, the application for the construction of the bazaar was overshadowed by the politics and the deep public resentment surrounding the demolition and rebuilding of Abadan and turned into another contentious urban reform program. In August 1925, Greenhouse, the Acting Representative of the Company in Tehran, wrote to Taimurtash, Minister of Public Works, stressing the necessity of erecting a "big new bazaar" before the onset of the cold weather,

⁹⁷⁴ F. S. Greenhouse to the Ministry of Public Works, 28 September 1925 (6/Mehr/1304); IRA: 240-15694

⁹⁷⁵ H. E. Nichols to T. L. Jacks, June 4th, 1925. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.2*, BP Archive ArcRef 54498, P.642

⁹⁷⁶ For instance, following the bad harvest in 1925, the prices of flour increased at Abadan. H. E. Nichols to T. L. Jacks, March 25th, 1926. *Anglo-Persian Oil Company Limited: Confidential letter Book, No.2*, BP Archive ArcRef 54499, P.83

when “the danger from diseases would pose serious consequences.”⁹⁷⁷ He also stressed the urgency for a bazaar in light of constant public requests, suggesting that the Anglo-Persian was willing to undertake the project at its own expense on conditions to be mutually arranged between the Iranian Government and the Company.⁹⁷⁸ To retain a total control over the management of the new market, Company officials considered setting regulations on sanitation, overcrowding, types of businesses, and provision of foodstuffs. Furthermore, it was decided to charge rentals at ten percent on capital expenditure and grant “first refusal” to the shopkeepers displaced from the old bazaar.⁹⁷⁹

The Company also submitted to the Ministry of Public Works a plan and a proposal for the construction of the new bazaar.⁹⁸⁰ As a Company propagandist put it, the new market was designed as “solidly built rows of shops with open fronts, of the general [Iranian] type” and marked “a great advance, in solidarity and cleanliness, on ramshackle, makeshift bazaar buildings frequently to be met with in the East.”⁹⁸¹ The architecture of the new market contrasted with the configuration of the old Abadan Bazaar. As Figure 4.25 shows, the proposed market featured a grid of fifty-foot-wide roads and forty-foot-wide alleys and consisted of eight blocks of shops. The bazaar was designed based on the sanitary principles in the colonial setting that ensured the provision of air, light, water, and “pucka” drainage. Unlike the “ill-ventilated and dark” alleys in the old bazaar, the new

⁹⁷⁷ F. S. Greenhouse to the Ministry of Public Works, 6 Aug 1925 (17/Amordad/1304); IRA: 240-15694

⁹⁷⁸ F. S. Greenhouse to the Ministry of Public Works, 14 September 1925 (22/Shahrivar/1304); IRA: 240-15694

⁹⁷⁹ A. T. Wilson to H. E. Nichols, August 11th, 1925. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹⁸⁰ F. S. Greenhouse to The General Manager, Khorramshahr, October 7th, 1925, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹⁸¹ John Woolfenden Williamson, *In a Persian Oil Field: A Study in Scientific and Industrial Development*. (London: Ernest Benn Limited, Second Edition (Revised and Enlarged), 1930), p.148-149

bazaar compound was surrounded by open land on all sides to facilitate the flow of air and maximize the penetration of sun light. Inspired by traditional Iranian bazaars, each block was comprised of a central “covered way” lined with two rows of shops. Each shop included a rear yard facing an alley. As in the model villages, the alleys functioned as conduits of sanitation infrastructure. In the new market, each alley accommodated a ten-seat latrine on one end and washing facilities on the other. It also accommodated surface drains which connected to the drainage channels that ran around the bazaar compound. In order to facilitate supervision and maximize air circulation, the meat, vegetable, and poultry shops were located in separate stalls at the southern end of the market.⁹⁸²

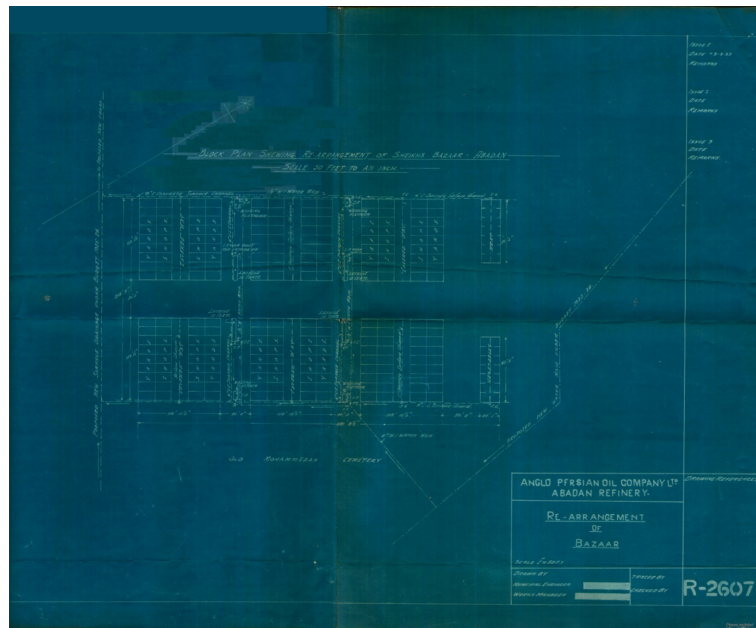


Figure 4.25 Initial site plan of the “model” bazaar in Abadan Town. Inspired by the colonial practices, the new market was designed to maximize circulation of air and facilitate sunlight penetration. It also connected to the sanitation infrastructure network, such as water, surface drainage, and waste disposal systems, which were provided for Abadan Town.

Source: Iranian National Archives, IRA: 240-29099

⁹⁸² John Cadman, January 1925, “Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924,” BP Archives, ArcRef 68331, p.48

Negotiations began between the Company Representative in Tehran and the Ministry of Public Works to develop a contractual agreement. Greenhouse tried to assure the Minister of Public Works that the Company had no vested interest in the bazaar, yet wished to help people and provide accommodation for the “poorer classes of shopkeepers including meat, fish, and vegetable sellers.”⁹⁸³ Based on the recommendation of the Minister of Public Works, the Iranian Council of Ministers passed a ruling on October 5, 1925, whereby granting the Company the permission to construct the new bazaar under specific circumstances.⁹⁸⁴ For instance, the land was considered state ground, and the Company was required to pay ground rent and *Mustaqallat* (property) taxes to the Iranian Government; the architectural and technical documents for the bazaar compound and the shops were to be approved by the Military Governor; and, the Company was required to devise a consistent system of monthly rental for the new shops which would not exceed seven percent profit on capital expenditure.⁹⁸⁵

The Representative of the Company called for modifying some of the articles, which in his views conflicted with the Oil Concession, and demanded clarification on the financial terms.⁹⁸⁶ Other Company officials in London and Khorramshahr regarded the Cabinet Ruling provisions unacceptable, threatening to abandon the scheme altogether.⁹⁸⁷

The Minister of Public Works agreed to revise some articles. For instance, since the land

⁹⁸³ Greenhouse to Taimurtash, 28 September 1925 (6/Mehr/1304) and 7 October 1925 (15/Mehr/1304); IRA: 240-15694

⁹⁸⁴ “Cabinet Ruling No. 7904,” 5 October 1925 (13/Mehr/1304); IRA: 240-29099

⁹⁸⁵ Furthermore, the list of expenses spent on the construction of the bazaar had to be approved by the representative of the Government or by the Military Governor. F. S. Greenhouse to The General Manager, Khorramshahr, October 7th, 1925, “Copy of the Cabinet Ruling No. 7904 dated 13 Mehr 1304.” *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹⁸⁶ F. S. Greenhouse to the Ministry of Public Works, October 7th, 1925. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹⁸⁷ H. E. Nichols to W. C. F. Fairley, November 19th, 1925. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

was State property (*Khaleseh*), the Minister agreed to grant it to the Company free of charge. Moreover, he accepted to increase the allowable interest on expenditure to eight percent, and the tenants were required to pay for electricity, water supply, and sanitation fees.⁹⁸⁸

The Council of Ministers discussed the revised agreement in their first meeting following the coronation of Reza Shah on December 15, 1925. Prime Minister Ghavam suggested that the new conditions in the agreement be approved by Arthur Millspaugh⁹⁸⁹, the Administrator General of Finances.⁹⁹⁰ In particular, the Ministry of Finance was asked to appraise the commercial value of the land that the Company was seeking to acquire free of charge.⁹⁹¹ In August 1926 a delegation from the Ministry of Finance was dispatched to Khuzestan to investigate firsthand the activities of the Company in both Masjid-i-Sulaiman and Abadan. Following the visit to the region, the chief of the commission⁹⁹² stipulated that per Article 3 of the Oil Concession the Company was not entitled to gratuitously be granted public domain lands for economic purposes other than exploitation of oil.⁹⁹³

⁹⁸⁸ The Ministry of Public Works to the Ministry of Finance, March 3rd, 1925. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹⁸⁹ Arthur C. Millspaugh, American economist and advisor to the State Department, served as the head of the American Mission to Iran between 1922 and 1927 to help the country restructure its fiscal and economic system which was crippled by accumulated debts and administrative inefficiency. Extensive authority was delegated to Dr. Millspaugh as Administrator General of Finances, including a virtual veto over all government expenditures. Millspaugh and his team introduced a set of progressive reforms particularly in the fields of tax collection, control and budgeting of government expenses, revival of commerce and industry, and designation of funds for State construction projects. For more information on the American Mission in Iran see: DeNovo, John A., *American Interests and Policies in the Middle East, 1900-1939*, University of Minnesota, 1963.

⁹⁹⁰ Letter from Prime Minister to the Ministry of Public Works, 14 January 1926 (14/Dey/1304); IRA: 240-15694

⁹⁹¹ The Ministry of Finance to the Ministry of Foreign Affairs, 4 January 1926 (14/Baman/1304); IRA: 240-9253

⁹⁹² Mirza Seyed Ali Khan Nasr

⁹⁹³ Report of the Chief of the Mission to Khuzestan concerning the A.P.O.C., August 1926 (Mordad 1305); IRA: 240-29099

Moreover, the sense of mistrust surrounding the Company's activities in Abadan overshadowed the bazaar project. Local shopkeepers viewed the rent calculation formula proposed by the Company with suspicion. Faced with fierce public opposition, Company and Iranian officials were forced to find alternative paths to build the new market. In early January 1926, the office of the A.P.O.C. in Khorramshahr and the Provincial Director of Finance in Khuzestan began to seek applications from potential local developers.⁹⁹⁴ Eventually, Mirza Hussein Movaqar Bushiri, a local merchant, notable, and Parliament Deputy for Abadan, approached the Provincial Director of Finance with a proposal to build the new bazaar at Abadan. The local merchant had planned to build the bazaar in four phases. The Provincial Director of Finance, however, rejected the proposal, insisting that the new market should be built in its entirety at once. Encountering a new deadlock in the execution of the bazaar project, the Company decided to finance almost half the cost of the project estimated approximately at ₹75,000 (equal to £5600). The Company also withdrew its application to build the bazaar on its own right.⁹⁹⁵

In August 1926, the Public Domain Administration issued an order authorizing Mirza Hossein Movaqar to take steps for erection of the new market.⁹⁹⁶ However, the obscurities surrounding the content of the development proposal and the form of finance raised concerns among Iranian officials. For instance, Mirza Movaqar agreed to build the bazaar based on the Company's proposed plan, while keeping the rents at the “present”

⁹⁹⁴ Dispatch from the Khuzestan Agency of the Ministry of Finance to the Ministry of Finance, 19 May 1926 (28/Ordibehesht/1305); IRA: 240-29099

⁹⁹⁵ E. H. O. Elkington to Harold Homan, March 26th, 1926. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

⁹⁹⁶ Correspondence from Administrator General of Finances to the acting representative of the A.P.O.C. in Tehran, 30 August 1926 (7/Shahrivar/1305); IRA: 240-29099

rates. The Director of Internal Revenues⁹⁹⁷ argued that unlike the initial agreement with the Company “the mechanism of rent calculation vis-à-vis the capital expended is not clear in Movaghar's proposal.” This was problematic, the Director maintained, because “rents of shops in Abadan could get as high as twenty-five Tomans per month.”⁹⁹⁸ Eventually, Mirza Muvaqar succeeded in securing the permit from the Government to build the new bazaar that was initially conceived by the Company. In October 1926 the second block of the bazaar was under construction.⁹⁹⁹

4.4.2.2 The Creeks. In the midst of the negotiations with the Iranian Government regarding the new bazaar, the Company began to dig a canal across the recently cleared land on the northwestern end of the Abadan Village.¹⁰⁰⁰ As discussed in the previous section, this canal was to serve as an element of the cordon sanitaire or the “safety zone” separating the Abadan Village from the oil establishment. This undertaking was not without a precedent in Abadan. In fact, the Company had built a similar creek in spring 1924 on the southern side of the Abadan Village next to its major depot, Central Stores Area. This straight conduit, which came to be known as the Central Stores Creek, was 300 cubits¹⁰⁰¹ (450 feet) in length and ran perpendicular to the Shatt. At high tides, the Shatt would flow into the Creek, enabling sailboats to navigate through it and deliver goods along the western border of the Central Stores Area.¹⁰⁰² In other words, this waterway served as a complementary transportation mode to a network of railroads crisscrossing the Central

⁹⁹⁷ Abdulhussein Diba

⁹⁹⁸ The Director of Internal Revenues to the Administrator General of the Finances, 13/November/1926 (21/Aban/1305); IRA: 240-29099

⁹⁹⁹ “Security,” October 1926. *General Manager’s Monthly Report, Abadan, 1926*, BP Archive ArcRef 5484

¹⁰⁰⁰ The Ministry of Finance to the Ministry of Foreign Affairs, 17 July 1927 (25/Tir/1306); IRA: 240-9253

¹⁰⁰¹ Zar'a (زرع)

¹⁰⁰² The Ministry of Finance to the Ministry of Foreign Affairs, 17 July 1927 (25/Tir/1306); IRA: 240-9253

Stores Area. Perhaps Central Stores Creek was also considered a technical solution to the problem of the island's natural drainage system which in the company's view was dysfunctional due to the town's position on lowlands.¹⁰⁰³ Figure 4.26 shows how the construction of this canal and the creek dredged in 1925 on the northern side curtailed the lateral expansion of the Abadan Village and Bazaar and delineated the southern and northern edges of the Village.

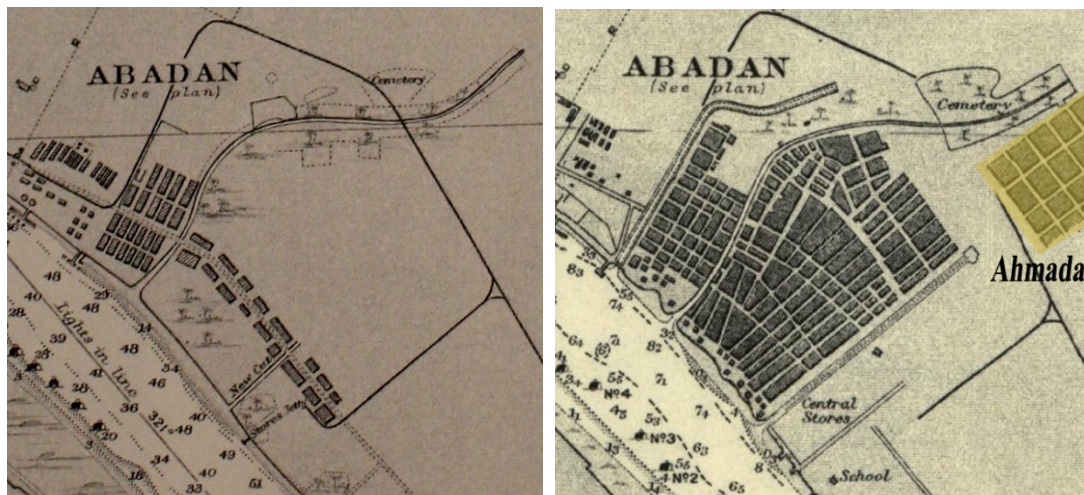


Figure 4.26 Formation of the northern and southern edges of Abadan Town by the creeks. Left: Map of Abadan with the southern creek under construction in 1924. As the map shows, this watercourse was labeled as “New Cut.” Right: Map of Abadan with the northern and southern creeks completed in 1931.

(Source: British Library)

Soon after the Company launched the construction of the second canal in November 1925, it became evident that the projected course of the conduit — which was to replace a wall temporarily demarcating a segment of the Company's eastern border and the Abadan Village — would coincide with a row of makeshift structures that, in the light of the 1924

¹⁰⁰³ T. L. Jacks to the Karguzar, 20 August 1924; IRA: 240-15694

demolition work, had mushroomed on the western periphery of the Village. The builders of these huts and shops were a group of displaced residents from the Company's bazaar who due to the lack of better options had resettled along a strip of land in an area known as *Sibeh Mohammad*. T. L. Jacks, the Company General Manager, called on the Ministry of Interior and the Military Governor of Abadan to forbid the growth of such settlements and prohibit the issuance of building permits unless they could make sure that the given property was not in the Company's territory. To this end, the Company appointed a survey engineer to collaborate with Iranian officials and demarcate the boundary between the Company's properties and the Abadan Village. The General Manager also warned that the structures erected in that area should be removed, for "the vibration from the mechanical equipment used to widen and deepen the creek might cause physical and mortal damages to these shaky settlements..."¹⁰⁰⁴

In winter 1927, only after the construction of the northern creek and its suspension bridge was completed did Iranian officials begin to speculate about the implications of the canal projects for the Abadan Village. Criticizing the waterways for blocking the growth of the town and restraining its inhabitants, the Karguzar accused the Company of undertaking the canals without due permission from the Iranian Government and of funding the construction from Iran's oil royalties.¹⁰⁰⁵ The Chief of the Abadan Municipality also expressed his disapproval of the creeks for making the town with 25,000 inhabitants restricted and overcrowded. The canals, the Municipality Chief stated, coupled with the Company's policy of prohibiting people from settling beyond the waterways had caused

¹⁰⁰⁴ The A.P.O.C. to the Ministry of Interior, 8 December 1925 (17/Azar/1304); IRA: 240-15694

¹⁰⁰⁵ Karguzar in Bandar Abbas to the Ministry of Foreign Affairs, 9 March 1927 (17/Esfand/1305); IRA: 240-9253

fierce competition for land inside the town.¹⁰⁰⁶ Calling for the resettlement of the population beyond the existing city proper, the Municipality Chief urged that the Company's further appropriation of land in Abadan should be stopped.¹⁰⁰⁷ The Provincial Director of Finance, however, suggested that the land lying to the east of the town was not “owned” by the Company, and was available for the future growth of Abadan Town.¹⁰⁰⁸

4.4.2.3 Re-Organization of the Abadan Municipality. The practice of tax collection by the Company motivated Iranian officials to push for the establishment of an organized municipality¹⁰⁰⁹ in Abadan. This idea was first introduced in July 1925 by the Minister of Public Works Abdolhussein Taimurtash through a letter to the Minister of Interior: “...the money, which is charged [by the Company] as sanitary and land taxes [...] and spent on the cleaning and the hygiene of Abadan, is actually the municipality tax which due to the lack of a functioning municipality is collected and consumed by the Company.”¹⁰¹⁰ The Ministry of Interior called on the Military Governor of Khuzestan to initiate a plan for the reorganization of the Abadan municipality. In October 1925, a committee of local officials created a structure for a municipality of fifty-four staff with a monthly budget of 750 tomans (7500 kran).¹⁰¹¹ The committee put the Abadan Municipality in charge of the

¹⁰⁰⁶ According to the the Municipality Chief, due to the scarcity of land in Abadan a family of twenty would live in a fifty-square-cubit piece of land.

¹⁰⁰⁷ Cheif of Abadan Municipality to the Ministry of Interior, 19 May 1927 (28/Ordibehesht/1306); IRA: 240-9253

¹⁰⁰⁸ Correspondence from the Ministry of Finance to the Ministry of Foreign Affairs, 17 July 1927 (25/Tir/1306); IRA: 240-9253

¹⁰⁰⁹ Baladieh Monazzam

¹⁰¹⁰ From the Minister's standpoint, the formation of an organized municipality in Abadan, which could handle the cleaning of the town and the collection of taxes, was a prerequisite to any conflict resolution scheme between the company and the residents. The Ministry of Public Works to the Ministry of Interior, 6 July 1925 (15/Tir/1304); IRA: 240-9253

¹⁰¹¹ The committee consisted of Yavar Hessam Humayoun, the Military Governor of Abadan, Mirza Abdulhussien Khan, Agent of the Ministry of Finance in Abadan and Khorramshahr, and Mofakham as-Saltaneh, the Commissionaire of the Ministry of Finance in Khuzestan.

maintenance of sanitation, drainage, and public health in Abadan Town and other indigenous villages, including Ahmadabad (*Shahr-i-Nau*) and Braim. A budgetary chart was also drawn up for the illumination, sanitation, and administrative departments. The illumination department was responsible for the upkeep of 250 kerosene-lit street lamps across the town and surrounding villages.¹⁰¹² The sanitation department, the largest in terms of the number of employees and the assigned budget, was administered by a medical doctor, for whom a monthly salary of 100 tomans was proposed.¹⁰¹³ The proposal for the reorganization of the Abadan Municipality and the appointment of an Iranian medical doctor¹⁰¹⁴ to the head of the Sanitation Department at the Abadan Municipality coincided with the appointment of provincial medical officers by the Iranian Government. This policy was the direct reaction to the mounting concerns regarding the public health status across the country at the time.¹⁰¹⁵

Instituting a proper municipality along “modern lines” at Abadan Town was among the objectives of Abadan Township Reorganization Scheme. In May 1926, Company officials complained to Iranian authorities that the municipality had failed to reorganize its structure and secure the required budget to administer a booming town of 25,000. The Chief Medical Officer regarded the unskilled labor and the population of Abadan Town as the “crux” of hygienic challenges and called for securing the cooperation of the Iranian

¹⁰¹² The Ministry of Interior to the Ministry of Public Works, 27 October 1925 (8/Aban/1304); IRA: 240-15694

¹⁰¹³ This rate was the highest among the staff and was even above the rate of the Chief of the Municipality for whom a monthly salary of 40 Tomans was suggested.

¹⁰¹⁴ Dr. Mehdi khan

¹⁰¹⁵ M. Y. Young, February 16th, 1926, “Public Health. Abadan Area,” *General Administration*, BP Archives, ArcRef 62413

authorities to check the spread of epidemics.¹⁰¹⁶ To this end, the Company Resident Director approached the Iranian Government Treasurer-General to ask for a special budget for the Abadan Municipality. He also called for the reorganization of the municipality “with strict regulations for the maintenance of public health in the direction of housing, lighting, drainage, and the disposal of refuse.” In fact, like other towns in Iran, Abadan drew its main revenues from *Navaghel* Taxes — duties levied on the means of transportation per the Municipality Act of 1907.¹⁰¹⁷ However, Abadan by 1926 had become so extensive that these revenue sources could not cover all the expenses required for sanitation and upkeep of the town.¹⁰¹⁸ In tandem with the political restructuring across the country and the increased demand for popular municipality, a new Municipality Bill was proposed by a group of deputies in the *Majles*. The bill, which was passed in May 1930, gave the administration of municipal affairs to elected bodies, known as Municipal Councils. The bill included provisions that not only addressed urban issues related to sanitation but also allowed Municipal Councils to levy taxation, whereby ensuring the financial independence of municipalities. The proposed taxes included Occupation Tax, a ten-percent increase in property tax, and additional shares of the already existing Road Tax (*Navaghel*).¹⁰¹⁹

¹⁰¹⁶ M. Y. Young, February 16th, 1926, “Public Health. Abadan Area,” *General Administration*, BP Archives, ArcRef 62413

¹⁰¹⁷ In the wake of the Constitutional Revolution, the first parliament (*Majles*) ratified the Municipality Act (*Qānūn-e-Baladiyeh*) in June 1907, whereby corporate municipalities were founded. Prior to this date, cities were administered by ward (*maḥalla*) leaders and other local notables. See: Ḥosayn Farhudi, “City Councils (*anjoman-e shahr*) in Persia,” October 21, 2011. *Encyclopedia Iranica*, Vol. V, Fasc. 6, pp. 646-648. <http://www.iranicaonline.org/articles/city-councils-anjoman-e-sahr-in-persia>

¹⁰¹⁸ “Minutes of an Interview with Dr. A. C. Millspaugh,” April 30st, 1926, *Sir John Cadman’s Visit to Persia and Iraq 1926*, BP Archives, ArcRef 71183

¹⁰¹⁹ F. S. Greenhouse to E. H. O. Elkington. “Abadan Municipality,” September 21st, 1927, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

Concerned with the recurrence of epidemics and doubtful about the fate of the New Municipality Bill, the Company proposed to offer financial and technical supports to help improve public health in Abadan Town. For instance, Company officials offered to contribute £2,000 to the yearly budget of the municipality (*Baladiyah*) until the institution would become a self-sufficient entity. In fact, by providing this “subvention,” the Company hoped it would be relieved from larger expenses, including the obligation of provision of housing to the Iranian unskilled labor. The “subvention,” however, was contingent upon covering the balance of the budget by the Iranian Government, which was approximately £3700. The Company also suggested to build public latrines and incinerators free of charge, provide and manage refuse bins, and provide fire service and quarantine services in case of outbreaks.¹⁰²⁰ Company officials also prepared a new budget for the Abadan Municipality and proposed a list of required personnel, facilities, and responsibilities. The Company’s proposed structure for the Abadan Municipality consisted of five departments: administration, sanitation, public health, lighting, and building.¹⁰²¹ Moreover, one of the Company’s Sanitary Inspectors, an Indian Muslim, was assigned to the Abadan

¹⁰²⁰ A. T. Wilson to The Ministry of Interior, May 7th, 1926. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

¹⁰²¹ The administration department consisted of the Chief of the Municipality, an accountant, a secretary, a general inspector, an inspector for slaughterhouse and butcheries, an inspector for food staples, a servant, and two *farrashes* (errand-runners). The Sanitation Department consisted of a deputy sweeper, thirty sweepers for Abadan Town, six sweepers for the Ahmadabad village, six sweepers for the Braim Village, four sweepers for public latrines, and four coachmen. The lighting department consisted of two lightmen for Abadan Town, two lightmen for the Ahmadabad Village, and one lightman for the Braim Village. The Public Health department consisted of one physician, two nurses, and one compounder (pharmacist). The building department consisted of one head mason. A. T. Wilson to The Ministry of Interior, “Proposed Budget for the Abadan Municipality,” May 7th, 1926. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

Municipality. The Inspector had the same authority in Abadan Town as did the Refinery Sanitary Department in the Company's territory.¹⁰²²

However, the proposed municipality budget and organization chart were not immediately approved by the Iranian Government. In fact, government officials treated the Company's proposed contribution according to paragraph 13 of Article 70 of the Municipality Act which authorized "subscriptions" under certain circumstances. To meet the requirements of the law, a special commission, comprised of representatives of the ministries of the Interior Affairs and Finance, was formed to scrutinize the suggestions proposed by the Company. Acknowledging the Company's interest in enhancing public health and sanitation at Abadan, the commission approved the British enterprise's technical support provided that all the public facilities built by the Company be handed over to the Abadan Municipality. The Commission also outlined the mechanism by which the Company could contribute to the Abadan Municipality's budget. This had to be paid to the Provincial Revenue Department through a designated subscription account.¹⁰²³ Following this guideline, the provincial Director of Finance approved a temporary budget for Abadan Town and an account was established at the Imperial Bank of Persia for the disbursement of money.¹⁰²⁴ The Company's contribution was spent on different urban projects. For instance, in 1928, it was spent on three projects: the dead ablution place, the

¹⁰²² Dr. E. Jamieson to Dr. M. Young, "D/O Medical," July 19th, 1925. *Demi-Official Letters from Dr. E. Jamieson, Principal Medical Officer, Persia to Dr. M. Young, Chief Medical Officer*, BP Archives, ArcRef 112928

¹⁰²³ The Ministry of Agriculture, Commerce, and Public Works to the Representative, APOC, Tehran. June 27th, 1927. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

¹⁰²⁴ The tone of the letter from the Ministry of Public Works and the manner in which Iranian officials treated the financial assistance implied that the latter was seen an obligation rather than donation. E. H. O. Elkington to the Director, London. July 20th, 1926. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

slaughterhouse, and the metaling of the taxi road between the petrol filling station and No.9 Jetty.¹⁰²⁵

4.4.2.4 Beautification of the Town: The Case of New Streets

“The Company destroyed a large part of Abadan Town two years ago...and after lodging dozens of petitions and complaints [the Company] refused to pay even a penny as compensation for the demolished houses...Now under the pretense of laying out new streets¹⁰²⁶ the Company aims to destroy another section of Abadan and make a handful of miserable people displaced and desperate...”¹⁰²⁷

The Omnibus Scheme called for eliminating the “tortuous gulleys” and widening and straightening of roads and alleys in Abadan Town in order to facilitate circulation of air and penetration of sun light.¹⁰²⁸ In 1924, certain thoroughfares in Abadan Town were opened up by the Sheikh Administration.¹⁰²⁹ In 1925, the Company designed two new roads in Abadan Town under the guise of enhancing public health. The first road was 60 feet wide, running parallel to Abadan’s main street and old bazaar road—which was called *Khiaban-i-Pahlavi*, or *Rah-i-Pahlavi* under the new regime. The second proposed road would run perpendicular to the first one and terminate in the old bazaar road. In the words of the Refinery Assistant General Manager, the two proposed roads were mainly designed to “clear very congested and insanitary areas” in Abadan Town. Moreover, the first road

¹⁰²⁵ This road ran parallel to the new canal dredged on the northern side of Abadan Town, separating the latter from the Company’s territory. A. T. Wilson to the Director, London, “Abadan Municipality,” September 7th, 1928. *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

¹⁰²⁶ *khiaban bori* in Farsi

¹⁰²⁷ “Telegraph from the heads of guilds and merchants of Abadan to government and parliamentary officials as well as newspapers,” 4 October 1926 (11/Mehr/1305); IRA: 240-9253

¹⁰²⁸ John Cadman, January 1925, “Report by Sir John Cadman, Director in Charge of R.F.G Department, Anglo-Persian Oil Company, Ltd.: Visit to Persia, Autumn 1924,” BP Archives, ArcRef 68331, p.49

¹⁰²⁹ John Cadman, January 1925, “2. Secret Diary,” *Report to the Board by Sir John Cadman on Visit to Persia, October to November 1924*, BP Archives, ArcRef 70211, p.13

was intended to shorten the route between two sections of the oil establishment, namely the Refinery and the Bawarda Tank Farm, and decrease the transportation costs for the Company. The construction of the new roads became a major conversation topic in Abadan in the years 1926-1927 and turned into another controversial urban reform program. However, unlike previous programs, the Company shrewdly managed to throw this urban renewal project into the realm of local politics and rivalry. As a result, the road building project morphed into a major tug of war among local Iranian officials.

In the midst of the negotiations with the Iranian Government regarding the new bazaar, and while the construction of the northern creek was underway, rumors spread about cutting a street through Abadan Town. Unlike the A.P.O.C.'s former urban reforms in Abadan, public opinion was divided on this so-called city-beautification scheme.¹⁰³⁰ The disagreement over this project not only demonstrates a shift in the town's socio-political structure; it also signifies how oil development framed larger quarrels between two major forces in the Iranian society: one that advocated for westernizing reforms and one that was more interested in retaining the status quo. Greeting the project with anguish and suspicion, Abadan's heads of guilds and merchants did not hesitate to break the news to the capital. A telegraphic petition was lodged on October 4, 1926, from Bushire not only to government and parliamentary officials but also to the Tehran press. The local traders and businessmen were convinced that the Company was trying to strip “urbanity”¹⁰³¹ off Abadan which, in their view, could have had a devastating impact on the town and its economic vitality.¹⁰³²

¹⁰³⁰ In an initial report on the project, the Khuzestan Agency claimed that the “beautification” of the town was the major objective of the scheme. The Khuzestan Karguzari to the Ministry of Foreign Affairs, 21 November 1926, (29/Aban/1305); IRA: 240-9253

¹⁰³¹ *Shahriat* in Farsi.

¹⁰³² “Telegraph from the heads of guilds and merchants of Abadan to government and parliamentary officials as well as newspapers,” 4 October 1926 (11/Mehr/1305); IRA: 240-9253

The protestors also criticized the Central Government for granting to the Company 4 pieces of land in Abadan which reportedly were required for construction of a cemetery, a hospital, a park, and new public recreation spaces.¹⁰³³

Soon after calling upon the Military Governor of Khuzestan to investigate the case, the Ministry of Interior received a new telegraphic petition in support of the project. Dispatched from Khorramshahr, the petition was signed by a group of inhabitants comprised mainly of artisans who arguably were either directly or indirectly linked to the Company. In providing a strong counterargument to the first petition, the artisan faction went beyond the condemnation of Abadan's bazaar-based circle, calling the opponents of the scheme “enemies of national sovereignty...who do not want to see the prosperity of Abadan... those who make fake claims on behalf of other inhabitants.” Denouncing the accusations made against the Company in the first petition, petitioners claimed that the construction of the new street would be carried out under the joint auspices of a municipality commission, the provincial Government, and other “dignitaries,” and would bring “salvation, progress, and prosperity” to the town. The proponents of the project also maintained that a “wide street,” which would be named after the new monarch and funded by the subsidies of the Ministries of Finance and Interior, was to replace a handful of “mud huts” and “straw shacks.” Moreover, the supporters claimed that “no one would be forcibly displaced,” that a local mason appointed by the landlords would appraise the structures, and that a “good” location free of charge would be provided to the people.¹⁰³⁴

¹⁰³³ Translation Made from *Habl-al-Matin* [Newspaper], “Don’t Trouble Oh Ye People of Abadan,” August 2nd, 1927. *Correspondence from V: Soviet Activities, Organization, etc.*, BP Archive ArcRef 129909.

¹⁰³⁴ “Telegraph from a group of Abadan Inhabitants to the Ministry of Interior,” 3 November 1926, (11/Aban/1305); IRA: 240-73574

The records from the Iranian National Archives include a third letter, signed by an unknown group of people who identified themselves as *Inhabitants of Abadan* and probably engaged in the draft of the first petition. Inhabitants of Abadan accused two local outcasts, whose names among others appeared under the second petition¹⁰³⁵, of orchestrating the campaign of support for the street project. Inhabitants of Abadan claimed that the two men, acting as secret agents of the Company, began negotiations with the landlords, disseminated disinformation, and crafted a fake statement on behalf of the inhabitants. Inhabitants of Abadan believed that the Company was the real mastermind behind the project, and that it bought off the local officials in the same way as it bribed the former governor of Abadan and “wreaked havoc on the residents' lives.” Inhabitants of Abadan even offered some specifics about the bribery of officials, maintaining that of a total amount of £2800 assigned by the Company for the destruction of houses, £1800 would be paid to the Military Government of Khuzestan and £1000 would be divided between the Chief of the Municipality and the Provincial Director of Finance.¹⁰³⁶

Similarly, Government officials also did not share the same view on the urban renewal project. While the Karguzar opposed the project, the Military Governor of Khuzestan was in favor of it. Endorsing the statements of “notables” and “dignitaries” in the second petition, the Military Governor of Khuzestan also rejected what he termed the “groundless” accusations made in the first “spurious” petition, including the contention regarding the involvement of the Company in the street project. Nevertheless, the Governor confessed that the Company agreed to offer technical assistance upon request. While

¹⁰³⁵ *Akbar Laat and Hussein Gazi*

¹⁰³⁶ Petition from the local inhabitants to the Ministry of Foreign Affairs, 25 January 1927 (4/Bahman/1305); IRA: 240-9253

promising to offer fair compensation to individuals “one-by-one,” the Governor also stated that the “filthy” huts and mud houses would give way to an “honorable” street.¹⁰³⁷

With repeated representations at different ministries at Tehran, the Company could secure the approval of the Iranian Government. For instance, the Ministry of Interior favored the street project and the demolition of mud huts— though with the owners' consent. The Ministry was convinced that the cleaning of streets and sanitation of the town was an imperative for controlling contagious diseases in Abadan.¹⁰³⁸ The Ministry of Public Works also supported the project on condition that the municipality carried out the whole undertaking and the Company only partook in logistics and technical aspects.¹⁰³⁹ The proposed urban renewal project in Abadan resonated with most Iranian officials as it echoed the broader urban modernization schemes being carried out by the Iranian Government in major cities and towns across the country. The state-led urban renewal policy involved overlaying new urban layouts and street patterns on traditional city centers, expanding older cities, and constructing new ones. The Central Government provided detailed guidelines and standards for new urban spaces, such as streets (*khiaban*) and squares (*maydan*), and for remodeled sections of cities across the country.¹⁰⁴⁰ When John

¹⁰³⁷ General Mohammad Toufighi the Military governor of Khuzestan to the Ministry of Interior, 31 October 1926 (8/Aban/1305); IRA: 240-73574

¹⁰³⁸ The Ministry of Interior to the Ministry of Public Works, 18 November 1926 (26/Aban/1305); IRA: 240-73574

¹⁰³⁹ The Ministry of Interior to the Ministry of Public Works, 21 November 1926 (29/Aban/1305); IRA: 240-73574

¹⁰⁴⁰ The layout and design of new urban modernization schemes were planned and standardized by the central Government. As a result, new urban spaces exhibited a great deal of consistency, marked by two-storied buildings around a central square. New streets were lined with shops which were painted in uniform colors, with the facades featuring neocolonial columns, blind arcades, among other features, all contributing to what came to be known as the “Pahlavi Style.” To read more on the urban modernization during the Reza Shah’s reign, see: Eckart Ehlers, “CITIES iv. Modern Urbanization and Modernization in Persia,” *Encyclopædia Iranica*, December 15, 1991, Vol. V, Fasc. 6, pp. 623-629, available online at <http://www.iranicaonline.org/articles/cities-iv> (accessed on 2 July 2019).

Cadman, Chairman of the Company, visited Tehran in February 1929, he was impressed with “the great development” with road-making that had taken place in the capital since his last visit in 1927.¹⁰⁴¹

Although Tehran finally approved the street project in Abadan, local authorities, fearing public backlash, were hesitant to carry out the work.¹⁰⁴² In order to address the concerns of inhabitants, the Ministry of Public Works suggested that a commission including the representatives of different government departments be formed to monitor the process of land acquisition.¹⁰⁴³ Eventually, the Provincial Administration Council was established under the auspices of the Military Governor of Khuzestan to “meticulously deal with pricing of properties” and ensure that landlords receive just treatment.¹⁰⁴⁴ The project expenses were to be divided between the Company and the Abadan Municipality. The Company agreed to cover fifty percent of the total compensation and construction costs estimated to be around 64,000 kran and also to provide financial assistance to the Municipality in the form of a six-month zero-interest loan in the amount of 13,000 kran. The Abadan Municipality was to incur the remainder of the estimated expenses.¹⁰⁴⁵

¹⁰⁴¹ Sir John Cadman, February 19th, 1929, *Persia and Iraq 1929*, BP Archives, ArcRef 92975

¹⁰⁴² Assistant General Manager to Director, London. “Abadan Municipality,” July 19th, 1927, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

¹⁰⁴³ Correspondence from the Ministry of Public Works to the Ministry Interior, 18 December 1926 (26/Azar/1305); IRA: 240-9253

¹⁰⁴⁴ Correspondence from the Ministry of Interior to the Ministry of Public Works, 30 January 1927 (9/Bahman/1305); IRA: 240-9253

¹⁰⁴⁵ The actual cost of purchasing the properties and construction of the road was 66,000 kran. The Company covered half the expenses and provided an interest-free loan of 15,000 kran to help the Abadan Municipality implement this project. Assistant General Manager to Director, London. “Abadan Municipality,” July 19th, 1927, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723. See also “Security,” October 1926. *General Manager’s Monthly Report, Abadan, 1926*, BP Archive ArcRef 5484

Despite public protests, the Abadan Municipality executed the first road project, which was described by a Company official as a “fait accompli.”¹⁰⁴⁶ It entailed demolition of 110 sarifas, 110 mud huts, 93 sun-dried brick houses, and 3 burnt brick houses. By September 1927 the demolition of the structures and construction of the road was completed, only a bridge over the Arusiyeh Canal and surfacing the road remained to be done. The work was entirely carried out by the Abadan Municipality with the support of the Company’s Iranian engineering staff.¹⁰⁴⁷ The second road connecting the new road to the Main Street was constructed in the following year and surfaced with macadam. To enhance the sanitary conditions, the bazaar roads in Abadan Town were covered with fuel oil.¹⁰⁴⁸ A new extension was made to the Ahmadabad Village to accommodate the residents displaced by the proposed roads. The Company laid out plots and roads with water fountains to facilitate the process of resettlement.¹⁰⁴⁹

4.4.3 Model Villages for Manual Laborers

By the end of the 1920s, the population of Abadan exponentially grew and reached near the neighborhood of 70,000. Out of approximately 12,500 third-class salaried employees, 2,500 were accommodated in Abadan Township, namely the Artisans’ Village and the Clerks’ Village, with the rest living in Abadan Town, in the Ahmadabad Village, and in a group of smaller villages around the Refinery. With the exception of Abadan Township,

¹⁰⁴⁶ T. L. Jacks to Sir John Cadman, December 22nd, 1927. *T. L. Jacks: Correspondence 1927*. BP Archives, ArcRef 68325

¹⁰⁴⁷ E. H. O. Elkington to Director, London. “Abadan Municipality,” September 21st, 1927, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

¹⁰⁴⁸ “General,” *Anglo-Persian Oil Company Limited: Annual Report for Year Ending 1928*, BP Archive ArcRef 54372

¹⁰⁴⁹ Assistant General Manager to Director, London. “Abadan Municipality,” July 19th, 1927, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

all these settlements were under the jurisdiction of the Abadan Municipality and fell beyond the Company's direct control. As discussed earlier, in 1924, the Company assumed responsibility to accommodate Iranian clerks and artisans. However, Company officials considered building housing for Iranian unskilled laborers an "uneconomic provision." The Chief Medical Officer explained the rationale behind this policy as follows: "Men of this class are drawn from a floating population, and with some exception, remain on our wage roll for uncertain periods...Some of them are already settled in scattered outlying areas, and would not move into Company's quarters in any case...Moreover, the majority are married and, at a moderate estimate of three to each family, we should have to provide accommodation not for 3,500 but for over 10,000 people."¹⁰⁵⁰

In 1930, one year after the Iranian workmen organized a major strike, Company officials developed a comprehensive plan to reorganize the scattered indigenous settlements surrounding the Refinery and to provide housing for unskilled laborers. For the Company, concentrating employees in a one settlement entailed many disadvantages with respect to "unwieldiness, control, sanitation, and efficient provision of necessary services." As a result, it was decided to re-settle the lower strata of the Iranian workforce in separate villages around the Refinery. As Figure 4.27 shows, the comprehensive plan envisioned new model villages on four sides of the Refinery to house roughly 10,000 employees. This arrangement even further fragmented Abadan's spatial organization and set the stage for the formation of a polycentric settlement. Designed to accommodate approximately 2,500

¹⁰⁵⁰ M. Y. Young, February 16th, 1926, "Public Health. Abadan Area," *General Administration*, BP Archives, ArcRef 62413

people, each village consisted of 300 self-contained residential units with a potential for extensions up to 900 units.¹⁰⁵¹

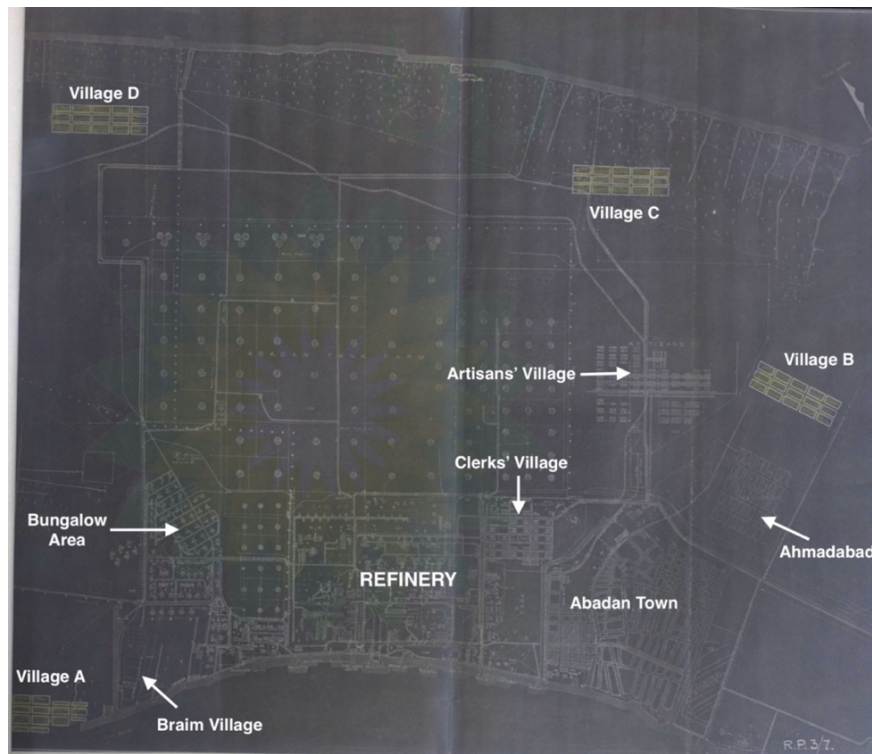


Figure 4.27 Map of Abadan showing the arrangement of new model villages (villages A-D) proposed for the accommodation of the lower strata of third-class employees, 1930.
Source: BP Archives, ArcRef 53874

4.4.3.1 The New Braim Village. One of the model villages designed for the accommodation of Iranian third-class laborers was the new Braim Village, Village A in Figure 4.27, placed near the old Braim Village to the northwest of the Refinery. Similar to Abadan Town, the Braim Village witnessed drastic growth between 1924 and 1927, and soon became a source of apprehension among Company officials. Located to the west of the Bungalow Area, Braim accommodated more than 2,000 people — approximately 400

¹⁰⁵¹ A central pump house on the Bahmanshir River would provide water supplies to the villages. “Braum Village Reconstruction,” July 28th, 1930. *Braum Village Reconstruction Proposals*, BP Archives, ArcRef 53874

households— who were mostly bungalow servants and Refinery artisans. Company officials viewed this village as “the most congested and unquestionably the most insanitary” of all the indigenous settlements surrounding the Refinery. A Company report described the village as follows: “The dwellings consist chiefly of mud and mat hovels so crowded together on either side of a narrow lane and in a very restricted area that this village being adjacent to the Bungalow Area is a constant menace to the health of [the] European community.”¹⁰⁵²

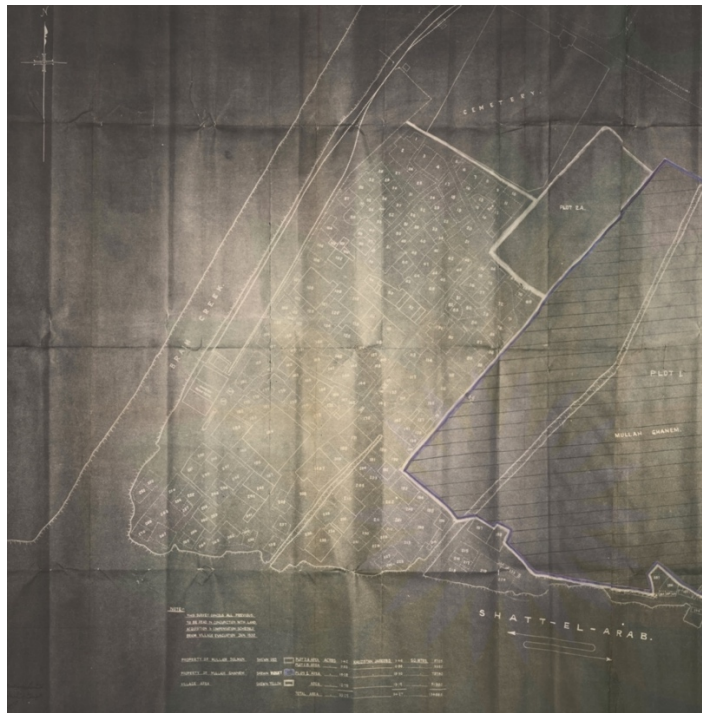


Figure 4.28 Layout of the old Braim Village, 1932. Similar to Abadan Town, the Company dredged a creek on the northwestern side of the village to contain its expansion towards the Bungalow Area. This increased the incidence of population and exacerbated public health in the village.

Source: BP Archives, ArcRef 62792

¹⁰⁵² “Braim Village Reconstruction,” July 28th, 1930. *Braim Village Reconstruction Proposals*, BP Archives, ArcRef 53874

As early as 1927, the Refinery Civil Engineering Department developed plans to enhance sanitary conditions in the Braim Village. Like the improvements made to Abadan Town, reforms in Braim included controlling the outward growth of the village, building roads, reducing population density, and implementing other sanitary measures. For instance, as Figure 4.28 illustrates, on the pretext of facilitating transportation of construction materials, a canal was dredged to the northwest of the village to contain its expansion towards the Bungalow Area. In 1929, new roads and a main drainage line (culvert) were built in the Village and a power line was installed in the main street.¹⁰⁵³

As part of the 1930 comprehensive plan, Company officials decided to clear the entire village and resettle its inhabitants in a new model village on a “fresh site.” As in other urban reforms in Abadan, the Company justified the reconstruction of the Braim Village on account of public health. However, rather than improving the well-being of its employees, the Company’s actual plan was to remove the village from the locality and annex Braim to the Bungalow Area. To this end, Company officials collaborated with the Abadan Municipality and local Iranian authorities to implement different phases of the project, such as property acquisition, compensation agreement, and demolition of the old village; however, the Company was solely responsible for payment of compensation and any other expenditure associated with the relocation of inhabitants.¹⁰⁵⁴

Similar to previous urban reforms, reconstruction of the Braim Village faced severe public opposition. Simultaneous with public protests, several fire outbreaks occurred in the old village in 1928-1929, two of which destroyed at least 100 sarifas. In a petition to the

¹⁰⁵³ *Anglo-Persian Oil Company Limited: Annual Report for year ending 1929*, BP Archive ArcRef 54371

¹⁰⁵⁴ Assistant General Manager to Director, London. “Abadan Municipality,” July 19th, 1927, *Abadan Township Reconstruction 1921 to 1928*, BP Archives, ArcRef 68723

Shah, residents of Braim accused the Company of setting fire to the mat huts to expel people from their homes.¹⁰⁵⁵ The Company, however, attributed the frequent outbreaks of fire to external factors, such as the inflammable material used in the construction of huts or the vindictive act of some rogue characters.¹⁰⁵⁶ For instance, the General Manager described one of the incidents as follows: “The fire occurred as a result of a primus stove being knocked over by a woman, and on account of the inflammable nature of the dry date fronds, [the fire] soon spread to surrounding sarifas. There was a strong wind blowing at the time, and had it not been for the fact that a mud wall divided the area of the fire from a number of adjacent sarifas, the extent of the damage would have been considerably greater.” As a result of this particular incidence, more than 26 families – all Company’s Iranian employees – became homeless. To gain political benefit from the incident and uplift its public image, the Company agreed to distribute 320 tomans, equal to £64, among the sufferers in proportion to their losses.¹⁰⁵⁷

In April 1929, in response to the Company’s request, the Iranian Government issued a decree and authorized the British enterprise to re-establish Braim on a new site and demolish the existing village on condition that duly compensation be paid to individual owners. Upon receiving the permission, the Company started negotiations with the owners and inhabitants of the Braim Village.¹⁰⁵⁸ In November 1930, the Company leased the land for the new Braim Village from a local sheikh, who was residing in exile in Basra, in the

¹⁰⁵⁵ “*Health & Sanitation*,” *Anglo-Persian Oil Company Limited: Annual Report for Year Ending 1928*, BP Archive ArcRef 54372

¹⁰⁵⁶ “*Braim Village Reconstruction*,” July 28th, 1930. *Braim Village Reconstruction Proposals*, BP Archives, ArcRef 53874

¹⁰⁵⁷ E. H. O. Elkington to Director, London. 12th June 1929, *Article 4: Land Acquisition, Abadan, Lots 1-14*, BP Archives, ArcRef 100497

¹⁰⁵⁸ “*Minutes of Conference Held in General Manager’s Office*,” February 24th, 1928. *Minutes of Conferences Held During General Manager’s Visit to Persia/Iraq, January 1928*, BP Archive ArcRef 67582

amount of 11,000 krans, equal to £220.¹⁰⁵⁹ To impress Iranian officials, the Company also formulated a paternalistic program to build the “Anglo-Persian Club” on the site of the old Braim Village to encourage “a spirit of co-operation and good fellowship” between Iranian and British staff. Neither the rhetoric of public health nor the promise of welfare paternalism could convince the Iranian Government to overlook the loss of tax revenue from the Braim date gardens which amounted to 3,000 krans. After several rounds of negotiations, the Company reluctantly paid compensation to the Iranian Government to the extent of 10 years’ tax revenue from the date gardens in Braim.¹⁰⁶⁰

The first stage of the construction of the new Braim Village, estimated to cost around £6000, consisted of site preparation efforts, including marking out the new site, filling ditches and leveling bunds, purchase of palm trees, and construction of new roadways and water mains. The second stage entailed evacuation of the old village and payment of compensation to the owners of structures. Unlike the strategy adopted a few years earlier in the Native Village, Company officials decided to build new homes and rent them to workmen.¹⁰⁶¹ As Figures 4.29 and 4.30 show, the New Braim Village was designed on the site leased by the Company on the northern side of the Braim Canal. For the first time, Company officials developed a long-term vision for the future growth of a planned settlement. The new Braim Village was to be constructed in three phases, providing in total up to 900 houses.

¹⁰⁵⁹ “Lot Number 13,” 11th November 1930, *Article 4: Land Acquisition, Abadan, Lots 1-14*, BP Archives, ArcRef 100497

¹⁰⁶⁰ T. L. Jacks to Director, London. 5th November 1930, *Article 4: Land Acquisition, Abadan, Lots 1-14*, BP Archives, ArcRef 100497

¹⁰⁶¹ E. H. O. Elkington to Director, London. 13th August 1929, *Article 4: Land Acquisition, Abadan, Lots 1-14*, BP Archives, ArcRef 100497

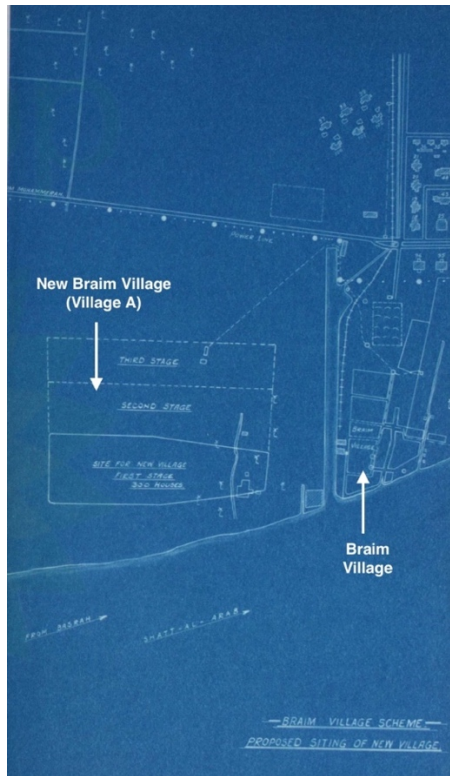


Figure 4.29 Model Village A (left) and the indigenous Braim Village (right), 1930. Designed on a site acquired by the Company in 1930 to the northeast of the Braim Creek, the New Braim Village was planned with provisions for future growth in three stages.
Source: BP Archives, ArcRef 53874



Figure 4.30 Layout of the New Braim Village, 1930. It consisted of 45 residential blocks organized within a grid of 40-foot-wide roadways, providing in total 900 residential units.
Source: BP Archives, ArcRef 53874

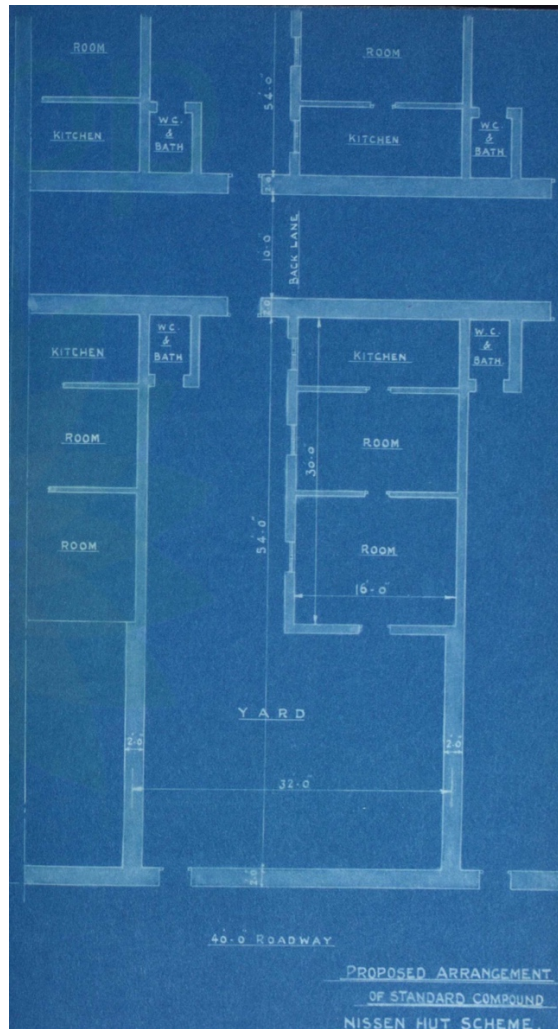


Figure 4.31 Layout of the residential compound in the New Braim Village, 1930. The living quarter was made up of a living room, a bedroom, and a kitchen, and was to be constructed out of a standardized structure.

Source: BP Archives, ArcRef 53874

As Figure 4.30 illustrates, the new village consisted of 45 residential blocks organized within a uniform grid of 40-foot-wide roadways. Each residential block was composed of a central 10-foot-wide “back lane” lined with 20 residential plots. Back lanes fulfilled the same functions as did alleys in the Clerks’ and Artisans’ villages. As Figure 4.31 illustrates, each plot, measuring 42 feet by 32 feet, was conceptualized as a self-contained “walled compound.” Each residential unit consisted of two separate quarters —

the living quarters on one side and the lavatory and bathroom on the opposite side — with a yard in the middle. The living quarter included a bedroom, a living room, and a kitchen and was to be constructed out of a standardized structure. Similar to quarters built for Iranians in Abadan Township, the internal arrangement of residential blocks, in particular, the separation of the private realm from the public sphere by a solid “purdah” wall was a direct interpretation of indigenous domestic architecture.

Four standardized sanitation systems were designed for the new Braim Village. Similar to other model villages, plans were developed to deliver purified drinking water from the Bahmanshir River to the water supply tanks in the Services Area at the center of the village. Here, water was pumped to three elevated tanks, 60,000 gallons each equal to the village’s one-day requirement. Two tanks were used for settlement of sediments and chlorination and one for distribution of the water. Therefore, the tanks collectively contained the village’s water supply for three days. The water would flow by gravity from the Services Area through distributing pipes across the village. The water supply system would connect to the lavatory-bathroom unit in each compound which was equipped with a water standpipe fitted with a “self-closing spring tab.” The washing quarter would also connect to the buried cast iron sewerage pipe in the back lane. The latter would be discharged into the Village’s main sewage line running down the main streets to the sewerage and disposal station located in the Services Area. A surface drainage network made of precast, semi-circular channels would also run in the middle of each back lane and would constantly be flushed with water pumped direct from the central pump house. This system also connected to the Village’s main sewage line and eventually discharged into the

disposal station. The combined effluents would then be treated and pumped into the Shatt.¹⁰⁶²

In order to further effect economy and apply the principles of scientific industrialism, the Civil Engineering Department studied two standardized structures — the Nissen Hut and the Mud Brick Hut— for the living quarter of residential compounds. The Nissen Hut, a product of the Fordist concept of mass production, was a prefabricated, semi-cylindrical steel-framed structure designed by Major Peter Norman Nissen, American-Canadian military officer of the British Expeditionary Force, in 1916. Originally intended to be used as a military barrack, this portable structure gradually proved to be a versatile shelter to accommodate different functions during and after the Great War. In the early 1930s, the Nissen Hut was used extensively as an economical prototype for labor accommodation in the oil company towns across the Persian Gulf region. For instance, Nissen Huts were erected to house oil men and drillers in the Kuwait Oil Company's Bahra Camp and in the oil camp of the Bahrain Petroleum Company.¹⁰⁶³

At Abadan, the Refinery Civil Engineering Department constructed three experimental prototypes, including two Nissen huts and one mud brick hut. Besides analyzing the construction costs for each alternative, the Civil Engineering Department carried out systematic research on the heat insulation properties of each structure and

¹⁰⁶² "Braum Village Reconstruction," July 28th, 1930. *Braum Village Reconstruction Proposals*, BP Archives, ArcRef 53874

¹⁰⁶³ "Administration Report of the Bahrain Agency for the year 1931," 1931, 'Administration [Administration] Reports 1931-1935' [29r] (57/416), British Library: India Office Records and Private Papers, IOR/R/15/1/715, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100030356104.0x00003a> [accessed 14 August 2019]; "Persian Gulf Diaries," 1936. *Coll 30/45 'Persian Gulf Diaries: Kuwait Intelligence Summaries, 1932-1936'* [53r] (116/1208), British Library: India Office Records and Private Papers, IOR/L/PS/12/3757, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100057214323.0x000075> [accessed 14 August 2019]

surveyed “local opinion” about each model.¹⁰⁶⁴ Data was also collected on the internal temperature and on the compatibility of each type to local domestic culture and life style.

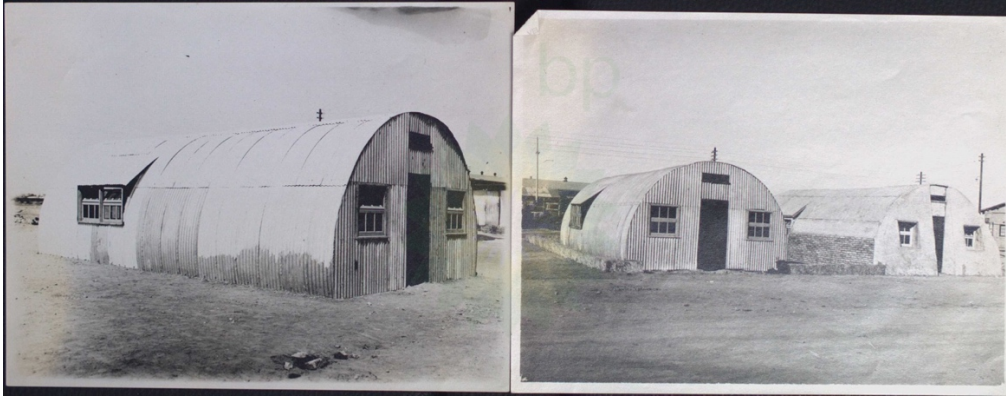


Figure 4.32 Experimental Nissen Huts erected at Abadan, 1930.

Source: BP Archives, ArcRef 53874

The initial findings suggested that despite the combined advantages of the Nissen Hut model, it was not perceived as an ideal dwelling by local population. The estimated cost of completion of the first stage of the new Braim Village, which entailed construction of 300 houses, made of Nissen Huts imported from England was 25 percent lower than the cost of a village built entirely of mud brick huts.¹⁰⁶⁵ Moreover, the Nissen Hut type had other advantageous properties, such as simplicity of erection, portability, low maintenance cost, fire proof construction, internal cleanliness, and ease of fumigation during the epidemics. However, the internal temperature recorded in this model was beyond the acceptable threshold. Overall, locals favored the mud brick prototype due to its similarity to vernacular houses. More importantly, the latter had a flat roof providing sleeping

¹⁰⁶⁴ *Anglo-Persian Oil Company Limited: Annual Report for the year ending 1930*, BP Archives, ArcRef 54374

¹⁰⁶⁵ The cost of construction of a compound using the Nissen Hut and the Mud Brick Hut was estimated at £120 and £160, respectively. “Braim Village Reconstruction,” July 28th, 1930. *Braim Village Reconstruction Proposals*, BP Archives, ArcRef 53874

accommodation at night during the summertime— an important feature of indigenous dwellings.¹⁰⁶⁶ Similarly, in other oil camps in the Persian Gulf, Nissen Huts were met with dissatisfaction. For instance, at the Bahra camp in Kuwait to the southwest of Abadan, the shade temperature in Nissen huts reached around 118 degrees Fahrenheit, forcing the Kuwait Oil Company to abandon this model for midday use.¹⁰⁶⁷

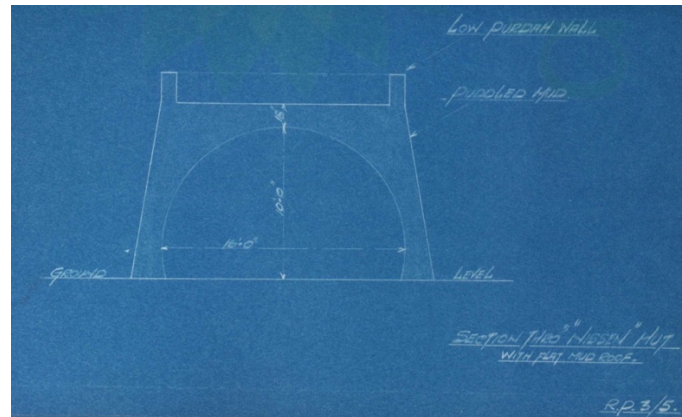


Figure 4.33 A cross-section of the experimental hybrid model, 1930. This model aimed to merge the advantages of both the Nissen Hut and the Brick Hut. It was comprised of the Nissen Hut insulated with mud brick. It also included a flat roof with a low “purdah wall” that could be used for outdoor sleeping in summer nights.

Source: BP Archives, ArcRef 53874

To build an ideal model, the Civil Engineering Department erected another experimental hut that included some characteristics of the two alternatives. As Figure 4.33 shows, this hybrid model was constructed out of the Nissen Hut insulated with mud brick. It also included a flat roof with a low “purdah wall” that could be used in summer nights. Nevertheless, the hybrid model showed no considerable difference in internal temperature

¹⁰⁶⁶ “Braum Village Reconstruction,” July 28th, 1930. *Braum Village Reconstruction Proposals*, BP Archives, ArcRef 53874

¹⁰⁶⁷ “Persian Gulf Diaries,” 1936. *Coll 30/45 'Persian Gulf Diaries: Kuwait Intelligence Summaries, 1932-1936' [53r] (116/1208)*, British Library: India Office Records and Private Papers, IOR/L/PS/12/3757, in Qatar Digital Library <https://www.qdl.qa/archive/81055/vdc_100057214323.0x000075> [accessed 14 August 2019]

compared to the conventional Nissen Hut. As the experimental buildings in Abadan did not yield fruitful results, Company officials began to make inquiries into the successful experiments across the Empire. For instance, they studied the barracks erected for British troops in Haifa which were made of corrugated iron and whitewashed plaster. This model had reportedly yielded good results as it cooled down very quickly at night.¹⁰⁶⁸

The New Braim Village never materialized. The reconstruction process coincided with the depression in the global oil market caused by over-production of oil and overbuilding of tankers— which led the Company to roll back on its capital expenditure and postpone construction projects in Iran for an uncertain period.¹⁰⁶⁹ Until 1934 virtually no Company housing was erected for Iranian manual laborers.¹⁰⁷⁰ In this year, a new residential township was designed by James Mollison Wilson at Bawarda to the southeast of Abadan Town. Aiming to address the widening social divide at Abadan, the Bawarda Township envisioned mixed housing.¹⁰⁷¹ The layout of the new model town, largely inspired by Lutyen's town planning practices in New Delhi and Hampstead, was designed along Garden City and City Beautiful ideals.¹⁰⁷²

¹⁰⁶⁸ “Notes of Meeting held at Abadan on 12th November 1931 on Abadan Estimates for 1932,” November 12th, 1931. *Visit to Persia and Iraq November/December 1931: Notes of Meetings Held at Abadan and Alwand*, BP Archives, ArcRef 69295

¹⁰⁶⁹ Sir John Cadman to T. L. Jacks, October 24th, 1930. *Persia: Confidential Correspondence, 1929 to 1930, Volume C*, BP Archives, ArcRef 71219

¹⁰⁷⁰ R. Lawless, and I. J. Seccombe, 1987, p. 47

¹⁰⁷¹ It was designed to house 80 percent of married supervisors and 25 percent of married artisans: J. Bamberg, p. 99

¹⁰⁷² M. Crinson, 1997, p. 347

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