# OIL CAPITAL: INDUSTRY AND SOCIETY IN BAKU, AZERBAIJAN, 1870-PRESENT

by

# **REBECCA LINDSAY HASTINGS**

# A DISSERTATION

Presented to the Department of History and the Graduate School of the University of Oregon in partial fulfillment of the requirements for the degree of Doctor of Philosophy

June 2020

## DISSERTATION APPROVAL PAGE

Student: Rebecca Lindsay Hastings

Title: Oil Capital: Industry and Society in Baku, Azerbaijan, 1870-Present

This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Philosophy degree in the Department of History by:

Julie Hessler Chairperson, Advisor

Julie Weise Core Member Ryan Jones Core Member

Alexander Murphy Institutional Representative

and

Kate Mondloch Interim Vice Provost and Dean of the Graduate School

Original approval signatures are on file with the University of Oregon Graduate School

Degree awarded June 2020

© 2020 Rebecca Lindsay Hastings

DISSERTATION ABSTRACT

Rebecca Lindsay Hastings

Doctor of Philosophy

Department of History

June 2020

Title: Oil Capital: Industry and Society in Baku, Azerbaijan, 1870-Present

This dissertation is a historical study of the city of Baku, Azerbaijan, and its oil industry from the 1870s to the present, covering the tsarist Russian, Soviet, and post-Soviet eras. The history of the Baku oil industry offers a clear, focused example of the social and physical effects of the imposition of external parties' financial and commodity demands on an urban-industrial setting. Baku as an urban environment, comprising not just the physical elements of the city but also its sociocultural communities, has embodied priorities imposed on the oil industry that have shifted as the global importance of oil and natural gas has grown, as those commodities' uses have changed over time, and according to successive regimes' respective political and economic ideologies. Despite the extra-regional connections that have contributed to Baku's incongruous nature relative to its surroundings, in every era the city has remained to some degree engaged with its Azerbaijani and Transcaucasian contexts, including ethnic relations, geography, and geology. Throughout successive administrative eras, the city's population grew and shrank, diversified and grew more homogeneous; interethnic and labor relations eased and raged; the city's architecture and physical layout altered according to authorities' tastes, ad hoc additions, industrial booms, innovations, and stagnation; the state of the natural environment deteriorated (according to modern standards) almost continuously,

iv

an unobjectionable or perturbing process, depending on the prevailing attitudes of the period. Using a synthesis of archival and published sources, this study investigates the extensive degree to which the character of the city, and its residents' experience of it, hinged on its status as an oil capital.

#### **CURRICULUM VITAE**

NAME OF AUTHOR: Rebecca Lindsay Hastings

#### GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene Central Washington University, Ellensburg South Puget Sound Community College, Olympia

## **DEGREES AWARDED:**

Doctor of Philosophy, History, 2020, University of Oregon Master of Arts, History, June 2013, Central Washington University Bachelor of Arts, History, June 2009, Central Washington University Associate of Arts, June 2006, South Puget Sound Community College

#### AREAS OF SPECIAL INTEREST:

History of Imperial Russia, the Soviet Union, and the Former Soviet Union History of Azerbaijan Oil and Energy History

#### PROFESSIONAL EXPERIENCE:

Graduate Employee, Department of History, University of Oregon, 2013-2020

Instructor, Grays Harbor College, 2019-2020

Instructor, South Puget Sound Community College, 2019

Teaching Assistant, Department of History, Central Washington University, 2012-2013

## GRANTS, AWARDS, AND HONORS:

McManus Student Travel Award, Loyola University Chicago, 2019

Turner Prize, University of Oregon Department of History, 2019

American Councils Title VIII Research Scholar Program, Advanced Research Fellowship, Azerbaijan (declined), 2019

Stephen F. Cohen-Robert C. Tucker Dissertation Research Fellowship, Association for Slavic, East European, and Eurasian Studies (ASEEES) (declined), 2018

Wayne Morse Graduate Research Fellowship, 2018

Global Oregon Graduate Research Award, 201

American Councils Title VIII Combined Research and Language Training Program Advanced Research Fellowship, Azerbaijan, 2017

American Councils Eurasian Regional Language Program Title VIII Fellowship, Azerbaijan (declined), 2017

Graduate Research Prize, Association for Women in Slavic Studies, 2016

Graduate Research Support Fellowship, Oregon Humanities Center, 2016

Title VIII Program for Research and Training in Eastern Europe and Eurasia Fellowship, Azerbaijani, Indiana University Summer Language Workshop, 2016

Dale and Mary Jo Comstock Distinguished Thesis Award, Central Washington University, 2013

Central Washington University College of Arts and Humanities Outstanding Graduate Student Scholarship Award, 2012

#### ACKNOWLEDGMENTS

My completion of this dissertation was possible only with the guidance and support of many mentors, colleagues, and friends. I thank my advisor, Julie Hessler, for her unwavering support and mentorship over the past seven years; her comments and suggestions have been invaluable to me. Julie Weise guided me on issues of migration history and consistently offered practical suggestions that oriented me during my years in the doctoral program. Alexander Murphy's feedback gave me grounding in the field of geography and other relevant theoretical frameworks. Ryan Jones encouraged me to consider seriously the environmental dimension of this history and always presented thought-provoking comments. Beyond the faculty members who served on my dissertation committee, I would like to thank George Sheridan, who was unfailingly kind and supportive as he served on my comprehensive exam committee and responded to chapters I presented in seminars.

My thanks also to the graduate students in the Department of History, including Tara Keegan (and Steve Chadwick), Haley Williamson, Hayley Brazier, Emily Cole, Patience Collier, Hillary Maxson, Nanosh Lucas, Annie Reiva, Olivia Wing, Jue Hou, Spencer Abbe, Kwangyeol Ko, Moeko Yamazaki, Jack Evans, and Christopher Smith. Nichelle Frank shared an office and completed the program in step with me for the entire seven years, a comradeship that I am immensely grateful for.

I could not have entered and completed this program without the continued encouragement of Roxanne Easley and Jason Knirck of Central Washington University. I benefited from language training by Yelaina Kripkov of University of Oregon, Zoya Polack of University of Washington, Vafa Yunusova of Indiana University's Summer

Language Workshop, and Sabina Aliyeva of the Azerbaijan University of Languages. I would also like to thank the staff of the Azerbaijan National Archives, the National Library of Azerbaijan, and the Hoover Institution Library and Archives. Thank you also to the staff of American Councils in Baku, and to Cat Bobbitt, who literally saved my life in Baku.

This project was supported by a number of grants and fellowships. I am grateful for the financial support and recognition of American Councils, supported by the U.S. Department of State's Program for Research and Training on Eastern Europe and the Independent States of the Former Soviet Union (Title VIII); the Oregon Humanities Center; the Association for Women in Slavic Studies; Global Oregon; the Wayne Morse Center; the Association for Slavic, East European, and Eurasian Studies; the University of Oregon Department of History; and Loyola University Chicago.

Finally, I am enormously grateful to my family and friends. Christina Bartholet always stuck with me. Sam provided constant inspiration. My mother and my late father, both archivists and fellow history enthusiasts, always encouraged me in my various endeavors. I cannot adequately express what my mother's support has meant to me through all of this.

# TABLE OF CONTENTS

Chapter		Page
I.	INTRODUCTION	1
II.	"PROSPERITY LIES AHEAD": DOMESTIC AND FOREIGN CONTRIBUTIONS TO THE BUILDING OF THE BAKU OIL INDUSTRY, 1872-1901	23
	Pre-Industrial Baku	27
	Opening the Baku Oil Industry	34
	Labor Migration to Baku	51
	Physical Transformation of Baku	58
	Conclusion	68
III.	LABOR, ETHNICITY, AND CRISIS IN THE BAKU OIL INDUSTRY, 1901-1920	70
	Baku, 1905	72
	Aftermath of the 1905 Events	87
	Between Crises: 1905-1914	93
	War to Revolution: 1914-1920	99
	Conclusion	107
IV.	RESTORATION OF THE BAKU OIL INDUSTRY, 1920-1928	110
	Bolshevik Takeover and Nationalization of the Industry	116
	The NEP Era and Foreign Assistance in Reconstruction	124
	Refashioning Baku	.131
	Conclusion	.145

V.	THE BAKU OIL INDUSTRY AND THE EARLY FIVE-YEAR PLANS, 1928-1939	147
	The First Five-Year Plan (1928-1932)	149
	Migration and Ethnicity	156
	Baku's Post-First Five-Year Plan Decline	174
	Conclusion	177
VI.	BAKU DURING WORLD WAR II	178
	British Targeting of the Baku Oil Industry, 1939-1941	180
	The German Advance toward Baku, 1941-1943	188
	Buildup and Decline in Baku	192
	Conclusion	201
VII.	A NEW VOCATION IN OIL: BAKU AND THE SOVIET OIL INDUSTRY, 1945-LATE 1980S	203
	Postwar Decline of the Baku Oil Industry	207
	A New Vocation in Oil	215
	Baku's Changing Character	224
	Conclusion	238
VIII.	BAKU AND OIL IN THE POST-SOVIET ERA	240
	Years of Crisis: Interethnic Strife and Economic Depression in Baku	242
	The Resurgence of the Azerbaijan Oil Industry	251
	Baku, Oil Capital	261
	Conclusion	274

Chapter		Page
IX.	CONCLUSION	.276
REFEI	RENCES CITED	.285

# LIST OF TABLES

Γable		Page
1.	Table 1. World, US, and Russian Crude Oil Production, Selected Years, 1861-1900 (thousands of tons)	49
2.	Table 2. Population of Baku, 1824-1913 (selected years)	52
3.	Table 3. Ethnic Composition of the Baku Oilfields Workforce (1893 and 1900)	58
4.	Table 4. World, US, and Russian Crude Oil Production, 1900-1910 (selected years) (thousand tons)	74
5.	Table 5. Azneft Share of Soviet Oil Production, 1920-1930	120
6.	Table 6. Approximate Crude Oil Production, Azneft, 1901-1926 (selected years) (metric tons)	129
7.	Table 7. Production of Crude Oil in the Soviet Union, 1927-1933 (millions of metric tons)	153
8.	Table 8. Crude Oil Output, Total USSR and AzSSR, 1937-1970 (selected years) (millions of tons)	209
9.	Table 9. Baku Population by Nationality (%), 1939-1989	226
10.	Table 10. Total Baku Population by Census, 1939-1989	230

# LIST OF FIGURES

Figure		Page
1.	Figure 1. Pipelines and railways connecting the oilfields with central Baku, 1880s	.45
2.	Figure 2. Transcaucasian Railway, 1883	.46
3.	Figure 3. Villa Petrolia, 1880s/1890s	.62
4.	Figure 4. Destruction in the Baku oilfields, 1905.	.80
5.	Figure 5. British military map depicting the major oil centers and pipelines of the Soviet Caucasus, 1939	.182
6.	Figure 6. Luftwaffe aerial photo of central Baku, 1942	.191
7.	Figure 7. Major Eurasian oil basins	.212
8.	Figure 8. Neft Dashlari	.222
9.	Figure 9. Statue of Sergei Kirov overlooking Baku Bay and the Bulvar, mid-twentieth century	.232
10.	Figure 10. Soviet-era apartment complex with Azerbaijani motifs in the concrete cladding	.233
11.	Figure 11. Soviet tanks in Baku, January 1990	.246
12.	Figure 12. Caspian region oil and natural gas infrastructure	.255
13.	Figure 13. Baku's architectural layers	.263
14.	Figure 14. Older neighborhoods bulldozed to make way for new parks and boulevards	.268
15.	Figure 15. Soviet-era mural near Fountains Square	.274
16.	Figure 16. Map of Baku and Absheron Peninsula districts, official and traditional	.284

#### CHAPTER I

#### INTRODUCTION

Late in the thirteenth century CE, the Italian explorer Marco Polo, sitting in a Genoese prison, related to author and fellow inmate Rustichello da Pisa accounts of his journey to East Asia in the preceding decades. Among the fantastical phenomena that Polo described was a curious geological process at work in the southern Caucasus:

On the confines toward Georgiania there is a fountain from which oil springs in great abundance, insomuch that a hundred shiploads might be taken from it at one time. This oil is not good to use with food, but 'tis good to burn, and is also used to anoint camels that have the mange. People come from vast distances to fetch it, for in all the countries round about they have no other oil.<sup>1</sup>

An exoticism for Europeans of the time, the natural oil wells of the Absheron Peninsula had shaped daily life and economic connections in the city of Baku for centuries at least.<sup>2</sup> And for centuries after Polo had passed through, Baku and its oil remained for Europeans much as depicted in his travelogue: a place of vaguely Eastern location, a substance emitted from the earth in a peculiar way and used a great deal in a small corner of the world for heat, light, and the relief of mangey camels. Even if, as has been suggested by scholars, Marco Polo himself did not witness all the phenomena he claimed to, his account demonstrates that well before the modern era this region was known for its geological curiosities.

<sup>&</sup>lt;sup>1</sup> Marco Polo, *The Travels of Marco Polo*, trans. Henry Yule, ed. Henri Cordier (London: John Murray, 1920, book 1, chap. 3, https://en.wikisource.org/wiki/The\_Travels\_of\_Marco\_Polo/Book\_1/Chapter\_3.

<sup>&</sup>lt;sup>2</sup> Cordier notes in his annotations that the location described in Polo's account is likely the Absheron Peninsula specifically, given the use of the term "ship-loads," the lack of other major oil centers located on water in Transcaucasia at the time, and corroboration from contemporaneous accounts that major powers of the Middle East and Central Asia imported oil from the Absheron region. *Ibid*.

By the late nineteenth century, however, Baku was known as one of the world's primary oil centers, producing roughly half of global oil output.<sup>3</sup> Where pre-industrial producers had once dipped up oil from shallow hand-dug pits throughout the Absheron Peninsula, oilmen of the nineteenth century used steam-powered drills to delve deeply into the earth. As oil gained value among industrializing states, Baku became (then) one of the world's few prolific sources of the substance. Only the United States, where oil drilling had begun in Pennsylvania in the mid-nineteenth century, rivaled the crude oil production and refining capacity of the Baku region. Into the twentieth century, as land-based wells increasingly failed to satisfy, oil extraction moved out into the Caspian Sea, dozens of oil platforms following indications of undersea reservoirs. Over the course of the past 150 years, tanker ships, railways, and pipelines carrying oil products and natural gas have spread out from eastern Azerbaijan across the Caucasus Mountains to the Black Sea, north into Russia, and farther west into Turkey and beyond.

The geographical focus and the driving concern of this dissertation is Baku and its environs. Changes in the Baku urban-industrial environment over the past century and a half are largely a reflection of the imperatives of successive regimes of private and state oil industry leaders, most of them resource-covetous nonnative centers of power. The period of Azerbaijani independence following the breakup of the Soviet Union, during which Azerbaijan gained full control of its own oil industry, offers a telling contrast to more than a century of domination by extra-regional authorities. The history of the Baku oil industry offers a clear, focused example of the social and physical effects of the

-

<sup>&</sup>lt;sup>3</sup> Heinrich Hassmann, *Oil in the Soviet Union*, trans. Alfred Leeston (Princeton: Princeton University Press, 1953). 147-148.

imposition of external parties' financial and commodity demands on an urban-industrial setting. Until recent decades, the Baku oil industry was uniquely concentrated, confined to the Absheron Peninsula; even today, with Azerbaijan's expanding offshore drilling commitments, its resources are less geographically extensive than most other oil sites, and Baku remains the industry's home. In addition, the absence of any other major industry in the area allows for relatively straightforward connections to be made between control of the oil industry and the development of the urban-industrial region.

Baku as an urban environment, comprising not just the physical elements of the city but also its sociocultural communities, has embodied priorities imposed on the oil industry that have shifted as the global importance of oil and natural gas has grown, as those commodities' uses have changed over time, and according to successive regimes' respective political and economic ideologies. The result has been the metamorphosis of the Baku urban-industrial scene in phases, which lend this dissertation its chronological structure. The Baku oil industry grew remarkably quickly in the mid- to late nineteenth century, expanding from the ancient Turco-Persian Inner City and sprouting from the previously thinly inhabited wastes of the Absheron Peninsula. In the early twentieth century, the industry suffered a series of crises that revealed its vulnerability to both local and global unrest. Following its revival by the Soviet regime, the Baku oil industry made immense material contributions to Soviet endeavors, including the development of offshore oil extraction in the mid- to late twentieth century. Finally, in the post-Soviet era, Azerbaijan dramatically reclaimed its hydrocarbon resources in the interests of the newly independent nation. Throughout these eras, the city's population grew and shrank, diversified and grew more homogeneous; interethnic and labor relations eased and raged; the city's architecture and physical layout altered according to authorities' tastes, ad hoc additions, industrial booms, innovations, and stagnation; the state of the natural environment deteriorated (according to modern standards) almost continuously, an unobjectionable or perturbing process, depending on the prevailing attitudes of the period. The character of the city, and its residents' experience of it, hinged on its status as an oil capital.

Until the post-Soviet era, Baku was shaped substantially by the investments, decrees, and conflicts of external powers as they sought oil, as well as oil industrialists' demands for labor, infrastructure, and transportation. The primary driver of industrial expansion until the breakup of the Soviet Union was the desire of non-Azerbaijani states, companies, and individuals to reap financial and political benefits via the exploitation of the natural resources surrounding Baku. Even now, Azerbaijan relies on large foreign investments and international consortia to take full advantage of its own oil and natural gas resources. The Baku region has produced billions of tons of oil products and trillions of cubic feet of natural gas, enriching private citizens, state officials, and the region itself, only with the intervention of distant seats of power and finance.

Particularly in the view of nineteenth- and early twentieth-century Western

Europeans, the situation of the Baku oil industry was interpreted in ethno-national or racial terms—that is, Western help was needed to build up the Baku oil industry because Russians by nature lacked a sense of enterprise, and Azerbaijanis were too "simple" and unindustrious to become involved in complex or long-term business dealings. 4 Nearly

<sup>4</sup> For instance, A. Beeby Thompson, *The Oil Fields of Russia and the Russian Petroleum Industry: A Practical* 

ubiquitous in these sources (and in many more since) is a fundamentally utilitarian view of Azerbaijan's natural resources—because it was possible to profit from oil and natural gas, they must be exploited to the maximum—and an accompanying assumption that industrial development was correct and beneficial, not just desirable but inevitable, according to a narrow understanding of progress and modernity. Baku was not fated to undergo industrial development—nor, of course, was this an inherently positive occurrence. The oil history of Azerbaijan offers a telling juxtaposition to Alison Flieg Frank's history of the failed oil ventures of Austrian Galicia in the late nineteenth and early twentieth centuries. In that case, inattention from the Austrian state, disorder on the oil fields and within the industry, and failure to develop transportation all contributed to the withering of the Galician oil industry by the end of World War I; ultimately, this lack of outside political and economic intervention caused the industry to remain underdeveloped to a fatal degree. Among Frank's arguments is the assertion that known oil reserves do not "set in motion a predetermined set of events or course of development," and that the development of an oil industry is "determined not by History or Progress, but rather by the social, cultural, political, and economic context of the

-

Handbook on the Exploration, Exploitation, and Management of Russian Oil Industries (New York: D. Van Nostrand Company, 1904), 375; J. D. Henry, Baku: An Eventful History (London: A. Constable, 1905), 151-152; "Despatch No. 43 from Mr P. Stevens, British Consul, Batoum, to the Marquess of Lansdowne, Foreign Secretary, London, 12 September 1905," in Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978, Volume 1: 1885-1919, edited by A.L.P. Burdett (Cambridge: Cambridge University Press, 2012), 179-181. This interpretation has persisted in some more modern works that appear to parrot the discriminatory views common in European sources from the time. For instance, Robert W. Tolf describes the Nobels as "industrial miracle makers in a primitive land," and local Transcaucasians as "brutal," "barbaric," "degenerate," and money-grubbing. Robert W. Tolf, The Russian Rockefellers: The Saga of the Nobel Family and the Russian Oil Industry (Stanford: Hoover Institution Press, 1976), xi-xii.

specific time and the specific place in which it rose and fell."<sup>5</sup> The Baku oil industry "succeeded" because its oil and gas resources were plentiful enough to avert exhaustion even after decades of profligate exploitation; because imperial Russian and Soviet authorities took a dedicated interest in its success, attention that included developing the infrastructure needed for a booming energy industry; and because large numbers of oilmen have poured in capital and other resources.<sup>6</sup>

The "outside" or "nonnative" parties discussed in this dissertation vary significantly from one era to the next. During the Russian imperial period, nonnative intervention in the oil industry entailed mass investment and development by Western European entrepreneurs—that is, extranational intervention. The involvement of the Russian government, centered in St. Petersburg, also constituted form of outside intervention: extra-regional and non-Azerbaijani. Decision-makers and other authorities from St. Petersburg to Baku were almost exclusively Russians rather than Transcaucasians. In the Soviet era, non-Soviet players participated in the restoration of the Baku oil industry in quite limited ways, and it was rather the Soviet regime based in Moscow that controlled capital and decision-making related to the Baku oil industry.

<sup>&</sup>lt;sup>5</sup> Alison Flieg Frank, *Oil Empire: Visions of Prosperity in Austrian Galicia* (Cambridge, MA: Harvard University Press, 2005), 7.

<sup>&</sup>lt;sup>6</sup> In this dissertation, I use terms such as "progress" and "development" with neutral intentions, indicating growth, increasing complexity, technological modernization, etc. It is not my intention to portray the elaboration of the modern oil industry as inherently positive.

<sup>&</sup>lt;sup>7</sup> The "foreignness" of Soviet authorities in this context is a matter of open debate. I agree with the assessment of Jane Burbank and Mark von Hagen that the Soviet regime inherited a "habit of imperial governance" from its predecessor in "assumptions about the nature of the populations on Soviet territory and how they should be governed." For my purposes, a categorical stance on this issue is not necessary; it is sufficient to argue that the Soviet center's relationship with Azerbaijan did retain "imperial" features, in significant part to capitalize most effectively on natural resource exploitation. Jane Burbank, Mark von Hagen, and Anatolyi Remnev, *Russian Empire: Space, People, Power, 1700-1930* (Bloomington: Indiana University Press, 2007), 2.

Soviet rule involved a heavily Russianized elite imposing directives on a largely non-Russian community. Thus, the Soviet era did include elements of nonnative, although not extranational, intervention in the development of the Baku oil industry.

It has been only in the post-Soviet era that Azerbaijani oilmen and officials have assumed a truly authoritative hold over national resources, but maximum exploitation has required massive investments from and cooperation with foreign companies such as British Petroleum (BP) and ExxonMobil. Although Azerbaijan's importance in the world oil market has dropped dramatically since the early twentieth century, the hydrocarbon industry of the Baku region remains the single largest contributor to the country's GDP. Much of this new national wealth has been guided by the state into the military, often skin-deep improvements to the Baku region, piecemeal infrastructural projects, and the pockets of the rich and powerful. Very unlike independent oil enterprises in countries such as the United States and Canada, and the larger oil-producing states in the Middle East since the mid-twentieth century, Azerbaijanis have never possessed the capacity to operate and expand this industry on pace with other major oil centers without outside intervention.

This study will contribute to the broader history of the oil industry in the modern era, both worldwide and in the former Soviet Union, where oil remains lucrative for several countries. A number of surveys of the history of oil contribute to our

-

<sup>&</sup>lt;sup>8</sup> Azerbaijan produced roughly 1% of the world's crude oil in 2016, and roughly 0.04% of natural gas in 2017. "Country Comparison. Natural Gas – Production," *The World Factbook 2020* (Washington, DC: Central Intelligence Agency, 2020), https://www.cia.gov/library/publications/resources/the-world-factbook/fields/269rank.html; "Country Comparison. Crude Oil – Production," *The World Factbook 2020* (Washington, DC: Central Intelligence Agency, 2020), https://www.cia.gov/library/publications/the-world-factbook/rankorder/2241rank.html; Alexande Zotin, "Azerbaijan: A Thirty-Year Fairy Tale," in *Managing the Resource Curse: Strategies of Oil-Dependent Economies in the Modern Era*, eds. Vladimir Grigoryev, Andrey Movchan, and Alexander Zotin, 36-46 (Carnegie Endowment for International Peace, 2017).

understanding of broad trends and the impact of oil in the modern era generally, but regional studies have begun to uncover more compelling lessons about the effect of this commodity in the modern world. In a general way, this study fits into what the authors of the recent collection *Petrocultures* term the "energy humanities," which "position oil and energy as the fulcrum around which many of today's most pressing social, economic, and political issues must be analyzed and understood." The themes of *Petrocultures*' essays largely have to do with the ways that oil has shaped politics, philosophy, and everyday life in oil-consuming societies; the book is therefore fairly West-centric and in some cases lacks historical depth. However, the authors call for further work with attention to oil's impact on individual communities, an approach that adds necessary dimension to energy humanities. Studies of the oil industry at the regional level acknowledge the impact of political context, indigenous interactions, and physical environment in a way that broad surveys cannot.

\_

<sup>&</sup>lt;sup>9</sup> For general studies, see: M A. Adelman, *The Genie out of the Bottle: World Oil since 1970* (Cambridge, MA: MIT Press, 1995); Peter Maass, Crude World: The Violent Twilight of Oil (New York: Alfred A. Knopf, 2010); Leonardo Maugeri, The Age of Oil: The Mythology, History, and Future of the World's Most Controversial Resource (Westport, CT: Praeger Publishers, 2006); Brian C. Black, Crude Reality: Petroleum in World History (Lanham, MD: Rowman & Littlefield Publishers, 2012); Mark Mau and Henry Edmundson, Groundbreakers: The Story of Oilfield Technology and the People Who Made It Happen (Peterborough, England: Fast-Print Publishing, 2015). Regional studies have tended to focus on the Middle East and the Americas. See Jorge Salazar-Carrillo and Bernadette West, Oil and Development in Venezuela during the 20th Century (Westport, CT: Praeger Publishers, 2004); Patricia Vasquez, Oil Sparks in the Amazon: Local Conflicts, Indigenous Populations, and Natural Resources (Athens, GA: University of Georgia Press, 2014). During the Soviet era, several Western scholars did contemporary studies of the state of the Soviet oil and gas industries, which are excellent sources for quantitative data, but are generally limited to that data and to brief time periods. These include Robert W. Campbell, Trends in the Soviet Oil and Gas Industry (Baltimore: Johns Hopkins University Press, 1976); Robert W. Campbell, The Economics of Soviet Oil and Gas (Baltimore: Johns Hopkins University Press, 1968); Robert E. Ebel, The Petroleum Industry of the Soviet Union (New York: American Petroleum Institute, 1961); Robert E. Ebel, Communist Trade in Oil and Gas: An Evaluation of the Future Export Capability of the Soviet Bloc (New York: Praeger, 1970); Vagit Alekperov, Oil of Russia: Past, Present, and Future (Minneapolis, MN: East View Press, 2011).

<sup>&</sup>lt;sup>10</sup> Sheena Wilson, Adam Carlson, and Imre Szeman, eds., *Petrocultures: Oil, Politics, Culture* (Montreal: McGill-Queen's University Press, 2017), 3, 4, 9-11.

Despite the extra-regional connections that have contributed to Baku's incongruous nature relative to its surroundings, in every era the city has remained to some degree engaged with its Azerbaijani and Transcaucasian contexts. Importantly, between the early nineteenth century and the end of the twentieth century, Baku was the most concentrated point of contact between the Azerbaijani and Armenian peoples, two groups that have seen no effective resolution to their longstanding interethnic conflict. Relations between them have recurrently affected the operation of the oil industry. Relevant also are the specific geology and geography of the Baku oil industry, including its position on a landlocked sea, in a landlocked country, and in a difficult middle ground between continents and empires, as well as the close concentration of its major inland fields and the location of a number of rich fields under the Caspian seabed. These realities have caused governance, demography, architecture, and urban-industrial planning to manifest change in ways specific to Baku.

In other respects, however, the evolution of the Baku oil industry corresponds with major elements of modern fuel-seeking narratives in the histories of other oil centers. On that note, a useful reference is Timothy Mitchell's Carbon Democracy. Mitchell emphasizes that the processes involved in obtaining oil energy, which in crucial ways relate directly to the properties of oil itself, have tended to result in common power dynamics. In broad strokes, this dissertation reinforces the idea that the oil business results in modes of power that stem from the particulars of its extraction, processing, transportation, and consumption. 11 The "oil rush" that rapidly populated Baku in the late nineteenth and early twentieth centuries bears a strong resemblance to the flood of oilmen

<sup>&</sup>lt;sup>11</sup> Timothy Mitchell, Carbon Democracy: Political Power in the Age of Oil (London: Verso, 2011), 1-2.

and laborers into Pennsylvania and California (as dramatized in the 2007 film There Will Be Blood) during the early boom years of those industries. Most of the major investors in the early American oil industry were East Coast plutocrats rather than local Pennsylvanians, Californians, Texans, and so forth, just as most of the capital that fed the early Baku oil industry came from wealthy Europeans. 12 The distinct ethnic stratification of industry personnel in Baku in nearly every era also appeared in Persia, where Britons struck oil at the beginning of the twentieth century and used local labor to keep it lucrative. 13 As elaborated in Myrna I. Santiago's *The Ecology of Oil*, the creation of the Mexican oil industry of La Huasteca in the late nineteenth and early twentieth centuries involved the intervention of successive state administrations seated in distant Mexico City, a complete reorientation of business in the region toward foreign oil tastes, and distinct ethnic stratification within the Huasteca oil industry (European and American executives, "white" middle-managers, and a working-class composed of competing local and non-local Mexican laborers), all developments that broadly mirror those in the Baku oil industry. 14 In post-Soviet Azerbaijan, profits and other benefits derived from the oil industry are channeled primarily back to the state, international oil companies, and a handful of private citizens; this unequal distribution of wealth has parallels in any number

<sup>&</sup>lt;sup>12</sup> Paul Sabin, *Crude Politics: The California Oil Market, 1900-1940* (Berkeley: University of California Press, 2005).

<sup>&</sup>lt;sup>13</sup> Touraj Atabaki. "From 'Amaleh (Labor) to Kargar (Worker): Recruitment, Work Discipline and Making of the Working Class in the Persian/Iranian Oil Industry," International Labor and Working-Class History No. 84 (Fall 2013): 159-175. Hannah Appel's work on central Africa also highlights ethnic stratification in oil industries there. Hannah Appel, The Licit Life of Capitalism: U.S. Oil in Equatorial Guinea (Durham: Duke University Press, 2019); Hannah Appel, Arthur Mason, and Michael Watts, eds., Subterranean Estates: Life Worlds of Oil and Gas (Ithaca: Cornell University Press, 2015).

<sup>&</sup>lt;sup>14</sup> Myrna I. Santiago, *The Ecology of Oil: Environment, Labor, and the Mexican Revolution, 1900-1938* (New York: Cambridge University Press, 2006), 6-7.

of other undemocratic oil states, including Nigeria, Russia, and Saudi Arabia. <sup>15</sup> Local forces in every case have shaped these oil centers in unique ways that contribute to our broader understanding of oil in history, but they can nevertheless be fitted into a broader framework that is itself telling.

Ultimately, however, this is an urban history, exploring the manifestations of global (or, in the Soviet context, national) demand for oil in a city that in many ways exists to produce the commodity. The history of Baku as a city, including its physical, social, and political elements, cannot be separated from the history of the oil industry, both global and local (and vice versa to a significant degree). That is, no single element can be separated from the others. The growth of the city depended on the growth and increasing importance of the oil industry until the mid-twentieth century. In every era, the oil industry has shaped Baku's character. In every era, however, the imperatives of the oil industry have had to contend with local context, including regional interethnic relations, customs, geography, climate, and pre-industrial history. Baku's urban development results from the meeting of these various external and local forces. Along those lines, this dissertation joins other studies of Russian/Soviet cities dominated by a single industry,

1.5

<sup>&</sup>lt;sup>15</sup> Maass, 55.

which unearth expressions of governance and large-scale economic concerns in individual urban centers.<sup>16</sup>

Further, this study will enter into scholarship regarding the imperial Russian,
Soviet, and Azerbaijani oil industries, as well as scholarship on Azerbaijan's historical
development more generally, by considering this history across a broad chronology,
including several successive regimes. The first formal histories of the Azerbaijan region
were produced largely by Soviet historians in the early decades of the twentieth century.
Soviet historiography usually bears the mark of the political imperatives of the era,
framed by Communist Party-approved rhetoric and often anchored by the revolutions of
1905 and 1917, the Russian Civil War, and the 1920 Bolshevik takeover of Baku.
Although the restricted ideological atmosphere in which Soviet studies were produced
must be kept in mind, they are valuable for a familiarity and immediate expertise with the
Baku oil industry that cannot be replicated. Western industry-related pieces produced in
the Cold War years similarly offer perspectives on the Baku oil industry informed by

Baku (1981-1985) (Baku: Kommunist, 1982).

\_

<sup>&</sup>lt;sup>16</sup> For instance, Jeff Sahadeo, Russian Colonial Society in Tashkent, 1865-1923 (Bloomington: Indiana University Press, 2007); Matthew J. Payne, Stalin's Railroad: Turksib and the Building of Socialism (Pittsburgh: University of Pittsburgh Press, 2001); Paul Stronski, Tashkent: Forging a Soviet City, 1930-1966 (Pittsburgh: University of Pittsburgh Press, 2010); Daniel R. Brower, The Russian City Between Tradition and Modernity, 1850-1900 (Berkeley: University of California Press, 1990); Alexander A. Martin, Enlightened Metropolis: Constructing Imperial Moscow, 1762-1855. (Oxford: Oxford University Press, 2013); Joseph Bradley, Muzhik and Muscovite: Urbanization in Late Imperial Russia. (Berkeley: University of California Press, 1985); James H. Bater, St. Petersburg: Industrialization and Change (Montreal: McGill-Queen's University Press, 1976); Patricia Herlihy, Odessa: A History, 1794-1914 (Cambridge, Mass.: Harvard University Press, 1986).

<sup>&</sup>lt;sup>17</sup> V.A. Beliaeva, Trudovoi geroizm rabochikh azerbaidzhana v gody velikoi otechestvennoi voiny

<sup>(1941-1945</sup> gg.) (Baku: Aznefteizdat, 1957); V.A., Dinkova, ed., Neft SSSR (1917-1987 gg.) (Moscow: Nedra, 1987); "Respublika nefti—respublika khimii," Khimiia i zhizn: nauchno-populiarnyi zhurnal 1 (Jan.

<sup>1967): 30-33;</sup> Z.A. Samed-zade, V.E. Akhundov, E.N. Khanlarov, et al., *Ekonomicheskoe i sotsialnoe razvitie* 

contemporary expertise. 18 Some of the most useful scholarship generated during the Soviet era, by either Soviet or Western scholars, consists of natural and social scientific studies related to the industries.

Ideological context remains an important consideration also in studies that have issued from Azerbaijan and Russia in the post-Soviet years, but this scholarship benefits significantly from specific regional awareness and immediate access to archival sources.

A.A. Igolkin's series of quantitative-heavy studies focusing on the Soviet oil industry faithfully channel the wealth of relevant archival material in Moscow. <sup>19</sup> The wideranging work of historian Leila Aliyeva on the detrimental legacies of oil extraction in Azerbaijan conveys her valuable local perspective on such issues as the physical effects of abandoned oil communities and the connections between Baku's oil history and Azerbaijan's EU status. <sup>20</sup> Farkhad Jabbarov, of the Azerbaijani National Historical Museum, draws substantially on original archival research in his studies. <sup>21</sup> The contributors to the website Nash Baku (Our Baku), particularly historians Irina Rote and Tatiana Speranskaia, have amassed, edited, and dedicatedly analyzed a variety of primary sources available nowhere else. <sup>22</sup>

<sup>&</sup>lt;sup>18</sup> For instance, works by Campbell and Ebel.

<sup>&</sup>lt;sup>19</sup> A. A. Igolkin, Otechestvennaia neftianaia promyshlennost v 1917-1920 godakh (Moskva: Rossiiskii gosudarstvenyi gumanitarnyi universitet, 1999); A. A. Igolkin, Sovetskaia neftianaia promyshlennost' v 1921-1928 godakh (Moscow: Rossiiskii gosudarstvennyi gumanitarnyi universitet, 1999); A. A. Igolkin, Neftianaia politika SSSR v 1928-1940-m godakh (Moscow: Rossiiskaia Akademiia Nauk Institut Rossiiskoi Istorii, 2005).

<sup>&</sup>lt;sup>20</sup> Leila Alieva, ed., *The Baku Oil and Local Communities: A History*, trans. Emil Gazi (Baku: Qanun, 2009).

<sup>&</sup>lt;sup>21</sup> Farkhad Jabbarov, Bakinskaia neft' v politike sovietskoi Rossii (1917-1922 gg.) (Baku, 2009).

<sup>&</sup>lt;sup>22</sup> https://www.ourbaku.com/index.php/Заглавная страница.

The work of several Western historians over the past several decades has informed much of the remaining context for this dissertation. Ronald Grigor Suny was one of the first English-language historians to move beyond outmoded considerations of Transcaucasian history. His monograph *The Baku Commune*, 1917-1918 was important in extending understandings of the Russian Revolution in what became the Soviet periphery, with a clear focus on nationality and social class.<sup>23</sup> Tadeusz Swietochowski has been one of the more prolific writers on modern Azerbaijan, with several monographs that together cover issues of identity, ethnicity, nationality, and politics in both northern and southern Azerbaijan (Iran).<sup>24</sup> In Jörg Baberowski's large 2003 study of the Caucasus, Der Feind ist überall, the oil industry is a presence insofar as it relates to his broad themes of early Soviet power, identity, and control in Azerbaijan.<sup>25</sup> Immensely valuable has been the wide-ranging work of Audrey L. Altstadt, including *The Azerbaijani Turks*: Power and Identity under Russian Rule, the first major English-language monograph on Azerbaijan's general history to emerge in the post-Soviet era, and *The Politics of Culture* in Soviet Azerbaijan, 1920-1940.<sup>26</sup>

<sup>&</sup>lt;sup>23</sup> Ronald Grigor Suny, *The Baku Commune, 1917-1918: Class and Nationality in the Russian Revolution* (Princeton: Princeton University Press, 1972) and "Nationalism and Social Class in the Russian Revolution: The Cases of Baku and Tiflis" (Kennan Institute for Advanced Russian Studies, The Wilson Center, Washington, D.C., 1980).

<sup>&</sup>lt;sup>24</sup> Tadeusz Swietochowski, Russian Azerbaijan, 1905-1920 (1985); Der Islam under die Entwiklung nationaler identitat in Aserbaidshan (1989); Russia's Transcaucasian Policies and Azerbaijan: Ethnic Conflict and Regional Unity (1992); Russia and Azerbaijan: A Borderland in Transition (1995); and A Historical Dictionary of Azerbaijan (1999); Azerbaijan (2004).

<sup>&</sup>lt;sup>25</sup> Jörg Baberowski, *Der Feind ist überall. Stalinismus im Kaukasus* (Munich: Deutsche Verlags-Anstalt, 2003). Here I will also be using the Russian translation, *Vrag est vezde. Stalinizm na Kavkaze* (Moscow: Rossiiskaia politicheskaia entsiklopediia [ROSSPEN], 2010).

<sup>&</sup>lt;sup>26</sup> Audrey L. Altstadt, *The Azerbaijani Turks: Power and Identity under Russian Rule* (Stanford: Stanford University Press, 1992); Audrey L. Altstadt, *The Politics of Culture in Soviet Azerbaijan, 1920-1940* (London and New York: Routledge, 2016).

Three dissertations alone constitute the bulk of recent and archival-based Englishlanguage scholarship on Baku's oil industry specifically. This relatively recent work has considered aspects of this history in greater depth over fairly small periods of time, yielding valuable insights about the industry according to narrower themes. In "At the Center of the Periphery: Oil, Land, and Power in Baku, 1905-1917," Nicholas Lund discusses the decline of the Baku oil industry in the late imperial period, which stemmed from a breakdown in consensus between state and private interests over how to manage the oil industry.<sup>27</sup> Sara Brinegar's dissertation, "Baku at All Costs: The Politics of Oil in the New Soviet State," picks up after Azerbaijan's forcible incorporation into the Soviet Union in 1920. She argues for the oil industry's importance in early Soviet state-building; for the Soviet state, oil was a means of entering foreign markets and international politics in an unsettled and vulnerable period in its history. <sup>28</sup> Finally, Jonathan Sicotte's recent dissertation, "Baku: Oil, Violence and Identity, 1905-1927," centers on the effects of industrial development on the city of Baku, connecting political identity and a "shift in material circumstances" to violence in early twentieth-century Baku.<sup>29</sup> These works have begun to piece together a history of the Baku oil industry that provokes attention and demonstrates the subject's potential to contribute significantly to various historical narratives, particularly relating to the role of the Baku oil industry in the high politics and economic developments of the late tsarist and early Soviet eras.

<sup>&</sup>lt;sup>27</sup> Nicholas Lund, "At the Center of the Periphery: Oil, Land, and Power in Baku, 1905-1917" (PhD diss., Stanford University, 2013).

<sup>&</sup>lt;sup>28</sup> Sara G. Brinegar, "Baku at All Costs: The Politics of Oil in the New Soviet State" (PhD diss., University of Wisconsin-Madison, 2014).

<sup>&</sup>lt;sup>29</sup> Jonathan H. Sicotte, "Baku: Oil, Violence and Identity, 1905-1927" (PhD diss., Georgetown University, 2017).

This dissertation balances a synthesis of secondary source research with primary source research in published, archival, and online sources. I drew on my language training in French, Russian, and Azerbaijani to delve into both primary and secondary sources. A number of French-language travelogues and other studies from the late nineteenth and early twentieth centuries, reflecting a further European perspective on the early Baku oil industry, added to the first two body paragraphs of this dissertation. I used my research of Azerbaijan state archives documents, nearly all of them in Russian, to provide some institutional perspective for multiple eras of the Baku oil industry's history. Furthermore, a number of Russian-language sources from Russian, Azerbaijani, and Soviet authors gave me access to archival and other unpublished information that offered both institutional and on-the-ground viewpoints regarding urban and industrial development in every era. Finally, my training in Azerbaijani not only eased my way in archival research, but also allowed me to connect with recent literature by Azerbaijani scholars on that country's history.

This dissertation addresses a much broader chronological scope than these studies, illustrating changes and continuities across several quite different eras of local and international administration, politics, social tableaus, and economic environments. This long view allows me to draw out cyclical patterns and regime-limited elements of Baku's long oil history, demonstrating that while certain urban-industrial developments, such as labor migration, ethnic stratification, extra-regional intervention, and environmental damage, have stemmed from the city's existence as an oil producer, others are the result of repeated turnovers in administration since the late nineteenth century—architectural styles, urban planning approaches, and the degree of state versus private

control have all shifted according to regime. The goal of this broad chronological approach is to understand the ways in which industrial-scale oil extraction affects upstream oil communities regardless of administrative regime, while showing that a particular regime's ideology and other circumstances can nevertheless deeply affect the lives and experiences of those living in oil-producing sites.

Presented in chapter two is a range of themes that reverberate in the history of the Baku oil industry from the late nineteenth century until the present, tracing the sequence of alterations that this urban-industrial site has undergone in the past century and a half in order to meet global cravings for oil and natural gas. Industrial development in late nineteenth-century Baku demonstrates that its oil industry was dominated by outside interests from the beginning; the nature of oil extraction in the modern geopolitical context prompted intervention from distant seats of power and finance. The administrative arrangement of the late imperial Russian period permitted a multitude of foreign industrialists and investors to drive development of the oil industry while the state itself largely limited its intervention to leasing, permits, and moderate infrastructural development. The urban environment of the Baku area underwent drastic transformations as the uses and importance of oil and natural gas changed, including alterations of the physical environment, both built and natural. Included in this change of urban environment was the population itself—Baku grew from a lightly mixed population of a few thousand in the mid-nineteenth century to a diverse boomtown of well over one hundred thousand at the turn of the century, the product of mass labor migration.

The unusually violent results of labor migration from across western Eurasia in the heated political environment of early twentieth-century imperial Russia is the focus of

chapter three. Like other major urban-industrial centers of the empire, Baku became susceptible to labor unrest around the turn of the century, but interethnic conflict—the result of exceedingly rapid population growth and unequal treatment of various ethnonational groups by private and state authorities—complicated the situation. The primary clash was between Muslim Azerbaijanis and Christian Armenians; their mutual hostility led to the Transcaucasia-wide Armeno-Tatar War (1905-1906) and aggravated the events of the 1905 political and labor revolutions. Relevant here is Rogers Brubaker's exploration of instances in which ethnicity "happens," or is most salient, in the context of a single city (his exemplar is Cluj, Transylvania). <sup>30</sup> Azerbaijani national movements flared into existence primarily in Baku under the Russians' intrusive domination, deriving strength for nationalist claims from the grievances of the Azerbaijani underclass in Baku, as well as from clashes with Armenians and Russians. Baku's character as a rowdy industrial town drew labor organizers of all kinds, including radicals such as the Bolsheviks and a number of ethnicity-specific organizations, making it a hotspot for the politically discontented in the unsettled years before the 1917 revolutions. It was this interethnic violence and labor unrest that repeatedly devastated the Baku oil industry between 1901 and 1920, reducing output to nearly nothing at times, pushing infuriated entrepreneurs and investors to eye other emerging oil centers, and ultimately driving away foreign industrialists.

After the Bolshevik takeover of Baku in 1920, of course, foreign capitalists had little presence in Baku. Following years of destruction and neglect after the February

<sup>&</sup>lt;sup>30</sup> Rogers Brubaker, *Nationalist Politics and Everyday Ethnicity in a Transylvanian Town* (Princeton: Princeton University Press, 2006).

Revolution, the Baku oil industry needed intensive rebuilding if it were ever to produce more than a trickle of oil. This task fell to the new regime, which nationalized the industry immediately. Chapter four covers the reconstruction of the Baku oil industry between 1920 and 1928, particularly addressing changes in the urban environment in this period of transition from old regime to new, from capitalism to state socialism. Although this era was filled with partly-failed industrial experiments and half-completed architectural projects, ultimately the Baku oil industry was again rendered useful as an oil center to a major industrializing power—the Soviet state. Control over oil as a commodity was now entirely domestic, funded and administered by hierarchies that ran upward to Moscow; however, Baku was yet again being maneuvered to serve the needs of a distant seat of power.

This trend reached its apex during the First Five-Year Plan (1928-1932). In chapter five, I use themes of labor migration and ethnicity in the Baku urban-industrial scene to illustrate the local consequences of pitched industrialization during the first three Five-Year Plans. Urban change in this case involved far more than physical transformation of the Baku area. A second major wave of labor migration brought hundreds of thousands of newcomers into contact with the ideologically straitened, challenging environment of Soviet industry. Interethnic relations in this period calmed, but tensions remained. A relatively new nationalities policy, in combination with rigorous keeping of the peace by new law enforcement bodies, effectively tamped down open interethnic conflict even as unequal treatment persisted—Russians and Russian culture continued to dominate Baku, an indication of the oil industry's value to Moscow and of

leaders' continuing doubts about locals' ability to run the industry according to the state's desires.

Baku's desirability and the importance of oil to industrialized warfare is evident from belligerents' focus on the oil center during World War II, the subject of chapter six. The city and industry were radically upended during the war. Baku served Soviet wartime demands by churning out fuels for military vehicles, refitting factories to produce weapons, parting with thousands of conscripted laborers, and recruiting tens of thousands of women, minors, and retirees to work in the oil industry. Following early wartime enthusiasm and optimism, the mood in Baku turned bleak as the extreme vulnerability of the city to violent invasion became clear, prompting a piecemeal evacuation of equipment and personnel across the Caspian Sea. Baku's position as an oil center during a modern war put a target on its back. Allied Powers, particularly the British and French, made plans to run aerial bombing raids over Baku, recognizing its significance to the Soviet war effort. Following the onset of Operation Barbarossa, Axis Powers targeted Baku not to cripple its industry but rather to claim its oil to make up for their own fuel shortages. The success of that effort would have had calamitous consequences for Allied Powers, but it was ultimately stymied by Allied victory at Stalingrad.

The targeting of Baku during the war called attention to the industry's vulnerability and the drawbacks of Soviet oil's concentration in Transcaucasia. Even before the end of the war, Soviet authorities began to develop oil and natural gas extraction elsewhere in the country, including the Urals region. The state's attention elsewhere, the Baku oil industry gradually declined in importance between the mid-1940s and the end of the Soviet era, as covered in chapter seven. Baku continued to play other

roles in the Soviet oil scene, manufacturing most Soviet oil equipment, hosting the Soviets' early experiments with offshore extraction, and training and educating the country's premier oil experts, but its centrality to the Soviet oil business had clearly diminished, as made evident by the exodus of Russian workers to more promising opportunities. The city's character changed remarkably as a result, its urban development now relatively disconnected from its status as an oil center. The "nativization" of Baku in the late Soviet era was a social, political, and cultural process that in many ways portended its post-Soviet future.

Finally, chapter eight will address the post-Soviet era of Baku oil, a period in which trends old and new have emerged. This period of Baku's history has been characterized very generally by a relatively steady upward climb from violence, poverty, and uncertainty toward peace and prosperity. The era began with severe clashes between Azerbaijanis and Armenians that resulted in horrific massacres and the expulsion of nearly all Armenians from Baku, the (likely) final bloody episode in that part of Baku's history, but not in Azerbaijan's. In the early 1990s, the oil industry reached its lowest point in nearly a century as Azerbaijan was ripped from the Soviet system and compelled to make the most of its oil industry independently. As in the imperial Russian period, the participation of foreign oil companies has become essential to the Baku oil industry's ability to produce according to its maximum potential. Otherwise, Azerbaijan has taken sole possession of its oil via the state-owned national oil company SOCAR (State Oil Company of the Azerbaijan Republic); although the Baku oil industry is still developing according to the requirements of the global oil market, much of its revenue now percolates down into projects and services that benefit Azerbaijanis and the nation of

Azerbaijan, albeit unevenly. For the fourth time, Baku has undergone remarkable physical changes, as towering buildings of glass and steel rise around the Turco-Ottoman Inner City, and among the classical imperial Russian and modernist utilitarian Soviet structures.

In the modern era, oil has become a resource that requires the convergence of immense systems of capital, manpower, expertise, and infrastructure for basic operations, let alone profitability. Only the world's largest superpowers have had the capacity to operate lucrative oil industries entirely independently. The social, political, cultural, and physical effects of this convergence, as it has evolved over the past century and a half, are embodied in Baku, among the oldest and densest oil centers in the world. The oil industry and urban development of Baku have been inextricably linked for much of the city's history, making it a site where regional circumstances and international priorities have come face to face.

#### CHAPTER II

# "PROSPERITY LIES AHEAD": DOMESTIC AND FOREIGN CONTRIBUTIONS TO THE BUILDING OF THE BAKU OIL INDUSTRY, 1872-1901

Baku is a city not only of the present, but also of a wide future; the city is more American than Russian; it grows as in a fairytale—not by the day, but by the hour. The most attentive administrative measures must lag behind its rapid growth and unstoppable new needs. Arising before one's eyes are new districts, whole new streets...In short, Baku is the Marseille of the Caspian Sea, the central trading port of the entire eastern Caucasus, ruling simultaneously over the Persian and Turkmen shores of the Caspian.

—Evgenii Markov, Rossiia v srednei azii (1901)<sup>31</sup>

Less than a century before European investors began turning their attention to Transcaucasia, the Absheron Peninsula had been for Europeans little more than a curiosity for travelers. Baku was a convenient stopping point while traversing the Caucasus, and its natural pools of crude oil and continuously burning gas seeps had offered an exotic diversion for Europeans passing through since at least the late thirteenth century CE.<sup>32</sup> French merchant Jacques-François Gamba, who stayed in the city briefly while on business trips between 1817 and 1820, made a point of paying a visit to what then amounted to the tourist hotspots: the centuries-old Zoroastrian temple containing an

<sup>&</sup>lt;sup>31</sup> Evgenii Markov, *Rossia v srednei azii: ocherki puteshestviia* (St. Petersburg, M. M. Stasiulevich, 1901), 113.

<sup>&</sup>lt;sup>32</sup> Earlier Western and current Azerbaijani historians have claimed that fifth-century Greco-Roman historian Priscus of Panium passed through Baku, citing his mention of "the flame that arises from the underwater rock"; in his translation of the works of Priscus, John Given concludes that Priscus' route could not have taken him anywhere near Baku. See Priscus of Panium, *The Fragmentary History of Priscus: Attila, the Huns, and the Roman Empire, AD 430-476*, trans. John Given (Merchantville, NJ: Evolution Publishing, 2014), 69, 90; Sabit Bagirov, "Azerbaijani Oil: Glimpses of a Long History," *Perceptions: Journal of International Affairs* 3, Vol. 1 (1996): 1.

"eternal fire," as well as nearby oil lakes and hand-dug oil pits.<sup>33</sup> Gamba noted that Baku was small and clean, with a diverse population of "Tatars," Armenians, and "Persians."<sup>34</sup> George Keppel, on his way to India from England on a sightseeing tour in the 1820s, made similar observations, describing Baku as "pleasantly situated on the peninsula of Abosharon" and a "neat, though small sea-port town, built entirely of stone." Its population, then about four thousand in his estimation, consisted of mainly "Tatars" and a few Armenians.<sup>35</sup> These travelogues, and others like them, indicate that before oil became a commodity valuable on a global scale late in the nineteenth century, it was significant only on a local level in the Absheron region. For outsiders, Baku oil and natural gas were essentially tourist attractions, not worth a journey in themselves.

By the end of the nineteenth century, however, this region and its resources had acquired great geopolitical and economic significance in the world. Oil became valuable to modernizing and industrializing states, and Baku offered plenty of it. This chapter recounts the emergence of industrialized Baku, focusing predominantly on developments that followed the Russian government's changes to Baku land leasing policies in 1872.

<sup>&</sup>lt;sup>33</sup> Jacques-François Gamba, "Baku," in *Le Voyage en Russie: Français aux XVIII<sup>e</sup> et XIX<sup>e</sup> Siècles*, ed. Claude de Grève (Paris: Robert Laffont, 1990), 739-741.

<sup>&</sup>lt;sup>34</sup> "Tatar" or "Tartar" was an early ethno-religious designation that covered roughly the people now known as "Azeris" or "Azerbaijanis" – for the sake of clarity, I will be using "Azerbaijanis" to refer to the Turkic Muslims of what is now Azerbaijan, but I recognize that this is not a completely accurate designation for this time period, given that Azerbaijan as a separate territory was essentially a creation of the Soviet state. In addition, so as to avoid confusion with the Persian ethnic group, I will be using the term "Iranian Azerbaijanis" to refer to the Turkic Muslims of the northern Persian Empire. Almost without exception, past and modern writers' use of "Persians" in Baku in the Imperial Russian era refers to those from the northern part of the Persian Empire, now northern Iran, who did not belong to the Persian ethnic group (as we conceive of it).

<sup>&</sup>lt;sup>35</sup> George Keppel, *Personal Narrative of a Journey from India to England* (Philadelphia: Carey, Lea & Carey, 1827), 298-299. Russians were by then present in the Baku region (conquest by the Russian Empire took place about 1806, and possession by the Treaty of Gulistan in 1813), but likely still would have been nearly always isolated in their garrison at the point when Gamba and Keppel traveled through.

Between that year and about 1901, the Baku oil scene grew in nearly every sense: acreage under exploitation, oil production, population of workers and other inhabitants, the physical size of the city, transportation, domestic and foreign investment, and so on. This period was followed by nearly two decades of rough ups and downs in the early twentieth century, as covered in chapter three. In the final few decades of the nineteenth century, however, Baku was rapidly developing into one of the Russian Empire's most valuable industrial centers. One purpose of this chapter is to explore the rise of the Baku oil industry as the result of Russian authorities' reactions to the emerging global market for oil products and, more critically, as the result of Western interventions. Following the theme of foreign influence on the industry and its surrounding community, I will narrow in on the ways in which nonnative actors initiated processes of economic growth and change that took Baku from a peripheral stopover to a lively urban-industrial center increasingly geared toward capitalist European imperatives. The Russian government was of course the ultimate authority when it came to leases, other permissions, and much of the infrastructural development associated with the growth of the oil business, but the industry would not have become competitive on a global scale by 1901 without the investments and entrepreneurship of (primarily Western) Europeans.

The interpretation of early Russian industrialization here enters an ongoing discussion regarding the degree to which the Russian state was the primary driver of industrialization within the Russian Empire. Especially before the industrialization policies instituted by Sergei Witte in the 1890s, Russia lagged considerably behind other European powers in this respect. Alexander Gerschenkron argued that in more "backward" countries, such as the Russian Empire, the state had to take a much greater

role in prompting industrialization than in more "advanced" countries, such as Britain.<sup>36</sup> Per John P. McKay's summary of this "statist interpretation," in Russia "the state itself substituted for the 'missing prerequisites' of autonomous market demand, accumulated private capital, enterprising businessmen, and skilled labor."<sup>37</sup> Although a number of historians still ascribe to the basics of this interpretation, studies of individual industrial sites in the Russian Empire have complicated the statist interpretation, showing that, in some cases, domestic initiative and wealth could fuel industrialization, and that European intervention was far from rare.<sup>38</sup> In Baku, market demand, private capital, enterprising businessmen, and skilled labor were all present by the 1880s, but from largely foreign sources. One of the Russian state's greatest interventions in stimulating industry in Baku was its completion of the Transcaucasian Railway, and this development came only after years of lobbying and financial contributions by foreign-owned oil interests.

The developments of this era demonstrate that, from the start, the oil industry of Baku required intervention from distant seats of power and finance in order to become profitable. The Nobel brothers were the most famous and prolific investors of this early period, but numerous other European entrepreneurs jumped in as they came to understand the potential lucrativeness of the oil business in Baku. Through the activity primarily of private oil companies, the region became figuratively and literally invested with

<sup>&</sup>lt;sup>36</sup> Alexander Gerschenkron, *Economic Backwardness in Historical Perspective: A Book of Essays* (Cambridge, MA: Belknap Press of Harvard University Press, 1962).

<sup>&</sup>lt;sup>37</sup> John P. McKay, "Baku Oil and Transcaucasian Pipelines, 1883-1891: A Study in Tsarist Economic Policy," *Slavic Review* 43, No. 4 (Winter 1984): 605.

<sup>&</sup>lt;sup>38</sup> See McKay, "Baku Oil"; Richard Sylla and Gianni Toniolo, eds., *Patterns of European Industrialization: The Nineteenth Century* (New York: Routledge, 1991); Olga Crisp, *Studies in the Russian Economy before 1914* (New York: Barnes & Noble Books, 1976); Thomas Jones, "British Business in Russia, 1892-1914" (PhD diss., University College London, 2017).

importance, crowded with British-owned oil derricks, German-run refineries, and Swedish-funded railroads and ships. Over several decades at the end of the nineteenth century and the beginning of the twentieth century, this multitude of foreign industrialists and investors, seeing themselves as the most capable exploiters of oil, and glimpsing an excellent opportunity to make a profit, attempted to reorient the once isolated and modest Baku oil industry toward international markets, adjusting it to meet external needs as well as their own. Baku metamorphosed at their touch, as tens of thousands of laborers migrated to work in the oil industry and associated enterprises, new neighborhoods (bright and modern, grim and shoddy) arose according to the needs of industry, the region began to drip and smolder with industrial pollution, and advances in transportation connected Baku more directly to the outside world.

### Pre-Industrial Baku

It was not until the mid- to late nineteenth century that Baku's oil held much interest for anyone but those living near the Caspian. For locals, oil and natural gas were a ubiquitous part of life and had been for millennia, since humans began congregating along that part of the Caspian Sea's shores. Some hundreds of thousands of years ago, humans were attracted to the area's coastal caves and (then) abundant flora and fauna. As powerful states emerged in Eurasia, the Absheron region became strategically significant as a crossroads on land and a sheltered harbor on the Caspian Sea. Before the nineteenth century, humans did not come to Baku because oil existed there; they were attracted to the area for other reasons, and oil became a part of their lives.

-

<sup>&</sup>lt;sup>39</sup> Sherri Liberman, *Historical Atlas of Azerbaijan* (New York: The Rosen Publishing Group, 2004), 7.

After centuries of alternating conquests by Turkic and Persian powers, in the eighteenth and nineteenth centuries the region that is now Azerbaijan drew the attention of the Russian Empire as it attempted to extend its influence southward at the expense of the Ottoman and Persian empires. Peter the Great briefly held the western shore of the Caspian Sea, including Baku, during the second Russo-Persian War (1722-1723), as did Catherine the Great during the third Russo-Persian War (1796); on both occasions, the territory was soon returned to Persia, and the local impact of Russian administration was slight. 40 It was only during the fourth Russo-Persian War (1804-1813) that the Russian Empire managed to secure Baku (as well as much of the rest of Transcaucasia) from Persia by the Treaty of Gulistan (1813), which established the border between Russia and Persia along the Aras River, today the border between Azerbaijan and Iran. Fifteen years later, during the fifth Russo-Persian War (1826-1828), Persia surrendered the rest of Transcaucasia to the Russian Empire by the Treaty of Turkmanchai (1828). The Caucasus was divided into several gubernii (provinces) administered collectively under the Imperial Russian Viceroyalty of the Caucasus.<sup>41</sup>

Until the 1840s, Azerbaijan remained under military administration, and Baku housed a Russian garrison, but Russian authorities allowed the semi-independent khanates that had long held effective power in the region to retain a fair amount of local autonomy in order to ease the transition to Russian rule. However, the Russian state incrementally undermined the khans' authority in the first half of the nineteenth century by adding its own recruits to local administration and rearranging territorial lines. This

<sup>&</sup>lt;sup>40</sup> Altstadt, *The Azerbaijani Turks*, 8.

<sup>&</sup>lt;sup>41</sup> Ibid., 17-19.

trend intensified as the Caucasus Viceroyalty moved to eliminate military administration in favor of civil administration mid-century. By the eve of industrialization in Baku, the Viceroy of the Caucasus and the Governor of Baku, always ethnic Russians, dominated politically.<sup>42</sup>

The relationship between the imperial state and Baku in the tsarist era was almost indisputably colonial, per widely accepted definitions in the context of the Russian Empire. <sup>43</sup> Baku and the rest of Transcaucasia were under the political and military control of the central Russian state, which deemed these regions backward and uncivilized, useful for their resources, strategic location, and other additions to imperial might. However, the Russian Empire had conquered the Caucasus primarily for geopolitical reasons, and only secondarily (a distant second) as another colonial extension that could produce raw materials for the imperial center. <sup>44</sup>

Oil extraction before the mid-nineteenth century was small in scale. If oil was not already seeping organically to the surface of the earth or sea, extraction was often a matter of simply digging a shallow well by hand, dipping up in hide or wooden buckets

<sup>&</sup>lt;sup>42</sup> Baberowski, 28-30.

<sup>&</sup>lt;sup>43</sup> Daniel R. Brower and Edward J. Lazzerini, "Introduction," in *Russia's Orient: Imperial Borderlands and Peoples, 1700-1917*, eds. Daniel R. Brower and Edward J. Lazzerini (Bloomington: Indiana University Press, 1997), xiv-xv. Most of the essays in *Russia's Orient* of course illustrate this approach to the Russian Empire's borderlands; see also Vera Tolz, *Russia's Own Orient: The Politics of Identity and Oriental Studies in the Late Imperial and Early Soviet Periods* (New York: Oxford University Press, 2011); Andreas Kappeler, *The Russian Empire: A Multiethnic History* (New York: Pearson Education, 2001); T.M. Barrett, *At the Edge of Empire: The Terek Cossacks and the North Caucasus Frontier, 1700-1860* (Boulder, CO: Westview Press, 1999); Sahadeo.

<sup>&</sup>lt;sup>44</sup> Leila Alieva, "The Reforms and Oil Revenues – Consequences and Implications for the Communities in the Historical Perspective," in *The Baku Oil and Local Communities: A History*, ed. Leila Alieva, trans. Emil Gazi (Baku: Qanun, 2009), 20; Tadeusz Swietochowski, *Russian Azerbaijan, 1905-1920: The Shaping of National Identity in a Muslim Community* (Cambridge: Cambridge University Press, 1985), 3, 17.

the fluid that seeped to the surface, and transporting it to reservoirs in hide bags. 45 Left to sit out in the elements for a time, this crude would self-separate: water and dirt sank to the bottom, and the remaining oil split into a few usable oil products with diverse applications. Baku oil, particularly a substance called by some "white naphtha" (possibly akin to mineral oil), was used for a variety of ailments. According to nineteenth-century English oil expert Charles Marvin, "externally applied, it is of great use in scorbutic pains, gouts, cramps, &c." When ingested, he claimed, white naphtha helped with kidney stones, "disorders of the breast," sexually transmitted diseases, and headaches. 46 The most common use for oil products in this period was for heating, lighting, and cooking. Baku's primary oil export for a long period was lamp oil traded to Persian cities.<sup>47</sup> In comparison to other fuels, it was evidently not of high quality (Alexandre Dumas père: "even when pure, [Baku naphtha] gives off thick smoke of a disagreeable flavor, which does not preclude it from being used from Lenkoran to Derbent"), but it had the advantage of abundance. Beyond its uses as medicine and for household fires, Baku oil was used by locals as a grease for carriage wheels and the like so that Muslim residents would not have to touch pork fat. It could be added to a kind of cement mixture for construction. 48 Varnishes and lacquers benefited from its addition. 49 Any surface that

<sup>&</sup>lt;sup>45</sup> Joseph A. Martellaro, "The Acquisition and Leasing of the Baku Oilfields by the Russian Crown," *Middle Eastern Studies* 21, no. 1 (1985): 80.

<sup>&</sup>lt;sup>46</sup> Charles Marvin, *The Region of Eternal Fire: An Account of a Journey to the Petroleum Region of the Caspian in 1883* (London: W.H. Allen & Co., 1891), 169.

<sup>&</sup>lt;sup>47</sup> Altstadt, *The Azerbaijani Turks*, 18-19.

<sup>&</sup>lt;sup>48</sup> Alexandre Dumas, "Les Feux de Bakou," in *Le Voyage en Russie: Français aux XVIII<sup>e</sup> et XIX<sup>e</sup> Siècles*, ed. Claude de Grève (Paris: Robert Laffont, 1990, 798.

<sup>&</sup>lt;sup>49</sup> Marvin, 169.

needed waterproofing, including food containers, might have oil rubbed into it. In order to mitigate the dustiness of Baku streets, city workers sprinkled oil about as a dampener—this kept the dust down for perhaps two weeks at a time, according to British traveler Edmond O'Donovan, but when the mess was disturbed by a particularly strong wind, oil particles stuck to one's clothes and "no amount of brushing or washing can remove it."<sup>50</sup>

Natural gas was also useful to locals, but given the unfeasibility of transporting natural gas over any great distance before the twentieth century, its use was necessarily entirely local. Inhabitants had long utilized natural gas in the making of lime; after quarrying limestone abundant near Baku, lime producers dug pits in locations known to seep natural gas, set the gas alight, and poured crushed limestone into the rudimentary kiln. Gamba noted "fifteen to twenty lime kilns" near the hand-dug oil wells he visited.<sup>51</sup> Using basic piping systems, or by strategically constructing domiciles, locals might tap into natural gas seeps for household cooking, heating, and lighting.<sup>52</sup> Finally, the connection between natural gas fires (first produced when natural gas seeps were ignited by lightning, then by human-made ignition sources) and the practice of Zoroastrianism in the area is unknowably old. Numerous travelers through the area visited a "fire temple,"

<sup>&</sup>lt;sup>50</sup> Edmond O'Donovan, *The Merv Oasis: Travels Abroad and Adventures East of the Caspian during the Years 1879-80-81, Vol. I* (London: Smith, Elder & Co., 1882), 32-33.

<sup>&</sup>lt;sup>51</sup> Gamba, 741.

<sup>&</sup>lt;sup>52</sup> Cunliffe Hippisley Marsh, *A Ride Through Islam: Being a Journey through Persia and Afghanistan to India, via Meshed, Herat, and Kanahar* (London: Tinsley Brothers, 1877), 54; Azərbaycanın Respublikası Dövlət Tarix Arxivi (State Historical Archive of the Azerbaijani Republic) (hereafter ARDTA) f. 22, op. 2, d. 2946, ll. 21-22.

likely the site now known as Ateshgah ("fire house" in Farsi), a structure of unclear origin apparently intended for worship by Zoroastrians and other South Asian religions.<sup>53</sup>

Following the domination of Transcaucasia by the Russian Empire, oil extraction continued, but for several decades it barely exceeded pre-conquest levels.<sup>54</sup> The Russian state tended to view oil and natural gas as resources of minor importance, and there was little interest in its products, including kerosene, beyond the peninsula.<sup>55</sup> In the global context, this attitude was unremarkable—until the point when fossil fuels became abundant, profitable, and easy to transport, local resources (wood, coal, sheep fat, animal droppings, etc.) and/or whale oil were the first preference in communities the world round.

Until 1821, oil operations in Baku were under the direct control of treasury officials in St. Petersburg, an arrangement that proved unsustainable. The complexities of the enterprise even in those early years required more dedicated, local attention in order to turn a profit for the state. The government of Alexander I (r. 1801-1825) over several years began to implement a leasing system that was only a partial modification of the pre-1821 system, and similar to the Crown's treatment of its forest and mineral resources. Under the "Lease System," the Crown rented out plots of land for four years at a time—

<sup>&</sup>lt;sup>53</sup> Sources regarding the history of this structure and its inscriptions are unreliable and/or outdated, clouded by earlier Western misconceptions about these religions, possibly prejudice from more dominant local religions/ideologies, and, more recently, the site's new life as a profitable tourist hotspot. See Rev. Justin E. Abbott, "Indian Inscriptions on the Fire Temple at Baku," Journal of the American Oriental Society 29 (1908), 299-303; C. [Charles] E. Stewart, "Account of the Hindu Fire-Temple at Baku, in the Trans-Caucasus Province of Russia," The Journal of the Royal Asiatic Society of Great Britain and Ireland (April 1897): 311-318; James Bryce, Transcaucasia and Ararat (New York: The MacMillan Co., 1896), 96-97.

<sup>&</sup>lt;sup>54</sup> Swietochowski, Russian Azerbaijan, 18.

<sup>&</sup>lt;sup>55</sup> Lund. 29.

each lessee thus had just four years to explore the plot, drill or dig wells, marshal laborers and equipment, and construct derricks. This arrangement meant that lessees had little incentive to invest heavily in a particular plot, which led to destructive and wasteful extraction practices.<sup>56</sup> Under this system, a succession of tax farmers won concessions from the state to collect royalties and rent.<sup>57</sup>

Russia's oil enterprise remained stunted for years after Baku oilmen drilled the first deep well around 1860. Drillers in Pennsylvania achieved the same feat in roughly the same period; however, American oilmen experienced few of the limitations imposed on oil entrepreneurs in Baku by the Lease System. Marvin blamed the state monopoly and tax-farming arrangement.<sup>58</sup> In July 1866, Charles E. Stewart noted just two sets of drilled wells fully in operation, one of them in Balakhani, the other in Surakhani, and two refineries.<sup>59</sup> Several years later, Cunliffe Hippisley Marsh also noted just two refineries.<sup>60</sup> In his study of the Russian Crown's pre-1872 leasing system, historian Joseph A. Martellaro concludes that it was altogether "short-sighted," plagued by ineffective short-

<sup>&</sup>lt;sup>56</sup> Martellaro, 80, 82-83. I am using Martellaro's terminology for the oil management regimes in Baku during the Imperial Russian period: Lease System (1821-1872), Auction System (1872/1873-1896), Auction-Royalty System (1897-1917).

<sup>&</sup>lt;sup>57</sup> Every state-picked concessionaire was Armenian. Altstadt, *The Azerbaijani Turks*, 21; Audrey Altstadt-Mirhadi, "Baku: Transformation of a Muslim Town," in *The City in Late Imperial Russia*, ed. Michael F. Hamm (Bloomington: Indiana University Press, 1986), 286.

<sup>&</sup>lt;sup>58</sup> Marvin, 204. Azerbaijani authors tend to claim an 1846 drilling on the Absheron Peninsula as first "successful" drilling using modern technology (there is no solid evidence for this); most other sources point to a drilling in 1859 in Pennsylvania. See Alieva; Bagirov.

<sup>&</sup>lt;sup>59</sup> Charles E. Stewart, *Through Persia in Disguise: With Reminiscences of the Indian Mutiny* (London: George Routledge & Sons, Ltd., 1911), 94, 410.

<sup>&</sup>lt;sup>60</sup> Marsh, 54. In one evening, Marsh witnessed both the industrial and traditional uses of natural gas in the region: returning to the city center from these refineries through the barrens, he saw "the silent waste lit up by various fires, each surrounded by a group of wild Tartars cooking their food by its heat."

term goals, corruption, and a general failure to develop commercially, and indeed some imperial Russian authorities stationed in Transcaucasia seemed to think along the same lines. Henry Morton Stanley, traveling through Baku in the year before he located David Livingstone in Africa, one evening had a deep conversation with General Nikolai Stoletov, who complained freely about the state of the oil industry, inhibited as it was by lack of government initiative, "Russian apathy," and timid merchants. 62

In regard to oil, the imperial Russian government was limited in its ability to push industrialization. The state persisted in treating oil as any other natural resource to be exploited, even as it became clear that demand for oil products was increasing by the moment, and that the resource required new approaches to industrialization: vast amounts of upfront capital, specific expertise, and integration into extensive economic and transportation networks. In order to remain competitive in the oil trade, the Russian state took a step back, encouraging local and foreign initiative to take the reins, while it limited itself largely to regulatory and transportation matters.

#### Opening the Baku Oil Industry

The Russian government was prompted to change the way it handled the Baku oil industry by the realization that a rapidly growing market for kerosene was emerging both in the Russian Empire and in other industrializing states, but that American products effectively monopolized it.<sup>63</sup> Baku's production was gradually increasing every year, but

...........

<sup>61</sup> Martellaro, 87.

<sup>&</sup>lt;sup>62</sup> Henry Morton Stanley, *My Early Travels and Adventures in America and Asia* (New York: C. Scribner's Sons, 1895), 240.

<sup>63</sup> Thompson, 32, 485-486; Henry, 5, 33.

it was not terribly profitable. Its production and profitability seemed especially meager in comparison to the American oil industry, which was expanding much more rapidly because of economic and legal structures set up in that country that allowed for greater and more rapid investment, as well as the development of infrastructure and technology to take advantage of the resource. Witnessing American investors and oil companies making massive profits on the resource, in part by selling to Russian subjects, Russian officials in the 1860s began the long and tedious process of considering a change from the Lease System to a more productive and profitable arrangement. The new system ultimately drew entrepreneurs and investors from all over western Eurasia.

In 1872, Russian officials announced new regulations that were intended to encourage private enterprise. 3300 acres of Crown oil-bearing land administered by the Mining Department (sectioned into regular twenty-seven-acre plots) around Baku would be available for auction and long-term leasing. <sup>64</sup> The development of this "Auction System" represents the Russian state's most consequential intervention into the Baku oil industry. Leases would be semi-permanent, and although the state still formally owned the land itself, lessees now exercised true rule of capture, meaning that they legally possessed all oil and/or gas brought to the surface. The new system was designed to increase revenue for the Russian state: the auctions themselves directly provided revenue, and the predicted increase in kerosene production would provide more product for state excise taxation. <sup>65</sup> As the number of interested parties increased, as the Russian state

-

<sup>&</sup>lt;sup>64</sup> Martellaro, 86. The Mining Department's letterhead font was designed to look like swirling rock patterns.

<sup>&</sup>lt;sup>65</sup> The main outlines of the new system reflected those in place in American oilfields. Lund, 33; Swietochowski, *Russian Azerbaijan*, 20, 31.

became more comfortable with the new system, and as exploration for oil expanded, officials made thousands more acres of land available for auction in subsequent years. Most came from state lands set aside for oil exploitation; some acreage had once been allotted for agricultural use by nearby villagers, now seized for the state's purposes as auctioning oil land became more profitable. The state also granted large plots in reward for service to officials and elites, some of whom sold the land to private owners as soon as they received it. In every case, the price depended greatly on a plot's proximity to proven oil sources.

The outcome of the first oilfield auctions, which took place between February and December of 1872, represented a great success for nearly every party involved. The Russian government raised nearly three million rubles in that year's auctions alone; by contrast, over the preceding fifty years it had collected just six million rubles via tax farming and its own development of oil fields. <sup>69</sup> The opportunities offered by the new system drew many interested entrepreneurs. Although several local Azerbaijani entrepreneurs bid successfully on the lots offered by the Russian government, the biggest winners by far in the 1872 auctions were Russian and Armenian businessmen. Of the

<sup>&</sup>lt;sup>66</sup> A. A. Igolkin, Otechestvennaia neftianaia promyshlennost v 1917-1920 godakh, 32.

<sup>&</sup>lt;sup>67</sup> Marvin, 206.

<sup>&</sup>lt;sup>68</sup> Thompson, 18.

<sup>&</sup>lt;sup>69</sup> Lund, 32

fifty-one plots auctioned in 1872, just five went to Azerbaijanis. The remaining plots were split about equally between wealthy Russians and Armenians.<sup>70</sup>

However, few Caucasian or Russian companies or individuals had the capital, networks, and resources to afford the outlays necessary to develop the Baku oil industry to meet the level of American industrialism. Significant upfront capital was needed to purchase proven oil plots, and unproven oil plots posed financial risks; depending on the field, drilling to an adequate depth could take over a year, meaning quite a delay in income for the owner; drilling and extraction equipment was expensive and usually had to be imported from abroad; and Russia's wealthy were still generally unused to investment practices already long-established elsewhere in Europe and North America. Entering the "downstream" components of the industry (refining, transportation, and sale) was in some ways more accessible to locals because it involved less risk, but only the giant companies had the resources and connections to achieve full vertical integration. J. D. Henry, a British journalist and editor of the publication *Petroleum World*, noted this in his observations of the nineteenth-century Transcaucasian oil industry: "Russia, confessedly poor, is not now, any more than she was a quarter of a century ago, a philanthropist amongst civilised nations, but she has new industrial aspirations which will not materialise without foreign financial assistance."<sup>71</sup> The Russian government and domestic entrepreneurs were simply not able to develop the oil resources of the region

<sup>&</sup>lt;sup>70</sup> Azerbaijanis owned a small minority of oil plots and extraction firms, and were progressively less important in refining and transportation, for the remainder of the Imperial Russian era. However, a few Azerbaijanis did become incredibly wealthy from their participation in the Baku oil industry. The unequal treatment (perceived and actual) between Armenians and Azerbaijanis will be explored in greater detail in chapter three. Altstadt, *The Azerbaijani Turks*, 21; ARDTA f. 22, op. 2, d. 10, l. 10.

<sup>&</sup>lt;sup>71</sup> Henry, x.

very effectively; indeed, Prince Grigorii Golitsyn, the Viceroy of the Caucasus between 1896 and 1904, urged foreign investment, noting in Russia a lack of free capital, weak industrial enterprise, a lack of technical knowledge, and poor business initiative.<sup>72</sup>

As it was, foreign entrepreneurs and investors were drawn to Baku not primarily because of any effort on the part of the Russian government or Caucasian locals to attract money and interest, but rather in large part due to a glut of travelogues and pamphlets circulating widely in Western Europe in the mid- to late nineteenth century and early twentieth century, advertising the enigmatic and exotic Caucasus, its many treasures, and the thrill of discovering a potentially lucrative opportunity in an "uncivilized" land. Dumas, traveling through Baku around 1858, described the region's fledgling oil industry and remarked optimistically that there must exist "an immense bank of naphtha" underground.<sup>73</sup> Henry Norman, a frequent visitor to Baku in the late nineteenth century, noted that "the mysterious processes of nature, whether animal or vegetable—probably the former—which produce petroleum in the bowels of the earth, have taken place in an unusual degree under the eastern shore of the Caucasian peninsula, where the town of Baku has risen."<sup>74</sup> Several years after Dumas, Valentine Baker, a Briton who saw himself as something of an explorer, passed through Baku on his way to Persia. He communicated images of uncultured locals, rough travel, a barren landscape beyond the small green garden of the Russian governor, and an oil industry just waking up, now that the Russians had "become alive to its value," allowing foreigners to begin developing

<sup>&</sup>lt;sup>72</sup> Henry Norman, *All the Russias: Travels and Studies in Contemporary European Russia, Finland, Siberia, the Caucasus, and Central Asia* (London: Charles Scribner's Sons, 1902),156.

<sup>&</sup>lt;sup>73</sup> Dumas, 798.

<sup>&</sup>lt;sup>74</sup> Norman, 220-221.

it.<sup>75</sup> These and numerous other published accounts similarly highlighted the strangeness and promise of this region for readers back home who might take an interest.<sup>76</sup>

For their part, the Nobel brothers, who were among the first Europeans to invest heavily in the Baku oil industry, discovered it by chance. The family had manufactured arms and other military equipment for the Russian government for decades in St.

Petersburg. In 1873, while searching for good sources of walnut wood for rifle stocks, Robert Nobel passed through Baku. After touring the region briefly, Robert made the unilateral decision to use the walnut money (extended by his brother Ludwig) to buy an oil refinery from a Dutchman. To In 1875, Robert and Ludwig began buying oil-bearing plots; the next year, utilizing their brother Alfred's fortune, they fell into business with other European investors, creating the oil giant Branobel (an abbreviation of *bratev Nobel* ["Nobel Brothers"]). By 1888, their investments represented one-fifth of all foreign investments in the Baku oil industry, and the company owned the majority of all oil

<sup>&</sup>lt;sup>75</sup> Valentine Baker, *Clouds in the East: Travels and Adventures of the Perso-Turkoman Frontier* (London: Chatto and Windus, Piccadilly, 1876), 44-46.

<sup>&</sup>lt;sup>76</sup> For instance: Gamba; Keppel; John Osmaston, *Old Ali: Or, Travels Long Ago* (London: Hatchards, Piccadilly, 1881); Dumas; C. E. Stewart, "Account"; Marsh; Arthur Arnold, *Through Persia by Caravan, Vol. 1*, (London: Tinsley Brothers, 1877); O'Donovan; Antonio Gallenga, *A Summer Tour in Russia* (London: Chapman and Hall, 1882); Edgar Boulangier, *Voyage à Merv: Les Russes dans l'Asie Centrale et le Chemin de Fer Transcaspien* (Paris: Libraire Hachette et Cie, 1888); A. Henry Savage Landor, *Across Coveted Lands, or a Journey from Flushing (Holland) to Calcutta, Overland* (New York: Charles Scribners Sons, 1903).

<sup>&</sup>lt;sup>77</sup> Tolf, 39, 45.

storage in the region.<sup>78</sup> They remained a favored partner of the Russian government. In October 1888, Tsar Alexander III made a trip to Baku, during which he and his entourage inspected one of Branobel's plants "in great detail," strolled out along one of the company's nearby piers to view its oil tankers, and were presented with a picture album of Nobel enterprises around the world and a cask containing samples of oil products.<sup>79</sup>

British companies became interested in the Baku oil industry somewhat later in the century, but by the 1880s their level of investment rivaled that of any other European nation. <sup>80</sup> In his 1875 trip through Baku, Arnold had encountered Armenian oil exporters who required extra capital to expand their businesses; they pleaded with him to send British investors to Baku, "as if such people were to be picked up in London for the trouble of stooping." <sup>81</sup> By the mid-1880s, as it happened, British investors were pouring money into Baku oil enterprises. In 1885, a precis from the British Imperial War Office evaluated the region's potential very positively, noting that the supply of oil appeared to be "almost inexhaustible," with new sources being discovered constantly. The report concluded, "Altogether, the petroleum industry in Trans-Caucasia bids fair to attain a

<sup>&</sup>lt;sup>78</sup> M. F. Mir-Babayev, *Kratkaia khronologiia istorii azerbaidzhanskogo neftianogo dela* (Baku: Sabah, 2004), 149-152. Branobel was in some senses no more "foreign" than the myriad European Russian companies that had begun to stake out places in the Baku oil industry—the Nobels had lived and manufactured goods in St. Petersburg since the 1830s. However, after the 1860s much of the Nobels' wealth was generated outside of Russia (from Alfred Nobel's dynamite enterprise), the brothersthemselves likely did not identify themselves as Russian, and Europeans of any kind (including Russians) were a relatively recent and alien presence in Baku regardless. Igolkin, *Otechestvennaia neftianaia promyshlennost v 1917-1920 godakh*, 39.

<sup>&</sup>lt;sup>79</sup> V. S. Krivenko, "Ocherki Kavkaza," (1893), Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ Визит Его Величества Александра III в Баку (1888г.).

<sup>80</sup> Norman, 224.

<sup>&</sup>lt;sup>81</sup> Arnold, 135.

great development."<sup>82</sup> As British oil engineer A. Beeby Thompson put it, the region was "likely to produce for many years large quantities of oil, so that it seems probable that a period of prosperity lies ahead."<sup>83</sup> Charles Marvin's *The Region of the Eternal Fire*, which described his 1883 trip to Baku, included recommendations on how Britons should pack for a trip from London to Baku, which routes to travel and when, and how to get into the oil business upon arrival (one may "go straight to Baku and make arrangements on the spot with the firms there for the opening up of business relations"). <sup>84</sup> British investors responded to reports, pamphlets, travelogues, and the like by funneling millions of pounds into newly-formed British companies such as the Black Sea Petroleum Company, the Caspian Oil Syndicate, and the European Petroleum Company.

The development objectives of these companies in the Caucasus can be seen in the charters and memoranda of their formation. The Caspian Oil Syndicate, formed in 1901, aimed to purchase crude oil and other minerals, as well as refineries, pipelines, ships, railways, "and all other adjuncts to or things useful for carrying on the business of dealers in oil or naphtha or petroleum producers." In addition, it was given permission to explore and secure rights to lands and resources, employ and send out "all persons useful, or supposed to be useful, in examining, investigating, and exploring leases, lands, mines,

<sup>&</sup>lt;sup>82</sup> "Precis of information concerning Trans-Caucasia, 1885, War Office," in *Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978. Volume 1, 1885-1919*, ed. Anita L. P. Burdett (Cambridge: Cambridge University Press, 2012) (hereafter *Oil Resources, Volume 1*), 81-82.

<sup>&</sup>lt;sup>83</sup> Thompson, 487.

<sup>84</sup> Marvin, 4-6.

<sup>&</sup>lt;sup>85</sup> "Memorandum of Association of the Caspian Syndicate, Limited," in *Oil Resources, Volume 1*, 82-83; "Memorandum of Association of the Black Sea Petroleum Company, Limited," in *Oil Resources, Volume 1*, 115-116; Thompson, 487.

minerals, ores, mining or other rights and claims." Similarly broad mandates were given to other British companies. Each of these companies, and many more throughout Europe, were permitted by their own governments and the Russian government great leeway in developing Baku oilfields according to their own interests.

The industry's development was not entirely under the control of European companies, it must be made clear. In a few cases, locals who had been involved in oil extraction since before the 1872 auctions effectively leveraged their holdings and established reputations in the community to become among the richest oilmen in the region. The most celebrated in Azerbaijan today is Zeynalabdin Taghiyev, an ethnic Azerbaijani born to a poor family in Baku's Inner City. He became involved in oil before the 1870s, but saw little success until 1878, when workers hit a fountain on one of his properties. In 1897, he sold his company to British businessmen, not long before the industry hit its peak and began to decline. Having amassed tremendous wealth, Taghiyev invested in the construction of a number of buildings that are now Baku landmarks, including his former palace, now the National History Museum of Azerbaijan, and the Taghiyev Theater, among others. He was also noted for his philanthropy, including the construction of the first secular school for Muslim girls in the Russian Empire, a building that now houses the Azerbaijan National Academy of Sciences Institute of Manuscripts.<sup>87</sup>

Notable also were Russian business partners Vasilii Kokorev and Petr Gubonin, who had gotten their start in the oil industry in 1858, when they founded the Transcaspian

<sup>86 &</sup>quot;Memorandum of Association of the Caspian Syndicate, Limited," in Oil Resources, Volume 1, 82-83.

<sup>&</sup>lt;sup>87</sup> Fuad Akhundov, "Europe outside the Fortress Walls," in *Memories of Baku*, ed. Nicolas V. Iljine (Seattle: Marquand Books, 2012), 29-30.

Trading Company, which dealt in oil products. A few years later, they constructed one of the first kerosene refineries in Baku. 88 In the 1872 auctions, Kokorev and Gubonin used their knowledge of the area to bid on and win several of the most valuable plots on offer. 89 The next year, they created the Baku Oil Company (*Bakinskoe Neftianoe Obshchestvo*, or BNO), the first oil company in Baku to attempt any degree of vertical integration, controlling oil from extraction to transportation. Kokorev and Gubonin were soon joined at BNO by Ivan Mirzoiev, an Armenian businessman who had once acted as the imperial government's tax farmer in the Baku oilfields. BNO was remarkably successful for several decades. 90

Of greatest concern to all oil industrialists was improving transportation, both passenger and cargo, and both within the Baku oil region and to markets. Poor transportation was the primary check on growth in this era of Baku's industrial development. Before the late 1880s, ramshackle carts transported barrels of oil from field to refinery to ship along unpaved roads that became nearly impassable morasses of mud and oil when it rained. European visitors never failed to be confounded by these carts. In the words of Arthur Arnold, "Where is the man who would dare to pose himself there, perched and caged in a little railed cart, big enough to hold one barrel of petroleum, and lifted so high on wheels seven feet in diameter, that another huge tub can be slung beneath the axle, the whole thing being painted with all the colours of the rainbow and

20

<sup>&</sup>lt;sup>88</sup> Henry, 32-33.

<sup>89</sup> Ibid., 53.

<sup>&</sup>lt;sup>90</sup> Tatiana Speranskaia, "Bakinskoe neftianogo obshchestvo," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ Бакинское\_нефтяное\_общество.

<sup>&</sup>lt;sup>91</sup> Referred to by Henry and Thompson as *arba* ("bullock cart"). Henry, 71; Thompson, 4.; Osmaston, 234.

creaking loudly as it is drawn by a diminutive horse, the back of which is hardly up to a level with the axle?"<sup>92</sup> Paying cart-drivers for this service was an enormous expense for oil producers, and so when the Nobels began to lay local pipelines, other producers soon followed suit (Figure 1).<sup>93</sup> By the early 1880s, dozens of pipelines ran from various oil fields to refineries in the Black City and the White City, discussed below, and from there to transportation hubs, "winding and twisting over the undulations of the desert, bridging chasms on the roughest of piers, and stretching stark across the road without any attempt to bury themselves in the surface out of the way of traffic."<sup>94</sup> These local pipelines paid for themselves quickly, and left producers with ample funds to pay for guardhouses every few hundred yards along the pipelines' routes to protect them from sabotage by out-of-work carters.<sup>95</sup>

Of greater importance was the construction of a higher-volume transportation route between Baku and world markets. The transportation and sale of oil products was limited by the capacity and reach of ships on the Caspian and Volga and of carriage and camel trains in Transcaucasia and northern Persia. Stewart noted that when he first visited Baku in 1866, the only realistic routes to Baku from Europe involved either a circuitous train and carriage route through Russia, followed by voyages down the Volga River and across the Caspian Sea, or somewhat less circuitous train and carriage routes through Russia to Odessa or Constantinople, a voyage across the Black Sea to Batumi, a train ride

<sup>92</sup> Arnold, 129.

<sup>&</sup>lt;sup>93</sup> Thompson, 4.

<sup>&</sup>lt;sup>94</sup> Marvin, 198.

<sup>95</sup> Ibid., 281.

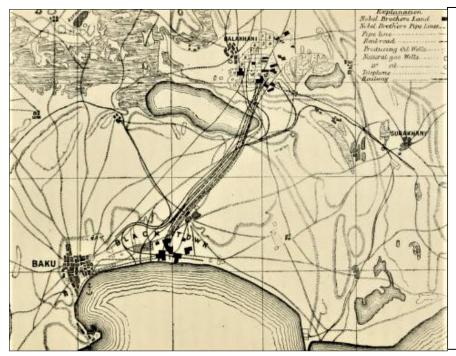


Figure 1. Pipelines and railways connecting the oilfields with central Baku, 1880s. Source: Charles Marvin, The Region of Eternal Fire: An Account of a Journey to the Petroleum Region of the Caspian in 1883 (London: W.H. Allen & Co., 1891), 199.

to Tbilisi (then Tiflis), and a carriage or horse ride across the rest of Transcaucasia to Baku. <sup>96</sup> Whichever route one chose, the journey took many weeks.

The Russian state had completed a line from the Black Sea to Tbilisi by 1872, but the stretch from Tbilisi to Baku remained incomplete for years afterward. <sup>97</sup> Given that Tbilisi had been the seat of the Imperial Russian Caucasus Viceroyalty since 1801, the Russian state had pressing administrative reasons to connect the capital by rail to the Black Sea ports of Poti and Batumi despite issues of terrain and resources. <sup>98</sup> Baku, for its

<sup>&</sup>lt;sup>96</sup> Stewart, 410; Bryce, 22; Marsh, 35; Arnold, 116-117. The last leg of the Transcaucasia route was a punishing 400 miles—Valentine Baker describes rough, swampy, overgrown roads; threats of bandits; and grim camping all along the route, which otherwise offered a monotony only relieved by the opportunity to shoot wild pigs and foxes that strayed into their path. Upon arriving in Baku, he discovered that his three-person party's full ton of luggage (much of it ammunition) had been ravaged by the rough journey. Baker, 36-44.

<sup>&</sup>lt;sup>97</sup> "Zakavkazskaia zheleznaia doroga," *Bolshaia Sovetskaia Entsiklopediia*, http://bse.sci-lib.com/article042354.html.

<sup>98</sup> Ronald Grigor Suny, "Tiflis," *Encyclopedia of Russian History*, ed. James R. Millar, https://link.gale.com/apps/doc/CX3404101376/GVRL?u=euge94201&sid=GVRL&xid=d6fdb8ae.

part, was not clearly worth the expense and effort required to complete a rail line across hundreds of miles of narrow valleys, swamps, and desert wastes until the mid- to late 1870s; until that point, Baku's primary export was rather low-quality kerosene, the United States was producing better-quality kerosene and had already cornered the market even in most parts of Russia, and the tedious but adequate steamer route across the Caspian Sea and up the Volga River served the industry's limited transportation needs

(relative to the 1880s and afterward).<sup>99</sup>

The Nobels and the French
Rothschilds, who had entered Baku oil
business in the early 1880s, committed
tremendous effort and resources to
convince the Russian government to
permit the construction of railways
within the Baku district and across
Transcaucasia to Tbilisi, completing a
connection of incalculable value to
those who wished to transport and sell
Baku oil (Figure 2).<sup>100</sup> The Rothschilds

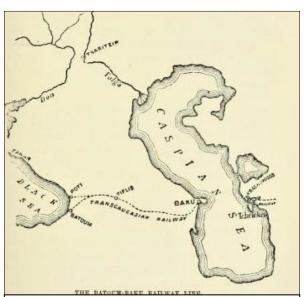


Figure 2. Transcaucasian Railway, 1883. Source: Charles Marvin, *The Region of Eternal Fire: An Account of a Journey to the Petroleum Region of the Caspian in 1883* (London: W.H. Allen & Co., 1891), 113.

<sup>99</sup> Henry, 33, 37.

 $<sup>^{100}</sup>$  George N. Curzon, *Persia and the Persian Question, Vol. 1* (London: Longmans, Green, and Co., 1892), 61-62.

alone contributed \$10 million USD toward the project. <sup>101</sup> In 1883, the Russian state finished the railway between Tbilisi and Baku, thus completing the Transcaucasian Railway, which ran from the Black Sea to the Caspian Sea. Other stretches of Russia's railway system had by then extended and improved considerably, permitting one to make the journey from Western Europe to Baku in less than two weeks, and entirely by steamship and train, allowing for vastly greater volumes of oil to be transported within and outside of the Russian Empire. <sup>102</sup>

Not long after the Tbilisi-Baku stretch was completed, however, it became clear that the transportation of oil products by train was not going to meet the Baku oil industrialists' growing needs. Trains carrying oil had to compete with other cargo trains and passenger trains along the Transcaucasian Railway's single line, and the steepness of the line near Tbilisi (authorities had opted to run the railway right over the Surami Pass rather than to bore train tunnels) as well as generally poor management of the railway caused rail traffic near Tbilisi to run at a glacial pace and limited the quantity of oil that an individual train could carry. <sup>103</sup>

The year that the Transcaucasian Railway was completed, Western oilmen and Russian officials were already making plans for the construction of an oil pipeline from Baku to the Black Sea. This was not an uncontroversial project, as historian John P.

<sup>101</sup> By mid-1880s, the Nobels and the Rothschilds were nearly direct competitors in the Baku oil scene. Both owned numerous wells and refineries in the area, but until the construction of the Transcaucasian pipelines they remained differently oriented in terms of transportation: the Nobels had long dominated Caspian shipping, and the Rothschilds, with their previous investments in European railways, remained devoted to the Transcaucasian Railway and Batumi. McKay, "Baku Oil," 617; Tolf, 85.

<sup>&</sup>lt;sup>102</sup> Stewart, 410; Marvin, 2; "Precis of information concerning Trans-Caucasia, 1885, War Office," in *Oil Resources, Volume 1*, 5.

<sup>&</sup>lt;sup>103</sup> Marvin, 121, 145.

McKay has detailed. Fears of foreign monopoly, as well as debates about whether the pipeline should carry crude oil or kerosene, whether an expansion of the railway might suffice, and how everything might be paid for held up the pipeline project for years. These convolutions delayed the construction of a full Baku-Batumi pipeline until 1903, just two years before the unrest of 1905 halted oil production in Baku and transportation across Transcaucasia (discussed in chapter three). In the period between the completion of the Transcaucasian Railway and the Transcaucasian pipeline, oil producers made do with minor improvements to the railway and short stretches of pipeline here and there. 104

Despite transportation issues, the output of the Baku oil industry increased rapidly in the final few decades of the nineteenth century, exceeding American output by the turn of the century. New markets for kerosene and other oil products had opened in Russia and elsewhere in western Eurasia. The region's extraction of oil and production of oil products increased impressively between 1872 and 1901 (Table 1). By the turn of the century, the Baku oil industry produced about half of the world's oil supply. Kerosene remained Baku's most important marketable product for some decades, but improved refining techniques yielded a greater variety of products. From crude, first benzine, gasoline, and other light fractions were distilled out. Benzine, commonly used in solvents, was shipped to Russia to be used as a detergent, while gasoline (in the era before widespread use of the internal combustion engine) was used locally as fuel.

Kerosene and "solar oil" (another type of lamp oil) were then distilled. 105 What remained

<sup>&</sup>lt;sup>104</sup> Thompson, 28. McKay finds that the pipeline project was fast-tracked by the Russian state only after an 1896 flood took out part of the Transcaucasian Railway, creating additional transportation pressures. McKay, "Baku Oil," 622.

<sup>&</sup>lt;sup>105</sup> Stewart, *Through Persia*, 411-412.

was *ostatki* ("leftovers"), a tarry substance that could be burned almost without smoke if properly managed. <sup>106</sup> By the mid-1880s, most steamers on the Caspian had converted from burning coal products to ostatki, more efficient than coal and certainly more abundant in the area. <sup>107</sup>

<b>Table 1.</b> World, US, and Russian Crude Oil Production, 1861-1900 (selected years) (thousands of tons) <sup>108</sup>						
Year	World production	US production	Russian production			
1861	293	286	3			
1865	374	338	9			
1870	798	711	28			
1875	1373	1187	96			
1880	4131	3552	413			
1885	5060	2954	1916			
1890	10547	6192	3949			
1895	14271	7147	6350			
1900	20525	8596	10429			

Natural gas also had its uses, but it remained a local product. Locals still used natural gas for heating, lighting, and making lime, and by the late decades of the nineteenth century the presence of natural gas was known to oilmen as a useful indication of a rich oil reservoir below. Refinery owners had also begun to rely on natural gas to fuel their distillation operations. When Stewart traveled through Baku in 1866, and visited the "Temple of Everlasting Fire" at Ateshgah in the Surakhani district of Baku, a petroleum refinery (then one of two in Baku) had been constructed nearby to take

<sup>&</sup>lt;sup>106</sup> Ibid., 416. Stewart and his contemporaries frequently transliterated "остатки" as "astatki," which hews closer to actual pronunciation of the word but does not accord with modern romanization systems.

<sup>&</sup>lt;sup>107</sup> "Precis of information concerning Trans-Caucasia, 1885, War Office," in Oil Resources, Volume 1, 5.

<sup>&</sup>lt;sup>108</sup> Hassmann, 147-148.

<sup>&</sup>lt;sup>109</sup> ARDTA, d. 22, op. 2, f. 7, ll. 8-9.

advantage of the natural gas as fuel, but the temple's fire still burned steadily. However, when Stewart returned in 1881, the fire had gone out and there was no priest in attendance. "The engineer in charge of the neighbouring petroleum refinery accompanied me over [to] the temple, of which he held the key. He relit the fire, and when leaving carefully extinguished it, as he said he wanted all the natural petroleum gas for heating the furnaces of his own works." The site was never forgotten, and is now a heavily frequented tourist attraction, but for at least a century, between the mid-1800s and mid-1900s, industrial needs outweighed cultural preservation.

After a few decades of intense investment and buildup, the Baku oil industry came to represent one of the major centers of global oil production. Largely with the investment of foreign capital, the Absheron Peninsula had been made over into a definitive oil-producing region. It had attained great material and strategic significance, in that it produced an increasingly valuable natural resource for the world's industrializing states. Foreign industrialists credited themselves with this accomplishment, indicating that Russian administrators had acted as little more than a hindrance to moneymaking and the access of more advanced and industrialized entities to the promise of oil.<sup>111</sup>

<sup>110</sup> Stewart, *Through Persia*, 311-313; Augustus Henry Mounsey, *A Journey Through the Caucasus and the Interior of Persia* (London: Smith, Elder & Co., 1872), 330.

<sup>&</sup>lt;sup>111</sup> Thompson, 7: Norman, 375.

## <u>Labor Migration to Baku</u>

The growing industry also offered new opportunities to hundreds of thousands of skilled and unskilled laborers—not enrichment, but at least a living wage. Like nearly all industrial boomtowns, Baku's population in the late nineteenth and early twentieth centuries was constantly fluctuating, but growing rapidly overall (Table 2). While many new arrivals came from elsewhere in Transcaucasia, large numbers trod long-established labor migration routes from farther north and south as well. Population growth and greater mobility in the western Russian Empire after the Emancipation Reform of 1861 (which ended serfdom in the Russian Empire) meant that more subjects were leaving year-round agricultural work for permanent or temporary wage labor in the cities. The population of St. Petersburg grew from roughly 500,000 in 1860 to well over one million in 1897; Moscow, Odessa, and Kiev saw similar growth in that period. 112 As Baku's industry grew, tens of thousands of workers from the western Russian Empire made the journey south to find employment. 113 Great numbers of workers also came from the northern regions of the Persian Empire due to social and economic dislocations there. However, although Baku and its industry became a large and diverse boomtown in the late nineteenth century, it was not a "melting pot" by any means. Ethnoreligious groups remained largely insulated from one another, both of their own accord and due to formal

<sup>112</sup> Natalia Chistiakova, "Naselenie severnoi stolitsy," Demoskop Weekly, http://www.demoscope.ru/weekly/2004/0163/tema01.php; "Moskva," Narodnaia entsiklopediia gorodov i regionov Rossii, http://www.mojgorod.ru/gor\_moskva/moskva/index.html; Patricia Herlihy, "Odessa: Staple Trade and Urbanization in New Russia," *Jahrbücher für Geschichte Osteuropas* 21, no. 2 (1973): 184; "Kyiv," *Encyclopedia of Ukraine*, http://www.encyclopediaofukraine.com/display.asp?linkpath=pages%5CK%5CY%5CKyiv.htm.

<sup>&</sup>lt;sup>113</sup> A very similar migration pattern emerged in the Soviet era; in both eras, migration north out of Transcaucasia was extremely limited due to a combination of formal and informal migration controls.

and informal conditions of work in the industry, a trend reinforced by the enduring fluidity of the population.

Table 2. Population of Baku, 1824-1913					
(selected years) <sup>114</sup>					
Year	Population				
1824	~4,000				
1870	12,191				
1879	15,105				
1883	~50,000				
1886	86,611				
1889	~90,000				
1897	111,904				
1903	155,876				
1913	214,672				

The majority of Baku's population in the late nineteenth and early twentieth centuries had not been born there, and likely did not intend to remain there permanently. A study in 1900 found that nearly 70% of Baku workers had been living there for less than three years, and about 40% had been living there for less than one year. A further study in 1903 discovered that 20% of the population had arrived in the preceding nine months. Census figures from 1897 regarding the marital status of Baku residents contribute somewhat to this picture of a "fluid" population: 60% of men ages 20-29 were unmarried (compared to 8% of women in the same age group). In the 30-39 age group,

<sup>&</sup>lt;sup>114</sup> Keppel, 299; Marvin, 318; Curzon, 66; Altstadt, 32; "Extracts from the Military Report on Trans-Caucasia, 1907," in *Oil Resources, Volume 1*, 229; *Svod statisticheskikh dannykh o naselenii zakavkazskago kraia, izvlechennykh iz posemeinykh spiskov 1886 g.* (Tiflis: Zakavkazskim statisticheskim komitetom, 1903), x-xi.

<sup>&</sup>lt;sup>115</sup> E. L. Keenan, "Remarques sur l'histoire du mouvement révolutionnaire a Bakou (1904-1905)," *Cahiers du Monde Russe et Soviétique* 3, No. 2 (Apr.-Jun., 1962): 228.

the number of unmarried men dropped to 20%. <sup>116</sup> Russians and other ethnic groups who typically occupied skilled positions in Baku were more likely to be older and married; the lopsidedness of marital status within the unskilled labor population was therefore likely even more exaggerated than census figures showed. <sup>117</sup> The typical unskilled laborer in the Baku oil industry was young, unmarried, and male, attempting to pull together savings or send money back home with the hope of returning to a more comfortable life.

Although precise migration routes within the Russian Empire are difficult to sketch out, some conclusions can be drawn from population snapshots of Baku in the late nineteenth century. Aside from those workers who migrated from Persia and elite company personnel who traveled from Western Europe, migrant workers came from elsewhere in the Russian Empire. The 1897 Russian census broke down populations by mother tongue (*rodnoi iazyk*), which corresponded closely with place of origin. The census showed that the urban population of the Baku guberniia (65% of whom lived in the city of Baku proper) was majority Transcaucasian—roughly half spoke "Tatar," one-seventh spoke Armenian, and there were large numbers of Georgian, Turkish, Lezgin, and Talysh speakers. Unsurprisingly, the majority of migrants from elsewhere in the Russian Empire came from the areas of greatest population concentration: the country's European regions. The second-largest language group in Baku was Russian (some 40,000, or about 23%). Other Slavic groups, primarily Ukrainians (*malorusskii* ["Little

11

<sup>&</sup>lt;sup>116</sup> "Raspredelenie naseleniia po guberniiam, semeinomu sostoianiiu i vozrastnym gruppam," Pervaia vseobshchaia perepis naseleniia Rosiiskoi Imperii 1897 g.,

http://www.demoscope.ru/weekly/ssp/rus\_mar\_gub\_97.php?reg=241. The 1897 Russian census cannot be relied on for strict accuracy but does indicate general figures and trends.

<sup>&</sup>lt;sup>117</sup> Keenan, 228.

Russians"]) and Belarusians, had significant concentrations, as did Poles and Lithuanians. 118

Officially, subjects of the Russian Empire were not free to move about as they pleased, even after the Emancipation of 1861. Peter the Great instituted an internal passport system in 1719 that was intended to control movement within the empire so that the state could maintain a stable tax base, make best use of the empire's agricultural and other resources, and control who inhabited the cities. <sup>119</sup> Part of this effort to control movement involved encouraging or forcibly sending workers to industrial sites to aid in their development, an approach later adopted by the Soviet regime as well. <sup>120</sup> Subjects of the Russian Empire migrating to Baku were likely a mix of sanctioned and unsanctioned migrant laborers.

Until the upheaval of the 1917-1920 period, a significant number of Baku's unskilled workers were seasonal labor migrants from northern Persia. A series of conflicts with Russia in the early nineteenth century, repeated famines, disruptive reform movements, and decades of weak and/or arbitrary state control had caused widespread social dislocations in northern Persia by the mid-nineteenth century, prompting many in the region to seek either asylum or new labor opportunities in neighboring countries,

<sup>&</sup>lt;sup>118</sup> "Raspredelenie naseleniia po rodnomu iazyku, guberniiam i oblastiam," Pervaia vseobshchaia perepis naseleniia Rosiiskoi Imperii 1897 g., http://www.demoscope.ru/weekly/ssp/rus\_lan\_97.php?reg=193; "Nalichnoe naselenie v guberniiakh, uezdakh, gorodakh Rossiiskoi Imperii (bez Finliandii)," Pervaia vseobshchaia perepis naseleniia Rossiiskoi Imperii, 1897 g., http://www.demoscope.ru/weekly/ssp/rus\_gub\_97.php?reg=61.

<sup>&</sup>lt;sup>119</sup> Charles Steinwedel, "Preface," in *Russia in Motion: Cultures of Mobility since 1850*, eds. John Randolph and Eugene M. Avrutin (Urbana: University of Illinois Press, 2012), 19.

<sup>&</sup>lt;sup>120</sup> See Chia Yin Hsu, "Frontier Urban and Imperial Dreams: The Chinese Eastern Railroad and the Creation of a Russian Global City, 1890-1917," in *Russia in Motion*, 43-62; Anatolyi Remnev, "Russians as Colonists at the Empire's Asian Borders: Optimistic Prognoses and Pessimistic Assessments," in *Russia in Motion*, 127-150; Sahadeo.

primarily Russia. <sup>121</sup> Russian Transcaucasia was especially appealing—its nearness made seasonal migration relatively uncomplicated, and Russian Azerbaijanis were an ethnic group very closely tied to the ethnic Azerbaijanis of northern Persia. <sup>122</sup> In the nineteenth century, migrants from northern Persia were greeted by Azerbaijanis as *hamshahri*: fellow countrymen. <sup>123</sup>

As northern Persia was falling into disorder, Russian Transcaucasia was changing for the better in regard to employment. The expansion of industry and shifts in Russian agriculture created labor shortages in Transcaucasia and other regions of the Russian Empire. 124 Migration rates between northern Persia (the Persian province also named Azerbaijan) and Baku gradually but steadily increased over the course of the nineteenth century; after the 1872 oil-leasing reforms, migration rates skyrocketed. It appears that Iranian Azerbaijani men seeking work learned of opportunities in the Russian Empire primarily through word of mouth, but private companies did spread word through advertisements in local publications. 125 The Russian state attempted to regulate this

Touraj Atabaki, "Disgruntled Guests: Iranian Subaltern on the Margins of the Tsarist Empire," *IRSH* 48 (2003): 401, 403-405; Hassan Hakimian, "Wage Labor and Migration: Persian Workers in Southern Russia, 1880-1914," *International Journal of Middle East Studies* 17, no. 4 (Nov. 1985): 443-444. The primary relevant conflicts in the early nineteenth century were the 1804-1813 Russo-Persian War and the 1826-1828 Russo-Persian War.

<sup>&</sup>lt;sup>122</sup> In some cases, the Azerbaijanis of northern Iran/Persia are considered to be an extension of the Azerbaijani ethnic group in Azerbaijan proper, but broad assessments along these lines are problematic. The Azerbaijani ethnic group was split in two by the treaties of Gulistan (1813) and Turkmanchai (1828); since then, the two have developed in sufficiently different circumstances that subjective ethnic identification has diverged. See Tadeusz Swietochowski and Brian C. Collins, eds., *Historical Dictionary of Azerbaijan* (Lanham, MD: Scarecrow Press, 1999) and Altstadt, *The Azerbaijani Turks*.

<sup>&</sup>lt;sup>123</sup> Atabaki, 401-402.

<sup>&</sup>lt;sup>124</sup> Ibid., 406.

<sup>&</sup>lt;sup>125</sup> Azərbaycanın Respublikası Dövlət (State Archive of the Republic of Azerbaijan) (hereafter ARDA) f. 1032, op. 1, d. 1, l. 6.

migration to some degree, officially requiring migrants from the Persian Empire to obtain visas and other permits before traveling and to register with officials upon arrival. However, the greater the demand for labor in Baku, the more flexible the Russian state became. In 1887, the Russian government issued a law that allowed migrants from the Persian Empire to live in Russia for six months without the need for visas or registration. Documented migration rose from an average of 13,000 Iranian Azerbaijanis per year between 1876 and 1890 to over 56,000 in 1896. Undocumented migration rates are difficult to judge, but were certainly in the tens of thousands per year. In total, perhaps 100,000 Iranian Azerbaijanis crossed into Russia each year around the turn of the century, one-seventh to one-fifth of them traveling directly to Baku to work in the oil industry and associated enterprises. Pay 1897, the total Iranian Azerbaijani population of Baku was in the tens of thousands.

There was pronounced ethnic stratification within the Baku oil industry. Iranian Azerbaijanis and Transcaucasian locals consistently occupied the worst jobs, such as diggers and bailers (Table 3). A Persian report on conditions in the Baku oil sector described the situation of Iranian Azerbaijani workers thus: "In [Sabunchi and Balakhani], in order to reach oil the depth of the wells varies between 35 and 45 metres.

--

<sup>&</sup>lt;sup>126</sup> Atabaki, 407.

<sup>&</sup>lt;sup>127</sup> Ibid., 411-414; Hakimian, 445. Authorized migration required filling out paperwork and paying fees and bribes for both the outward and return journeys. I recognize that "documented migration" and "undocumented migration" are somewhat anachronistic terms, but they seem to fit the situation under discussion.

<sup>&</sup>lt;sup>128</sup> Keenan, 229; Hakimiam, 445; Atabaki, 417. As Atabaki notes, population estimates for typically seasonal migrants (including Iranian Azerbaijanis) varied wildly; in regard to Iranian Azerbaijanis, at least half migrated without documentation, and censuses were necessarily momentary snapshots of a fluctuating population group.

Usually, after 30 metres of digging, the ill-fated Iranian workers cannot stand the gas inside and are poisoned and pass away. No information on working condition[s] is available, and with no knowledge of what awaits them at the bottom of the well the Iranian diggers accept the pay of 20 to 40 manats a day and meet their unfortunate fate. It is almost every day that news of the death of 4 or 5 of these diggers appears in the local press."129 Many local Azerbaijanis had similar experiences, but Iranian Azerbaijanis were in an even more precarious position. They had very little job security, especially once labor and ethnic unrest began to consume the Baku region in late 1904, temporarily reducing oil production and therefore demand for labor; many were forcibly deported. 130 In addition, local Azerbaijanis had somewhat greater access to upper-tier unskilled and lower-tier skilled labor. There was also discrimination in wages, in that the same work earned different wages depending on nationality (Iranian Azerbaijanis earned less than Russians, Armenians, and local Azerbaijanis). Even in times of great labor shortage, Iranian Azerbaijanis continued to earn less. Iranian Azerbaijanis' status as non-subjects was certainly a barrier in these cases, but the Russian state also pursued a relatively subtle policy of relegating Iranian Azerbaijani migrant laborers to the worst unskilled jobs in order to sustain barriers within the Baku workforce as a means of avoiding labor organization.<sup>131</sup>

20

<sup>&</sup>lt;sup>129</sup> Quoted in Atabaki, 420-421.

<sup>&</sup>lt;sup>130</sup> Atabaki, 421; Hakimian, 447, 450, 457. Russian officials may have believed that Iranian Azerbaijani workers were exacerbating political unrest in Baku in 1905, acting under the influence of the Russian Social Democratic Labor Party (RSDLP) and later the Bolsheviks, as well as budding socialist movements in their own country.

<sup>&</sup>lt;sup>131</sup> Atabaki, 417.

<b>Table 3.</b> Ethnic Composition of the Baku Oilfields Workforce (1893 and 1900) <sup>132</sup>						
Ethnic origin	1893		1900			
	% of unskilled	% of skilled	% of unskilled	% of skilled		
Tatars (Azeris)	21.5	3	19	12.3		
Russians	13.7	54.3	10.9	42.9		
Armenians	26.4	27	24.3	30.8		
Dagestanis	19.1	1	17	2.8		
Iranians/Persians	14	-	24.7	4.7		
Others	5.3	14.7	4.1	6.5		

Because of its oil industry, Baku became one of the largest cities in the Russian Empire, and the second largest in Transcaucasia by 1897, after the Caucasus Viceroyalty capital of Tbilisi. Including the population of nearby satellite communities, it was by far the largest industrial center in the southern Russian Empire. Nearly all migrants came to work in positions directly and indirectly related to the oil industry, whether as diggers, drillers, and bailers out in the oilfields; refinery workers and managers; carpenters; clerks; geologists; or as workers in the myriad other trades that sustained the growing industry.

#### Physical Transformation of Baku

Though relatively few in number, the European oilmen who traveled to Baku to direct businesses, manage outfits, and work in company offices, as well as European Russian officials and civil servants sent by the state to oversee industrial, municipal, and military affairs ("career migrants" by some definitions) did distinctly alter Baku from its pre-industrial condition. 133 Changes in the built and natural environments of the

<sup>132</sup> Ibid.

<sup>133</sup> Lewis H. Siegelbaum and Leslie Page Moch, Broad Is My Native Land: Repertoires and Regimes of Migration in Russia's Twentieth Century (Ithaca and London: Cornell University Press, 2014), 13-14.

Absheron peninsula resulting from outside intervention were rapid and dramatic.

Observers who traveled through the Caucasus in the late nineteenth century marveled at the spectacles of industry and the great progress being made in Baku's transportation and habitability (by European standards) rather than the natural phenomena that had fascinated them in the pre-industrial era. <sup>134</sup> Per anthropologist Tsypylma Darieva's analysis, Baku came to embody the split character seen in many colonial cities in the Middle East: traditional Muslim neighborhoods organized around courtyards, gender segregation, and privacy; and European districts typified by open spaces, orientation toward the waterfront, and edifices that evinced wealth and grandeur. <sup>135</sup> But urban development in Baku has never been separate from its industrial heart. As European investment in the industry grew, so did, on the one hand, the number of green spaces, European-style hotels and restaurants, and modern modes of transportation, and on the other hand, vast worker slums and dismal industrial sites, an ad hoc and decades-long process of altering Baku to meet the needs and desires of foreign industrialists.

Changes brought about by the Russian presence were evident to travelers by the mid-1800s—before the oil boom, but after several decades of Russian administration.

John Osmaston, a Briton taking a sightseeing trip to Persia in 1860, described Baku as "thoroughly Oriental in every way" but with small cultivated Russian pockets. The inn in which he stayed, called the Poste, was the best in Baku but still quite stark, the rooms on the second story arranged over reeking stables on ground level. However, after a morning

11

<sup>&</sup>lt;sup>134</sup> Edward Stack, *Six Months in Persia, Vol. II* (London: Sampson Low, Marston, Searle, & Rivington, 1882), 209.

<sup>&</sup>lt;sup>135</sup> Tsypylma Darieva, "Reconfiguring a Public Place. Baku Promenade between Europe and Asia," *Comparative Studies on Regional Powers Series*, no. 13, 117-132 (Sapporo: Hokkaido University Press, 2013), 123.

of wandering the dusty, colorful bazaar, Osmaston dined one evening with one "Colonel Fragank," a "gentleman" with a pleasant, English-style residence in Baku. <sup>136</sup> High walls enclosed a garden, "a little oasis of green...only kept so by hard labour, by the constant working of a well, a horse, and a man." In addition to multiple stuffed Caspian tigers (now extinct), the colonel's household consisted of a wife, three children, a German governess, and local servants. The family spoke German and French to one another, and Russian to the servants. In Ostmaston's opinion, they were all well-mannered and welleducated, "though so far away from all civilisation." Several years later, a new hotel had usurped the Poste as the best lodging in Baku—the Hotel Dominique, run by an Italian landlord. While Baker Valentine had no complaints, Arthur Arnold and his wife in 1875 found the same hotel's rooms quite bare and full of sand or dust, but he made a special note regarding the rise of European-style houses in central Baku. <sup>138</sup> The governor's residence, a large mansion constructed along the seaside promenade in the mid-1860s, was of course noteworthy. A number of European travelers, including Henry Morton Stanley, found themselves invited to governors' frequent soirces as distinguished

<sup>&</sup>lt;sup>136</sup> Possibly due to misspelling or poor transliteration in this account, I have been unable to determine who "Colonel Fragank" might have been, including his nationality or position.

<sup>&</sup>lt;sup>137</sup> Osmaston, 233, 235, 238-239. Similarly, in the early 1870s Baker noted that the house of the Governor of Baku, Dmitrii Semenovich Staroselskii, had "some small gardens tended with fond and anxious care, for anything green is cherished at Baku." Baker, 45. Dmitrii Semenovich Staroselskii was Governor of Baku, 1872-1875 ("Dmitrii Semenovich Staroselskii," Polovtsov A. A. Russkii Biograficheskii Slovar, http://www.rulex.ru/xPol/pages/25/353.htm).

<sup>&</sup>lt;sup>138</sup> Baker, 44: Arnold, 123-124.

guests. <sup>139</sup> It was considered the finest residence in Baku, and hosted Alexander III during his 1888 trip to Baku, the only time a Russian monarch visited the city. <sup>140</sup>

The barrenness of Baku was a frequent theme in European travelogues of the midnineteenth century, but European travelers were sure to note the few green spaces that did exist. One of the earliest accounts to make the point was that of George Keppel, who grumbled that "there are no vegetables [in Baku], nor, indeed, is there a blade of vegetation." Osmaston described the area surrounding Baku as "devoid of all verdure[;] nothing could be more bare and barren, and this entirely from want of rain." Per Arnold, Baku was unbearably dusty, and "there is not a tree or shrub to be seen upon the arid hills and stony steppe, and the odour of naphtha is never out of the nostrils." However, he complimented the "Baku Club," an outdoor complex on the shore reserved for Baku's wealthy and Russian officers stationed at the garrison across the harbor. A painstakingly maintained seaside garden, dotted with colorful pavilions illuminated by petroleum lamps, was pleasant in the evening; music and the rippling of the Caspian intertwined as club members dined and played card games, passing "the happiest hours of

<sup>&</sup>lt;sup>139</sup> Stanley, 237-238.

<sup>&</sup>lt;sup>140</sup> Soviet authorities later used the building as a sort of community center. It was demolished in 2006 to make way for a Four Seasons Hotel. Irina Rote, "Gubernatorskii dom (Zdanie gradonachalstva, vposledstvii Dom kultury medsantrud, Dom medrabotnikov)," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ Губернаторский\_дом\_-\_Здание\_бакинского\_градоначальства\_-Дом медработников.

<sup>&</sup>lt;sup>141</sup> Keppel, 299.

<sup>&</sup>lt;sup>142</sup> Osmaston, 243. Also see Mounsey, who describes Baku as a place containing "nothing of interest" and surrounded by land with a "decidedly volcanic appearance." Augustus Henry Mounsey, *A Journey through the Caucasus and the Interior of Persia* (London: Smith, Elder & Co., 1872), 329-330

<sup>&</sup>lt;sup>143</sup> Arnold, 126-127.

their existence" in Baku. 144 Around the same period, Marsh noted that Baku had a small park, "all the soil of which was brought in boats from Lenkoran." Like other European travelers who passed through Baku around this period, Marsh was fixated on the beautification of Baku's public spaces according to aesthetic standards common in his place of origin, desiring the transformation of Baku into a lovely Europeanized town, the port "par excellence of the Caspian." 145

By the 1880s, Branobel had constructed neighborhoods of "pretty and spacious houses" and administrative buildings in a complex called Villa Petrolia, "a little paradise" meant for its European employees. Villa Petrolia was located in a district that neighbored central Baku called the White City. Refreshing seaborne winds and carefully cultivated greenery made the neat suburb a pleasant break from the oilfields and refineries, the



**Figure 3.** Villa Petrolia, 1880s/1890s. Source: https://www.ourbaku.com/index.php/"Вилла\_Петрол ea"\_-\_«Villa\_Petrolea»\_-\_поселок\_служащих\_ (Черный\_город,\_Баку)

"tortuous and dirty" streets
and bazaars of old Baku, and
the barren deserts beyond. 146
Villa Petrolia offered
apartments for single men and
families, and the complex
included a library, a meeting

<sup>&</sup>lt;sup>144</sup> Ibid., 137. In 1870, Henry Morton Stanley visited an "English clubhouse" in Baku, a building "whose exterior was eminently respectable, and promised restful ease and comfort. A gentleman took me in, introduced me to the finest suite of apartments there was in the building, and gave me to understand that while I stayed at Baku it would be a pleasure to the club if I condescended to use the apartments." Stanley, 237.

<sup>&</sup>lt;sup>145</sup> Marsh, 53.

<sup>&</sup>lt;sup>146</sup> Boulangier, 337-339.

hall, and recreational facilities such as a billiards hall. The large park (now Nizami Park), which subsisted on imported soil and water, included flower gardens and a greenhouse. Although the White City contained some refineries, they were clean and orderly, benefiting from wealth and expertise that only immense operations such as Branobel had access to. 148

The White City was the shiny side of the fundamental change that Baku was undergoing as a result of intensive industrialization. While central Baku and the White City benefited from the vast resources and beautifying efforts of oil magnates and the Russian state, arising from the coast of the Caspian a few miles east of Baku proper was an utterly dire industrial slum, a growing concentration of refineries situated for the convenient transport of crude oil from wells just inland. The thick, black smoke that poured constantly from the refineries and hovered low over them prompted the name "Black City." Branobel and other major European companies had refineries in Black City, but blamed non-European (especially Azerbaijani and Armenian) refinery owners for the filth of the district. Their apparent careless running of refineries (their inability to "manage their smoke") in the Black City ran in contrast to the clean, European-run refineries in the White City, in the eyes of these observers. <sup>149</sup> The streets were rough and unpaved, ponds of distillation leftovers lay all over, the soil was blackened with oil, ditches running with dirty water lay along the roads, and the smell of chemicals pervaded

1.

<sup>&</sup>lt;sup>147</sup> K. I. Dzhafarov and F. K. Dzhafarov, "Tovarishchestvo neftianogo proizvodstva bratev Nobel," *Naukovedenie* 1, 2001.

https://web.archive.org/web/20131102033145/http://vivovoco.rsl.ru/VV/PAPERS/HISTORY/BRANOBEL.HTM.

<sup>&</sup>lt;sup>148</sup> Boulangier, 337.

<sup>&</sup>lt;sup>149</sup> Stewart, 416; Arnold, 129-130; Boulangier, 337.

the air. 150 Regardless of its cleanliness, it was an industrial spectacle by any standard, crowded with cylindrical storage silos and towering smokestacks. <sup>151</sup>

Interspersed among the refineries in the Black City and the wells of the oilfields, barracks and improvised housing spread as the industry drew more workers. In the oilfields, housing was almost invariably of poor quality; this was in part so that plot owners could rapidly deconstruct barracks if a particular section of the plot proved to be oil-bearing. However, the larger reason was lower-tier workers' inability to achieve better working and living conditions before the turn of the century due to rapid turnover and weak labor organization (addressed further in chapter three). Housing was often segregated by religious affiliation in order to reduce tensions within the workforce. 152

To be sure, some oil industrialists were concerned to improve public services in the city, including those specifically for their workers. The Council of the Congress of Oil Industrialists (Sovet sezda neftepromyshlennikov), a body made up of several top Russian and western European oil industrialists in Baku, in this respect acted as a sort of zemstvo for the oil worker population. The council made agreements on such issues as the provision of hygienic barracks, canteens, bathhouses, water supply, and medical services. Implementation appears to have been limited, given that far from all industrial heads

<sup>&</sup>lt;sup>150</sup> Boulangier, 334; Idris Aliyev and Orkhan Mamed-Zade, "History of the Baku 'Black Gold': Fate of the Communities and Formation of National Bourgeoisie," in The Baku Oil and Local Communities: A History, ed. Leila Alieva, trans. Emil Gazi (Baku: Qanun, 2009), 82.

<sup>&</sup>lt;sup>151</sup> "Chernyi gorod – fotoalbom," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ Черный город - фотоальбом.

<sup>&</sup>lt;sup>152</sup> Lund, 206-211, 233.

were represented, that the agreements were not binding, and that this body was not strictly a municipal authority. <sup>153</sup> Nevertheless, not all workers lived in dire conditions.

It is evident that Europeans were repelled and fascinated by Baku. While most of them loathed the discomfort of life there and avoided witnessing its most unpleasant locales, they found the region appealing for its exoticism, its potential to enrich investors, and the intense drama of the oil business. The stories of boom or bust were widely circulated in European investment circles, and every travelogue reveled in sensational descriptions of the hellish fields and factories. Especially in photography and film, a notable fixation was the oilfield fires that struck occasionally, usually due to an accident or lighting strike. In areas with proven oil reservoirs, derricks stood just a few dozen yards apart, interspersed with pumphouses, machine shops, workers' barracks, pipelines, and pools of oil. When one enterprise hit an uncontrollable oil fountain, it was likely to inundate neighboring plots and force work stoppages for days or weeks. Destructive fires were inevitable—in addition to the inherent flammability of oil and gas, risk factors included the distinctive wooden cladding added to derricks in Baku to keep sand out of the works, the high winds common in the area, limited rainfall, a culture of cigarettesmoking, round-the-clock operations that required lighting by kerosene lantern, and poorly-enforced safety procedures. However, production always resumed after oilfield fires, and observers were left with an exciting story to tell the folks back home. Countless postcards, carrying words of cheerful greeting and mundane business, depicted derricks

<sup>&</sup>lt;sup>153</sup> Irina Rote, "Sezd bakinskikh neftepromyshlennost i Sovet sezda neftepromyshlennikov," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/

Съезд\_бакинских\_нефтепромышленников\_и\_Совет\_съезда\_нефтепромышленников

and oil fountains engulfed in flames, black smoke rising hundreds of feet in the air.<sup>154</sup> In 1896, the Lumière brothers traveled to Baku to make a film on the subject, which they entitled *Oil Wells of Baku: Close View*. Much of the film's thirty seconds is devoted to shots of a large, uncontrolled oilfield fire.<sup>155</sup> Russians also found these images compelling. In 1901, French-born Russian citizen A.M. Mishon shot three films in Baku, two of which focused on oil fountains and fires.<sup>156</sup>

Such accounts of the fires and gushers in the oilfields indicate observers' fixation on the effect of the oil industry on the surrounding environment, another of the dirty features of the oil industry that added to its dreadful allure. This is by no means evidence of early ecological concerns; rather, European writers' lingering descriptions of the industry's exceptionally pollutive effects were an extension of their fascinated horror at the unnaturalness of the whole enterprise. The smoke of the Black City and the well fires, the standing lakes of oil, the thorough saturation of the ground with oil for miles around the city, the litter of exhausted plots—unless these conditions interfered with production or otherwise affected revenues, they were dramatic and unappealing side effects of business as usual, another facet of life in Baku to be endured for the sake of money-

\_

<sup>&</sup>lt;sup>154</sup> "Chernyi gorod – fotoalbom,"; "Bibi Eibat – fotoalbom," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ Биби\_Эйбат\_-\_фотоальбом; multiple photo essays in Nicolas Iljine, ed., *Memories of Baku* (Seattle: Marquand Books, 2013).

<sup>&</sup>lt;sup>155</sup> Robin L. Murray and Joseph K. Heumann, "Ecology and Spectacle in Oil Wells of Baku: Close View: The First Eco-Disaster Film?" in *Ecology and Popular Film: Cinema on the Edge* (Albany: State University of New York, 2009), 21. Murray and Heumann suggest that European oil company owners would have seen oilfield fires as "business as usual" rather than the disaster we would see today. In fact, while the ecological effects were likely disregarded, owners would most definitely have felt the financial effects of lost property and production.

<sup>&</sup>lt;sup>156</sup> "V tsarstve nefti i millionov' – khudozhestvennyi film," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ "В\_царстве\_нефти\_и\_миллионов"\_-\_художественный\_фильм.

making. 157 For their part, the cleanliness of Nobel refineries in the White City said nothing about the company's practices out in the oilfields; complaints about the smoke of the Black City were usually semi-racist commentaries on the district's unsightliness and odor. Contamination of the environment simply was not a concern for early oil industrialists, nor was it for industry authorities for many following decades. Suffice it to say that due to common industry practices from the mid-nineteenth century until at least the mid-twentieth century, the Baku region—its land, sea, and air—became one of the most polluted locations on earth.

It is worth noting that, in every era, perceptions of pollution in the Baku region had some gray areas, as it were. Travelogues from the early nineteenth century, well before Baku had any notable industrial activity, lingered on descriptions of oil naturally oozing from the ground and floating on the surface of the Caspian Sea. Rowing out into the bay to set fire to an oil slick or bubbles of natural gas was a favorite diversion for visitors. Certainly this was quite different in the eyes of nineteenth-century observers from smoke that blackened the sky and oil particles that floated on the wind from fountains to stain one's clothing once the oil industry reached its prime. However, between processes of nature that had always forced oil and gas to the surface, on the one hand, and the damaging effects of human industry, on the other, it was not always clear

<sup>157</sup> Thompson, 223; Marvin, 174; Marsh, 53; Murray and Heumann, 21.

<sup>&</sup>lt;sup>158</sup> Landor, 22-23; O'Donovan, 37; Osmaston, 249.

<sup>&</sup>lt;sup>159</sup> Abraham V.W. Jackson described one oilfield fire as a "titan torch" threatening to destroy "everything in its radius, engulfing it in a veritable holocaust of flame." While this does not necessarily indicate ecological concern, clearly Jackson recognized the event as an extraordinary and disruptive industrial disaster. Abraham V.W. Jackson, *From Constantinople to the Home of Omar Khayyam* (Piscataway, NJ: Gorgias Press, 2002 [1911]), 26.

what constituted pollution. Those concerned with the health of workers and other urban inhabitants were most frequently concerned with crowded barracks, improper waste disposal, and other conditions that might lead to the spread of diseases such as typhoid and cholera.<sup>160</sup>

The physical changes that overcame Baku in the last decades of the nineteenth century were a display of European aesthetic standards and the unsightly operations that worked to support them. The businessmen who directly and indirectly funded the growth of Baku wanted the city to comfort them even as they gathered wealth from an industrial enterprise that spawned urban-industrial landscapes repulsive to their sensibilities. This was certainly not the last era in which the rewards of industrial development were unevenly distributed across Baku's physical environment.

### Conclusion

By the end of the nineteenth century, every acre of the major Baku oilfields had been accounted for. In spite of the risks, or perhaps in some cases because of them, Baku became attractive for European businessmen and investors who hoped for a relatively quick and exciting rise to affluence. Western and European Russian oilmen felt confident in the future of Baku as a moneymaking venture, and had indelibly transformed the region, layering industrial infrastructure and pretty European flourishes onto the city's existing Persian and Russian administrative elements.

Emerging in this era, too, were the seeds of future long-term troubles that became as characteristic of Baku's development as its pipelines and refineries. Despite repeated

68

<sup>&</sup>lt;sup>160</sup> Baberowski, Vrag est vezde, 63-64.

attempts at urban planning, the city has never been able fully to accommodate the residents drawn in by the work opportunities it offers. Environmental damage accumulated, unaddressed, eventually interfering with residents' wellbeing. As addressed in chapter three, the city and industry soon felt the ramifications of rapid migration and population, which resulted in interethnic and labor disputes that laid low the industry in the early decades of the twentieth century. Conflicts between Armenians and Azerbaijanis in Baku contributed to a longstanding feud that has continued to the present. Over time, the city drifted into a space between Europe and Asia, embedded in the Transcaucasian context that made it alien to the West, but integrated also in a system of international commerce that separated it from its surroundings.

#### CHAPTER III

## LABOR, ETHNICITY, AND CRISIS IN THE BAKU OIL INDUSTRY, 1901-1920

The bloody and sad events of the past few days in the city of Baku upset the entire population in the Caucasus. Hearts bleed from horror, reading the incomplete, short reports about these events in the local newspapers and telegrams. In the peaceful, trade-filled and industrial city Baku, a savage scene of murder, theft, violence, and arson took place. Two parts of the city's population, closely linked by common interests, and very often by the ties of friendship, warmed their hands in blood.

—Yerevan Chief of Administration to Yerevan City Council (1905)<sup>161</sup>

On February 14, 1905, the Yerevan Chief of Administration requested that the city council send funds to help victims of recent clashes in Baku. The murder of an Armenian man by an Azerbaijani oilfield proprietor in Baku had set off spates of fighting between Azerbaijani and Armenian inhabitants of the city; the violence spread from Baku to the surrounding countryside and other major population centers of Transcaucasia, subsiding and resurfacing repeatedly until the middle of 1906. This conflict, usually referred to as the Armeno-Tatar War, was largely concurrent with the 1905 Russian Revolution, an outbreak of political and social turmoil that spread from St. Petersburg to all parts of the empire. As an established industrial center, Baku was eclipsed by the sort of political protest and labor unrest that was taking place in other large cities, such as Moscow and St. Petersburg; disruptive striking had plagued the city for years but became uncontrollable beginning in early 1905. These two conflicts, Baku's Revolution of 1905

<sup>&</sup>lt;sup>161</sup> Quoted in Leslie Sargent, "The 'Armeno-Tatar War' in the South Caucasus: Multiple Causes, Interpreted Meanings," *Ab Imperio* 4 (2010), 154. I would like to acknowledge, as does Sargent in her article, that the ethnoreligious violence of 1905 and similar incidents later continue to be contentious matters in the national narratives especially of Armenia and Azerbaijan today, and that retrospective assessments such as my own might bear some implications beyond their specific historical focus. It is my express intention to avoid "taking sides" in regard to any of these events.

and the Armeno-Tatar War, were to some degree of separate origins and to some degree took different courses, but nevertheless built upon and fed into one another in 1905, making that year in Baku's history one of its most violent.

As it transpired, the events of 1905 were only the beginning of a deeply unsettled period in Baku's history, setting the tone for the remainder of the pre-Bolshevik era in Baku, just as the Russian Empire never quite settled after the country-wide Revolution of 1905. Frontier lawlessness had been common in Baku in the late nineteenth century, but in the early twentieth century this disorder was sharpened and escalated by specific grievances. Under the combined influences of tsarist political opposition, leftist labor activism, and a natural decline in the oil industry, the labor movement of Baku emerged as a wide-scale, sometimes-organized, and extremely disruptive force in its oil industry. Major strikes occurred in 1903, 1904, 1905, 1906, 1908, 1913, and 1914, followed by general disorder between the February Revolution and the Bolshevik takeover. The political breakdowns and military interventions associated with the 1905 Revolution, World War I, and the 1917 revolutions created their own waves of violence and unrest.

These failures of political control became openings for interethnic massacres in Baku during the first two decades of the twentieth century. The distinctiveness of this era of conflict lies in the inseparability of governance, labor, and ethnicity in this industry and region, a theme raised in passing by Audrey Altstadt and Ronald Grigor Suny in their mentions of this period, and more extensively in Jörg Baberowski's *Der Feind ist* 

*überall*.<sup>162</sup> In particular, Baberowski has detailed the deep ethnic divisions apparent in Baku's organized labor activity of the time. The nature of the oil industry in this region caused rapid, unregulated, concentrated urban-industrial growth to a largely unprecedented degree, and was greatly complicated by extreme ethnoreligious diversity in the workforce that was made possible only due to Baku's particular history and geographical location, which facilitated large-scale migration from Armenia, Russia, and Iran. The history of the unsettled oil industry in the early twentieth century is a clear demonstration of Baku workers' complex and overlapping ethnic and labor identities.

# Baku, 1905

In early 1905, labor strikes and political protest began to spread across the Russian Empire in response to numerous perceived governmental deficiencies. The severe strikes that took place in Baku in the same year represented the culmination of several years of increasing labor unrest. Labor and political discontent had been relatively common in Baku since 1901 due to fluctuations in the oil industry, so the strikes and demonstrations of 1905 were in large part a continuation of a trend, albeit more violent

\_

<sup>&</sup>lt;sup>162</sup> Suny's *Baku Commune*, 1917-1918 was one of the first to address directly the clear ethnic stratification present in Baku industries, although other historians comment on it as well. Audrey Altstadt-Mirhadi, "Baku: Transformation of a Muslim Town," in *The City in Late Imperial Russia*, ed. by Michael F. Hamm (Bloomington: Indiana University Press, 1986), 283-318; Ronald Grigor Suny, *The Baku Commune*, 1917-1918: Class and Nationality in the Russian Revolution (Princeton: Princeton University Press, 1972); Ronald Grigor Suny, "A Journeyman for the Revolution: Stalin and the Labour Movement in Baku, June 1907-May 1908," Soviet Studies 23, No. 3 (Jan. 1972): 373-394; Jörg Baberowski, *Vrag est vezde*. Stalinizm na Kavkaze (Moscow: Rossiiskaia politicheskaia entsiklopediia [ROSSPEN], 2010), chapter one. I should also note here the useful recent work of Jonathan Sicotte on this era of Baku's history, although I disagree with his conclusions in several instances. Jonathan H. Sicotte, "Baku: Oil, Violence and Identity, 1905-1927" (PhD diss., Georgetown University, 2017).

and uncontrolled. Waning oil production and the fluctuation of global oil prices combined to put workers in a relatively disadvantageous position after 1901.

After Baku hit its peak of production in 1901, making up more than half of oil extracted globally that year, output began to decline (Table 4). The reasons for this decline are various. Suny points to a general economic downturn in Russia around this time, falling oil prices and less demand for oil globally, and steep competition from the American oil industry, which benefited from more advanced technology and less taxation. It also seems likely that the known oil reservoirs beneath the Absheron Peninsula were starting to show fatigue; in the absence of large new discoveries, the same oilfields had been under continuous exploitation for decades by oilmen who frequently used extractive methods detrimental to the future productivity of the reservoirs. In 1902, oil production was reduced about 700,000 metric tons, or about 6 percent from the previous year, and in 1903 a similar decrease occurred.

An excess of labor relative to the number of positions available, in combination with less power in bargaining for fair working conditions, pushed workers to seek alternative means to pressure employers: that is, striking and other work stoppages. The overwhelming majority of strikes and other labor unrest that occurred in Baku in the first two decades of the twentieth century appear to have originated, expectedly, in the various enterprises associated with the oil industry. Oil workers made up one-quarter of the region's population; therefore, although most strikes were confined to individual

\_

<sup>&</sup>lt;sup>163</sup> Suny, Baku Commune, 6.

<sup>&</sup>lt;sup>164</sup> Heinrich Hassmann, *Oil in the Soviet Union: History, Geography, Problems* (Princeton: Princeton University Press, 1953), 147-148.

Table 4. World, US, and Russian Crude Oil Production, 1900-1910 (selected years)			
$(thousand\ tons)^{165}$			
Year	World (thousand tons)	US (thousand tons)	Russia (thousand tons)
1900	20525	8596	10429
1901	23044	9376	11721
1902	25022	11994	11085
1903	26821	13574	10403
1904	29996	15820	10509
1905	29602	18203	7564
1906	29351	17091	8106
1907	36328	22442	8512
1908	39263	24122	8559
1909	41111	24749	9079
1910	45109	28315	9680

enterprises, the industry-wide or general strikes that occasionally arose often resulted in utter paralysis of the region's operations. <sup>166</sup> In 1901, workers in the Baku oil fields for the first time observed International Workers' Day (May Day). <sup>167</sup> In July 1903, what began as individual strikes mounted into a general strike, incorporating transportation and utilities workers, and therefore crippling the city's operations. <sup>168</sup> By the summer of 1903, labor unrest was a near-constant part of the Baku working atmosphere, and would remain so for nearly the next two decades.

Discontent among workers created fertile ground for labor activists, who had been at work in the area for several years. The Russian Social Democratic Labor Party (RSDLP), the predecessor of the Bolshevik and Menshevik parties, appears to have been

<sup>&</sup>lt;sup>165</sup> Ibid.

<sup>&</sup>lt;sup>166</sup> Robert C. Tucker, Stalin as Revolutionary (New York: W. W. Norton & Company, 1973), 105.

<sup>&</sup>lt;sup>167</sup> Nicholas Lund, "At the Center of the Periphery: Oil, Land, and Power in Baku, 1905-1917" (diss. Stanford University, 2013), 141; Suny, *Baku Commune*, 31-35.

<sup>&</sup>lt;sup>168</sup> Altstadt-Mirhadi, 304.

the first present in the Caucasus, organizing mostly Russian workers beginning in the last years of the nineteenth century. For many years after the 1903 split between the Bolsheviks and Mensheviks, the latter held far more sway among Baku workers, and in the Caucasus more broadly. Because of their explicit association with Russia, however, the RSDLP did not initially have much success reaching non-Russian workers.

More appealing to Baku's diverse workforce were non-Russian labor organizations. In 1904, the RSDLP spawned the Hummet ("endeavor") party, a branch organized for Muslims only, and led by Azerbaijani community elites. Many Iranian workers were taken in by a party called Adalet ("justice"), which later became the basis for the Iranian Communist Party. However, the most influential party of this period was that led by brothers Lev and Ilya Shendrikov, who had arrived from Tashkent in the summer of 1904 to found a socialist organization that at first incorporated workers from the Balakhani and Bibi-Eibat districts of Baku, but soon grew to encompass a far larger contingent of workers. From the time of their arrival until 1907, the Shendrikovs headed likely the most popular labor organization in Baku, first named the Organization of the Balakhani and Bibi-Eibat Workers, and renamed the Baku Workers' Union. 171

Contemporaries recalled the charisma particularly of Ilya Shendrikov, who was regarded

<sup>&</sup>lt;sup>169</sup> Robert Service, *Stalin: A Biography* (Cambridge, MA: The Belknap Press of Harvard University Press, 2005), 59. Also Suny, "A Journeyman," 374. The Mensheviks' popularity in the Caucasus generally was likely due to their openness to the peasantry; despite this and their devotion to Georgia, the Mensheviks also remained a (usually) stronger presence among Baku workers than the Bolsheviks in the years prior to World War I.

<sup>&</sup>lt;sup>170</sup> Altstadt, *The Azerbaijani Turks*, 47-48.

<sup>&</sup>lt;sup>171</sup> J. V. Stalin, "The Press," in Works, Vol. 2, 1907-1913 (Moscow: Foreign Languages Publishing House, 1954), 132-134.

as either a dangerous demagogue or a champion of the people, depending on how closely one identified with the Bolshevik party, the Shendrikovs' declared antagonist. 172

It was the Shendrikovs who organized a general strike that in December 1904 utterly paralyzed Baku industries. For two weeks, workers throughout Baku, especially in the oil and transportation industries, refused to show up for work and picketed.

Ultimately, 50,000 workers went on strike, and for the first time many Muslims were among them. There was some property destruction, including the burning of over two hundred oil derricks, and the labor stoppage caused a temporary downturn in oil production and transportation, as the strike spread quickly to the Black Sea port of Batumi. Compared to the 1905 strikes, however, the labor problems of December 1904 were swiftly and neatly concluded. Oil producers and workers sat down to negotiations by mid-December, and by the new year had agreed to the "December agreement" or "Fuel Constitution," the first industry-wide labor contract settled in the Russian Empire, and a major success for organized labor. This agreement set labor standards that, even if further strikes were necessary to compel enforcement, were ultimately binding for

\_

<sup>&</sup>lt;sup>172</sup> Cecilia Bobrovskaya, *Twenty Years in Underground Russia: Memoirs of a Rank-and-File Bolshevik* (Chicago: Proletarian Publishers, 1976), https://www.marxists.org/archive/bobrovskaya/twenty-years/ch07.htm.

<sup>&</sup>lt;sup>173</sup> Baberowski, Vrag est vezde, 55.

<sup>&</sup>lt;sup>174</sup> Irina Rote, "Pervye rabochie soiuzy neftianikov i 'Mazutnaia Konstitutsiia' (Baku, 1906)," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/
Первые рабочие союзы нефтяников и "Мазутная Конституция".

employers for the remainder of the imperial period.<sup>175</sup> Peace reigned briefly, but in January 1905 word spread to Baku of the shootings in St. Petersburg, and both labor and political activists took the opportunity to stage their biggest protest to date.

The labor unrest that immobilized the oil and other industries of Baku was initially not dramatically different from that taking place in other major urban-industrial centers of the Russian Empire in 1905. 176 That is, the process of worker radicalization tended not to be spontaneous or strictly self-generated, but rather prompted by the agitation of professionals or intelligentsia; grievances were both economic and political; and the unrest quickly embraced factions from a variety of industrial enterprises and backgrounds. The labor unrest that immobilized the oil and other industries of Baku was not itself exceptional in the context of the 1905 Russian Revolution—broadly speaking, similar trends of striking and property damage were occurring throughout the empire.

What distinguished Baku's 1905 was its concurrence and interaction with the first severe spate of ethnoreligious violence between the Armenian and Azerbaijani populations living in the region. Baku was increasingly ethnically diverse, but it was not a "melting pot"; that is, ethnic communities tended to remain fairly insulated from one another in the city. In the oil industry there was clear ethnic stratification along

<sup>&</sup>lt;sup>175</sup> Altstadt-Mirhadi, 305; Lund, 243. This event is the subject of several pieces written by Stalin in his Baku years, including "The December Strike and the December Agreement (on the Occasion of the Fifth Anniversary, December 13, 1909," in *Works, Vol. 2, 1907-1913* (Moscow: Foreign Languages Publishing House, 1954), 174-178; Suny, *Baku Commune*, 31-35; J. V. Stalin, "The Press," 132-134. Much later, in the late 1930s, in the process of editing his own *Short Biography* Stalin claimed that he and fellow Bolshevik Japaridze had in fact led the December 1904 strike; this appears to be simply unfounded self-promotion nurturing Stalin's cult of personality. Sarah Davies and James Harris, *Stalin's World: Dictating the Soviet Order* (New Haven: Yale University Press, 2014), 150-156.

<sup>&</sup>lt;sup>176</sup> For instance, Laura Engelstein, *Moscow, 1905: Working-Class Organization and Political Conflict* (Stanford: Stanford University Press, 1982) and Gerald Dennis Surh, *1905 in St. Petersburg: Labor, Society, and Revolution* (Stanford: Stanford University Press, 1989).

occupational and union lines, and separation between ethnic groups of individual enterprises. For much of the oil industry's history, Russians and Armenians filled whitecollar and skilled positions, while Azerbaijanis, Persians, Daghestanis, and others occupied blue-collar and unskilled positions. Social hierarchy according to ethnicity or nationality was not unique to Azerbaijan in any time period under consideration, but the diversity, insularity, and friction of groups in Baku meant that labor relations were especially volatile. Ethnic conflict in Baku and the Caucasus region more generally has been enduring and conspicuous for centuries, perhaps millennia, but ethnic or national consciousness was particularly heightened in the late nineteenth and early twentieth centuries. The industries in Baku brought together workers, students, and state officials of a variety of ethnic and religious backgrounds in unprecedented numbers. Only in the rarest of cases did "class" solidarity overcome ethnic divisions, and in fact was more often obstructed by it. As Baberowski has pointed out, multiethnicity and social solidarity need not be mutually exclusive; in this situation, however, longstanding governmental and workplace discrimination based on ethnicity was largely effective in intensifying the seriousness of perceived ethnic differences. 177

For reasons that are complex and partly guesswork, antagonism had been growing particularly between the Azerbaijani and Armenian populations of Baku since at least the mid-nineteenth century. I argue that, as with the labor and political grievances that fed into Baku's Revolution of 1905, the tension that grew into outright violence primarily between Azerbaijanis and Armenians in Baku can be largely traced back to the rapid growth of the region's oil industry. Industrial growth demanded more workers and other

<sup>&</sup>lt;sup>177</sup> Baberowski, *Vrag est vezde*, 61, 75.

personnel, which provoked rapid growth in the region's population. Men and women traveled from Russia proper, Central Asia, what is today Iran, and from elsewhere in the Caucasus, turning Baku from a city of several thousand in the mid-nineteenth century to over 150,000 in 1903. Notably, many of the permanent arrivals (as opposed to seasonal laborers) were Armenians, who often received preferential treatment from tsarist authorities, and as a result occupied more gainful positions in the oil industry. In combination with various other ethnoreligious differences, not least that Armenians were Christian and Azerbaijanis Muslim, resentment grew between the two populations, most clearly in overcrowded Baku.

Relatively recent western scholarship has contended that tsarist authorities in the Caucasus deliberately fomented hostility between the two groups in a decades-long "divide and rule" strategy. 179 I do not dispute that the nature of Russian governance in the Caucasus was significant in generating these clashes; with some significant exceptions, Russian policy did appear to favor Armenians more often than Azerbaijanis. It should be noted nonetheless that evidence of a deliberate, long-term strategy to create antipathy between the two groups is weak; contemporary and scholarly accounts that emphasize this interpretation (excepting Altstadt) are frequently motivated by some other platform, such as Marxism or anti-Russian sentiment. Certainly, Russian authorities and private oil company owners did routinely practice ethnicity-based labor and economic

<sup>&</sup>lt;sup>178</sup> Baku po perepisi 22 oktiabria 1903 goda (Baku: Tovarishchestvo Kavkazkogo Pechati, 1905).

<sup>&</sup>lt;sup>179</sup> Altstadt, 19, 43; Tadeusz Swietochowski, *Russian Azerbaijan, 1905-1920: The Shaping of National Identity in a Muslim Community* (Cambridge: Cambridge University Press, 1985), 40.

discrimination, but instances of casual racism versus strategic attempts to deter widespread labor organization are not clear cut.

In February 1905, less than a month after the escalating labor, political, and social tensions in the empire had given way to labor revolution in Baku after "Bloody Sunday," Armenians and Azerbaijanis throughout Transcaucasia began attacking one another in recurring, often small-scale, bloody and destructive confrontations. The first attacks took place on February 6 following the public murder of an Azerbaijani by one or more Armenians; the reason for the murder is unclear, but could very well have been the outcome of a personal dispute. The conflict increased in scale on each of the three following days, growing to include large numbers from each ethnoreligious group and setting entire neighborhoods of the city against one another. 180 This particular wave of

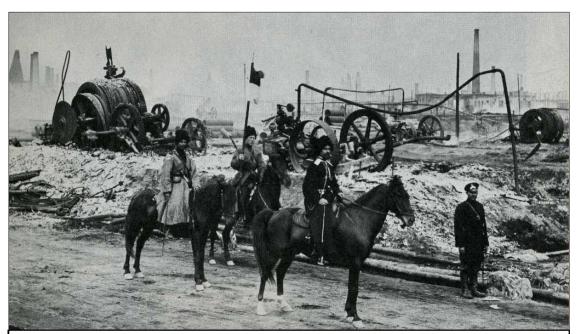


Figure 4. Destruction in the Baku oilfields, 1905. Source: https://en.wikipedia.org/wiki/Armenian%E2%80%93Tatar massacres of 1905%E 2%80%9307#/media/File:Neft.jpg

<sup>180 &</sup>quot;Telegramma bakinskogo gubernatora kn. M. A. Nakashidze ministru vnutrennikh del A. G. Bulyginu. Baku, 7 fevralia 1905 g. No. 2358," in "Meznatsionalnye stolknoveniia v Baku 7-10 fevralia 1905 goda," Olga Edelman, Regnum, May 11, 2017, https://regnum.ru/news/polit/2273761.html.

violence, which included murder, beatings, theft, and arson, ended only when imperial troops were called in to clear the streets. Between 3,000 and 10,000 people were dead by the end. 181

On February 9, community leaders called for peace, offered to pay for any damage, and held a diplomatic parade to unite the community. Prince Nakashidze, the governor of Baku, walked through the city with the Armenian bishop, the head of the local mejlis (the Azerbaijani community council, essentially), and other Armenian and Azerbaijani elites. In his report to Minister of the Interior Bulygin, Nakashidze reported bystanders' "shouts of joy" during the procession, followed by an evening of calm.

Nevertheless, he expressed uneasiness about the future. 183 His fear was ultimately justified; the atmosphere of conciliation did not last long.

Sporadic outbreaks of demonstrations and intermixed violence took place throughout the remainder of year. In March of 1905, the Transcaucasian Railway strike reached Baku, spreading from railway workers to other industries. Tens of thousands of workers participated in striking and other demonstrations on May Day of that year. After Nakashidze was assassinated by Armenian nationalists in May, nearly the entire Caucasian region was placed under martial law. <sup>184</sup> Throughout the spring and summer of 1905, numerous smaller strikes in industries of all kinds took place, settled either by employer concessions or by force, but always another arose elsewhere. This state of

<sup>181</sup> Sargent, 144.

<sup>&</sup>lt;sup>182</sup> *Ibid.*, 151-154.

<sup>183 &</sup>quot;Telegramma bakinskogo gubernatora,"

<sup>&</sup>lt;sup>184</sup> "Military Report on Trans-Caucasia," in *Caucasian Boundaries: Documents and Maps, 1802-1946*, ed. Anita L. P. Burdett (England: Archive Editions, 1996), 458.

affairs continued not simply because workers felt empowered by the general disarray that weakened employers, but also because the labor activism was itself quite disorganized. The general strike of December 1904 had been uniquely successful because the Shendrikovs acted as a strong, single advocate for workers of all participating enterprises. In contrast, striking workers in the first half of 1905 lacked a unified labor movement, and so no general settlement between labor and employers could be made. Each small-scale strike had to be settled individually and was in no sense binding for the workers or employers of other trades or enterprises.

After February, the largest-scale and most violent incident of 1905 was the August general strike, organized by the Baku Committee, which had managed to coordinate a large number of workers. The strike began in Baku on August 16; on the same day in the city of Shusha, far to the east, yet another outbreak of violence between Armenians and Azerbaijanis took place. As word of this incident spread to Baku, ethnoreligious violence also pervaded the general strike, turning the organized demonstration into bedlam. Between August 20 and August 26, ethnoreligious and other violence killed hundreds and wounded thousands more; arson far worse and more widespread than that earlier in the year destroyed workers' homes and industrial infrastructure and set wells ablaze. 185

In this period, labor and ethnoreligious identities blurred in myriad ways. Russian workers were typically considered to be the most proactive and enlightened because they went on strike for, in the view of labor organizers, the most progressive reasons—that is, they desired more expansive social and political concessions. It was noted in the records

<sup>185</sup> Altstadt-Mirhadi, 306.

of oil companies such as Nobel and Krasilnikov that "Muslim workers" were the first to begin striking in 1905, bringing work to a halt. Furthermore, the industrial sabotage that took place in 1905 and 1906 was not simply a matter of workers taking political and economic grievances too far, but was in some cases motivated by the ethnicity of the owners or personnel of a particular enterprise. <sup>186</sup> In other cases, it was likely collateral damage, as the ongoing violence between Azerbaijanis and Armenians contributed to general lawlessness in the region that easily turned to property damage, quite often arson.

Likewise, the Armeno-Tatar War should not be considered separate from the Revolution of 1905. The acute breakdown of authority that followed Bloody Sunday created an anarchic atmosphere in Baku that at the very least fostered the continuation of outbreaks of ethnoreligious violence in February 1905. Various other mass political demonstrations during the following year and a half, most notably in October 1905, generated unrest that at times turned to ethnoreligious violence. In most cases, it is difficult to determine whether a particular outbreak of violence or arson was motivated by political, economic, or ethnic grievances, and whether the grievances were personal or based on broader motives.

The violence of this period ultimately died down due to the settlement of the October Manifesto, which temporarily calmed labor and political upset. Stronger law enforcement presence and a constant state of either emergency or martial law helped to dampen unrest as well.<sup>188</sup> In mid-1905, before the August riots, city administrators began

<sup>&</sup>lt;sup>186</sup> Altstadt, The Azerbaijani Turks, 71.

<sup>&</sup>lt;sup>187</sup> Abraham Ascher, *The Revolution of 1905: Revolution in Disarray* (Stanford: Stanford University Press, 1988), 254-260.

<sup>&</sup>lt;sup>188</sup> Altstadt-Mirhadi, 307.

to implement police reforms, which included bringing district police forces more directly under the control of the central Baku police department. D. Odinstov, one of Baku's former governors, advised on this restructuring. A larger police force was justified, he argued, because the city was large and growing, the workforce was unruly and saw constant turnover, the population was unusually ethnically heterogeneous and "excitable," and the urban layout was worrying from a security point of view, characterized by narrow, twisting streets that were easily barricaded and provided cover for ambushers. Oil industrialists lobbied relentlessly for a stronger police force in Baku, offering to dedicate some of their own funds to that goal. After the August events, oil industrialists demanded to have armed guards at every oil field and enterprise and the right to influence the election of the police chief. Some imperial officials balked at the proposition to involve foreign money in policing, which they feared would result in oil companies running their own militias, but ultimately foreign money was accepted in limited amounts. By October 1906, the Baku police force had been fortified and restructured to owners' satisfaction. 189

This assessment of the violence in Baku in 1905 is intended to make at least two points. First, I wish to emphasize the centrality of the region's oil industry to these developments, as it generated a great potential for labor unrest and drew together masses of workers from various regions of the continent. Second, I argue that in the history of the Caucasus, labor and ethnicity must be considered together; the Revolution of 1905 and

-

<sup>&</sup>lt;sup>189</sup> Irina Rote, "Bakinskie neftepromyshlenniki v borbe za vliianie na gorodskuiu politsiiu (1905-1907 gg.)," Nash Baku: Istoriia Baku i bakintsev,

https://www.ourbaku.com/index.php/Бакинские\_нефтепромышленники\_в\_борьбе\_за\_влияние\_на\_гор одскую\_полицию\_(1905-1907\_гг.). Extra policing appears to have been effective in tamping down labor activity for only a few years after 1905; Nicholas Lund describes the inter-revolutionary era as chronically under-policed. Lund, 134.

the Armeno-Tatar War were to some degree driven by different grievances, but blended and fed into one another. I would like to avoid leaning too far into the notion that the strikes of this year "degenerated" into "uncontrollable" ethnoreligious riots, as it carries some misleading assumptions. <sup>190</sup> Ethnoreligious conflict did in a number of cases seem to vitiate worker solidarity; for instance, the August 1905 strike might well have had the potential to accomplish a broad agreement akin to that obtained from the December 1904 strike, had its participants not been diverted by ethnoreligious hostility. However, it is not strictly correct to imply that labor activity in this period was significantly less violent, more organized, and more legitimate in some sense than the conflict between Armenians and Azerbaijanis.

A central interpretive issue regarding the factors contributing to and the events of 1905 is the absence of definitive evidence, with information coming largely from rumors, the accounts of often confused or biased witnesses and participants, one-sided press, official reports, and, rarely, archival documents, which when brought together provide little clarity, leaving room for a variety of interpretations, in particular regarding who is to blame for starting it. One contemporary British military report vaguely blamed "political agitators," possibly referring to labor activists. <sup>191</sup> Maxim Gorky, who was traveling in the area at the time, promoted in a pamphlet his belief that the Russians

-

<sup>&</sup>lt;sup>190</sup> Altstadt-Mirhadi, 310-311.

<sup>&</sup>lt;sup>191</sup> "Military Report," 458-459. "Despatch No. 602 from [Sir] Charles Hardinge, (HM Ambassador to Russia), St Petersburgh, to the Marquess of Lansdowne, Foreign Secretary, London, 8 October 1905," in *Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978. Volume 1, 1885-1919*, ed. Anita L. P. Burdett (Cambridge: Cambridge University Press, 2012), 112-114.

instigated the 1905 interethnic violence. 192 Both contemporary accounts and more recent scholarship from a number of recent Armenian and Azerbaijani writers have quite consistently placed blame on the other side: Armenian writers have tended to paint the Azerbaijanis of 1905 as resentful bullies; Azerbaijani writers have tended to argue that radicalized, expansionist Armenians began the conflict. 193 Soviet historians generally claimed that tsarist authorities and the forces of bourgeois capitalism fomented ethnic hostility in order to suppress revolutionary movements and labor radicalism. 194

It is this last line of interpretation that is most commonly carried forward in more recent western scholarship on 1905 in Baku. That is, after decades of deliberately manipulating the two ethnic groups, in February of 1905 local tsarist authorities in one way or another directly instigated the violence between them in order to distract from the intensification of labor-based disruptions that had troubled the Baku oil industry all winter. <sup>195</sup> One scholar states that after Bloody Sunday, local officials had begun to spread rumors that violence between the two groups was imminent, and that the governor-

<sup>192</sup> Ronald Grigor Suny, *Looking Toward Ararat: Armenia in Modern History* (Bloomington: Indiana University Press, 1993), 49.

<sup>&</sup>lt;sup>193</sup> For pro-Azerbaijani interpretations, see, for example, Anar Kurdoglu Eyubov, "Dashnaksutun 1905 Yili Chatishmalarinda," *Turan-Sam* 11 (Summer 2011), 37-42; Eldar Azizov, *Difai: XX Esrin Evvellerinde Ermeni-Azerbaijanli Munagishasinin Ilkin Tarikhi Shertleri ve Sebebleri Azizov* (Baku, 2009); Ziyad Amrahov, "Russia's Political Steps in the 'Armenian Question' and the Pact on January 26 (8 February) 1914 between Russia and Turkey," *Karadeniz Arashtirmalari* 47 (2015): 53-59. For pro-Armenian interpretations, see several of the essays included in *The Caucasian Knot: The History and Geo-Politics of Nagorno-Karabagh*, eds. Levon Chorbajian, Patrick Donabedian, and Claude Mutafian (London: Zed, 1994).

<sup>&</sup>lt;sup>194</sup> Sargent, 145.

<sup>&</sup>lt;sup>195</sup> Altstadt, *The Azerbaijani Turks*, 43; Geoffrey A. Hosking, *Russia: People and Empire, 1552-1917* (Cambridge.: Harvard University Press, 1997), 387-388.

general had begun to allow more Azerbaijanis to purchase arms. <sup>196</sup> This line of reasoning is not well supported by existing evidence, and may not be entirely plausible. Under Russian rule, the two groups gradually grew in their resentment of one another, but it never deterred respective community leaders from deriding and attacking their tsarist oppressors, or laborers from striking against their employers. Did tsarist officials believe that introducing an ethnic dispute would result in less destruction and remain more controllable than the political and labor unrest they faced, knowing that the they were short on law enforcement due to the Russo-Japanese War and the recent diversion of Baku's forces to the town of Shusha, and, one scholar insists, having issued weapons permits to Azerbaijanis?<sup>197</sup> Stirring up ethnoreligious antagonisms intentionally and arming one side of the conflict in order to quell other unrest would have been at minimum a reckless and shortsighted strategy, especially for a region so economically valuable to Russia and Europe alike.

### Aftermath of the 1905 Events

The events of 1905 had long-lasting consequences largely along two different lines: the status of the oil industry, and relations between Azerbaijanis and Armenians in the region. Given the high level of foreign investment in the Baku oil industry, the destruction associated with 1905 represented an international economic disaster.<sup>198</sup>

<sup>196</sup> Lund, 145, citing Luigi Villari, Fire and Sword in the Caucasus (London: T.F. Unwin, 1906).

<sup>&</sup>lt;sup>197</sup> "Despatch no. 602," 112-114; Lund, 145.

<sup>&</sup>lt;sup>198</sup> Altstadt, *The Azerbaijani Turks*, 45; "Letter from Mr W.A. Turner, Secretary, The Schibaieff Petroleum Co. Ltd, to Marquis of Lansdowne, Foreign Secretary, London, 19 September 1905, regarding losses of the company," *Oil Resources, Volume 1*, 109.

Although the oilfields lay in Azerbaijani territory, and lawfully belonged to the Imperial Russian government, the development of Baku had been truly an international effort. The extent of the entanglement and the associated possessiveness that European interests had come to feel for the Baku region is apparent from the ire they expressed when the labor and ethnic unrest in the Caucasus resulted in extensive loss of life and destruction of property around Baku and its oil industry. The affected European industrialists felt that they had reached for a blossom and encountered its thorns, namely, "savage" locals and the utter incompetence of Russian administration. <sup>199</sup> This episode demonstrates that by the early 20<sup>th</sup> century, the southern Caucasus, and therefore the Russian Empire, were sufficiently integrated into European business that domestic disorder could wipe out foreign companies and draw the attention of the world. That is, there was a distinct international element to the revolutions of 1905.

During the first few days of the conflicts, the grand corporations that nearly monopolized the oil industry had remained fairly unconcerned with the unrest taking place in Baku, likely believing that it would soon be resolved as strikes of the previous few years had been. Only when the bloody fighting turned to widespread destruction of property later in the year did owners and investors become truly agitated. The chairmen of the Council of the Congress of Oil Industrialists and the Baku Exchange Committee reported to Minister of Finance V. N. Kokovtsov around February 14 that the non-combatant population of Baku had effectively lost its nerve: "the impression of the hard days was so strong that order could not be restored. Under the influence of

...

<sup>199</sup> Henry, vii.

<sup>&</sup>lt;sup>200</sup> Altstadt, The Azerbaijani Turks, 45.

understandable panic, masses leave the cities, abandoning property and affairs, industrialists, artisans, workers. Fishing and trade risk being left without workers. Only a complete conviction that the life and property of the population will receive protection from the government can reassure the population and establish a peaceful, normal order."<sup>201</sup> In addition to extensive arson, which claimed not just derricks and pipelines but also company housing and offices, the conflict became threatening enough to drive away company personnel.<sup>202</sup> Several companies, in their claims to the British government, estimated their immediate losses at over one million pounds, and future loss of revenue due to stoppage only slightly less.<sup>203</sup> "It is at present impossible to estimate even approximately the amount of loss which this Company has sustained," wrote a representative of the London-based Schibaieff Petroleum Company, "but it must amount to a very large sum."<sup>204</sup> The Nobels lost thirty-six oil derricks, the company office was looted, and its managers' apartments were damaged. The company was not able to recover its production levels until just before World War L<sup>205</sup>

In the weeks and months following the onset of the most destructive conflicts, rumors and accusations surfaced that regional authorities had, at the very least, known beforehand that violence was going to break out, and had perhaps encouraged or

<sup>&</sup>lt;sup>201</sup> "Vsepoddanneishii doklad ministra finansov V. N. Kokovtsova Nikolaiu II, 14 fevralia 1905 g.," in Edelman; ARDTA, f. 44, op. 2, del. 884.

<sup>&</sup>lt;sup>202</sup> "Military Report," 458.

<sup>&</sup>lt;sup>203</sup> "Despatch," 111, 117.

<sup>&</sup>lt;sup>204</sup> "Letter from Mr W.A. Turner," 109.

<sup>&</sup>lt;sup>205</sup> Dmitry Travin and Otar Marganiya, "Resource Curse: Rethinking the Soviet Experience," in *Resource Curse and Post-Soviet Eurasia: Oil, Gas, and Modernization*, ed. Vladimir Gel'man and Otar Marganiya (Lanham: Lexington Books, 2010), 26.

instigated it. Some oil company owners accused local authorities not of deliberate instigation but of irresponsible passivity. <sup>206</sup> In October 1905, Sir Charles Hardinge, the English ambassador to Russia, wrote an outraged letter to the English Foreign Secretary regarding the outbreaks of fighting earlier in the year, asserting that the Russian government had a responsibility to compensate oil owners whose property and workforce had suffered because, he asserted, authorities knew of an "imminent massacre" and had done nothing.

Two days before the massacre occurred a deputation from the Russian and foreign petroleum Companies waited on General Fedaieff, the Governor of the town, pointed out to him the impending danger, and asked that additional troops might be brought into the town, there being at the moment only 1800 troops in Baku. The Governor declared that there was no cause for alarm and treated lightly the warnings of the deputation. Two days later 1000 of the 1800 troops in Baku were sent by the Governor to Shusha, where disturbances had occurred, thus leaving only 800 troops in the town, and in the afternoon of the same day the massacre commenced which lasted some days. The Governor himself declared to those who asked for protection that he could only protect the foreign Consulates. From these facts it is evident that the Governor was absolutely wanting in all sense of responsibility and was, owing to his action in sending away more than half his troops, answerable for the disorders and the losses which they entailed.<sup>207</sup>

Hardinge pointed out the "enormous revenue" that the Russian government received from oil companies in the form of taxes and rent, arguing that the companies were therefore deserving of protection from the government.<sup>208</sup> Other companies made similar demands, claiming that local authorities had allowed fighting between Azerbaijanis and Armenians

<sup>206</sup> "Memorandum of Evidence of omission on party of Russian government to take proper measures for protection of life and property on the Baku oil fields during the recent disorders, by the Russian Petroleum and Liquid Fuel Co., 13 October 1905), in *Oil Resources, Volume 1*, 125-127.

<sup>&</sup>lt;sup>207</sup> "Despatch No. 602," 112-113.

<sup>&</sup>lt;sup>208</sup> Ibid., 113-114.

to continue unchecked for days.<sup>209</sup> However, the Russian government responded that it could not be held responsible for the losses, and refused to compensate foreign subjects.<sup>210</sup>

In addition to immediate compensation, foreign companies and governments were interested in ensuring that no further disturbances occurred. Oil journalist J. D. Henry offered his outlook on the situation: "Obviously, practically the chief thing wanted to ensure the return of prosperity in Baku is a lasting peace—not a patched-up arrangement amongst the fanatical races of the Caucasus, but a real, permanent peace guaranteed by a military force which the country must keep in the Caucasus before it can expect to enlist the assistance of foreign capital in the development of its mineral and industrial resources." Foreign companies continued to invest in the region, but remained wary of its potential for instability.

The destruction caused contemporaries to reflect on the importance that

Caucasian oil and the industry in Baku had for the British Empire itself. Sir Boverton

Redwood, a contemporary British expert on petroleum and a member of the Baku

division of the Imperial Russian Technical Society, observed, "The progress of the

Caucasian oil business has been temporarily arrested by the recent disorders and

destruction of property, but the first effect has been to bring into greater prominence the

extent to which the industrial life of the Empire depends upon the supply of petroleum in

<sup>209</sup> Ibid., 127.

<sup>210</sup> Ibid., 125.

<sup>211</sup> Henry, x.

the form of liquid fuel."<sup>212</sup> Significance was invested into the region by industrializing capitalist powers who came to value the resource. The Russian government and local entrepreneurs left the oil industry open to foreign powers, who, because of their investments in the region, came to feel possessive of it. The unrest in Baku in 1905 would otherwise have meant little to foreign imperial powers.

For Russia and the other powers of Europe, the 1905 upheavals were more than just another incident of peripheral ethnic conflict, demonstrating the great geopolitical significance that had been imbued in the peninsula as an established "oil-producing region" in just a few decades. Poor labor relations, ethnoreligious strife, and inadequate governance and policing caused oil companies to see Baku as a risky investment, which, in addition to the destruction of industrial property and the Russian government's refusal to compensate owners for the damage, severely hampered industrial reconstruction in the following years. Archival records show a flurry of plot sales and purchases around 1905 as owners reconsidered the wisdom of remaining involved in the Baku oil business. <sup>214</sup> Baku fell behind the world's other great oil-producing regions, and to the present it has not regained its status as a serious competitor on a global stage.

In addition to this major industrial setback was the enduring damage done to relations between Azerbaijanis and Armenians. Before 1905, there had been no open, large-scale violence between the two populations. Open conflict further reinforced a sense of national rather than merely religious difference between the two groups. Since

<sup>&</sup>lt;sup>212</sup> Ibid., vi.

<sup>&</sup>lt;sup>213</sup> Ibid., x.

<sup>&</sup>lt;sup>214</sup> ARDTA, f. 44, op. 2.

1905, there have been several major clashes, notably between 1918 and 1920 (discussed later in this chapter), in the late 1980s and early 1990s, and occasionally in more recent years. This conflict represents the initiation of a longstanding cyclical interethnic dispute: the violence of 1905-1906 in Transcaucasia involved injustices that Armenians and Azerbaijanis could use as justification for continued hostility toward one another, and in moments of turmoil might fuel reoccurrences of ethnoreligious violence, which were themselves folded into the narrative that justified continued hostility.

### Between Crises: 1905-1914

Between the settlement of October 1905 and the onset of World War I in July 1914, Baku experienced a somewhat more peaceful period. Organized labor was temporarily undermined by the October Manifesto and concessions granted by oil companies. Suny finds that, until about 1908, "Baku workers enjoyed a degree of freedom and activity unknown in the rest of the empire." The devastating consequences of worker dissatisfaction demonstrated in the death and destruction of 1905, in addition to better oil prices and higher domestic demand for oil, compelled employers and municipal authorities to concede more liberties to workers and unions. Whether due to the passivity or contentment of workers, or exceptional repression by authorities, this period was in fact quiescent only relative to the scale of violence that arose in 1905. In comparison with the decades before 1900 and after 1920, this era in Baku's history remained deeply unsettled. Rather than seeing an "absence of further clashes" between 1905 and 1918, Baku remained ripe to burst whenever the balance of

<sup>&</sup>lt;sup>215</sup> Suny, "Journeyman," 375-376.

labor power again tipped, resulting in a number of strikes, both individual and general, albeit largely devoid of ethnoreligious violence.<sup>216</sup>

Certainly, despite frequent arrests, labor organizers had little trouble continuing their propagandizing among workers or their political maneuvering against one another. <sup>217</sup> The period between 1905 and 1914 saw considerable shifts in the balance of power among the labor organizations of the region. The Shendrikovs, who had been such a formidable presence in years previous, quickly fell from grace after 1905, the victim apparently of competitors' successful rumormongering, and fled to Saint Petersburg. <sup>218</sup> In the footnotes of Stalin's Works, the editors craft a story of enmity between the Shendrikovs and the Baku Bolsheviks, elaborating on rumors that the Shendrikovs were controlled by the police ("Zubatovites") and in the pay of oil company owners and tsarist authorities. The Bolsheviks, who may well have been the originators of this attack, continued to press it for years afterward, lumping together the Shendrikovs and the Mensheviks as unacceptably rightist. In a 1908 article, Stalin derided the Shendrikovs' attempt to reenter the Baku scene via their publication *Pravoie Delo*, in which they promoted more conciliatory tactics than the Bolsheviks proposed; Stalin framed their approach at once as meek and insultingly patronizing to workers, and as a danger to the proletariat.<sup>219</sup>

\_

<sup>&</sup>lt;sup>216</sup> Altstadt-Mirhadi, 307.

<sup>&</sup>lt;sup>217</sup> Suny, "Journeyman," 375-376; Altstadt-Mirhadi, 307.

<sup>&</sup>lt;sup>218</sup> Altstadt-Mirhadi, 307.

<sup>&</sup>lt;sup>219</sup> Stalin, "The Press," 132-134. In the Soviet era, the Shendrikovs were completely condemned by the Communist regime as an enemy organization; despite their great influence in Baku in these years, they appear in the scholarship very infrequently.

This was also the period in which the Bolsheviks made their move against the Mensheviks, who were still the most influential organization in the region. Stalin was only one of several leading Bolsheviks active in Baku in the years before World War I. After playing a leading role in the infamous 1907 Tiflis bank robbery, Stalin traveled to Baku. Mensheviks then dominated the Baku Committee, so Stalin and other Baku Bolsheviks—including Transcaucasians Stepan Shaumian, Aliosha Japaridze, Suren Spandarian, and Sergo Ordzhonikidze—formed their own organization. Stalin wrote prolifically for the relevant local press, and was active in organizing labor strikes, for which he was repeatedly arrested; he was detained in Baku's Bailov prison for most of 1908. After a period of exile and flight, Stalin returned to Baku in June or July of 1909, remaining there until he was again imprisoned in Bailov and subsequently expelled from the region in September 1910. 221

Much of Stalin's writing from this period related to a series of strikes that took place in the first months of 1908, likely the worst labor disruption that Baku experienced between 1905 and 1913, in which the Bolsheviks played a large part. The strike of the Mirzoiev firm was the most severe, beginning on February 14 and lasting 73 days, and including 1500 workers at its peak. However, the workers of several other large firms also went on strike in late 1907 and early 1908, notably Nobel, Motovilikha, Molot, and Adamov. Economic terrorism had apparently been rather common in the preceding years, including assassination, theft, arson, and other sabotage. During the Mirzoiev strike, the manager of the Surakhani oil fields was assassinated, and a fire occurred in a boiler room.

<sup>&</sup>lt;sup>220</sup> Robert Conquest, Stalin: Breaker of Nations (New York: Viking, 1991), 43-44; Tucker, 105.

<sup>&</sup>lt;sup>221</sup> Service, 68.

Stalin wrote that any "dark elements" who committed acts like these were not associated with the Bolsheviks or honest laborers. However, if any workers were guilty of economic terrorism, it was only because of the malicious activities of the oil owners, "which incense and embitter the workers." Unless oil owners corrected course by ameliorating working and living conditions and offering educational opportunities, the assassinations would continue. 223

There was a distinctly racialized note to Stalin's descriptions of the Bolshevik effort to "enlighten" Muslim workers, now an increasingly larger portion of their organization. A March 1908 article by Stalin in the Baku-based *Gudok* (The Siren) reflects some of the Bolshevik narrative describing the evolution of Baku's Muslim workers from ignorant small-mindedness to a more "evolved" state. Prevailing stereotypes about Muslim workers of this period painted them as largely passive laborers, motivated by material desires, and easily mollified by minor concessions. Now, Stalin wrote, "from petty-bourgeois demands (for bonuses), the workers are passing to proletarian demands: dismissal of the more arrogant managers..., reinstatement of discharged comrades..., extension of the rights of the oil field and works commission." Stalin repeatedly called attention to the workers of Nobel and Mirzoiev for their exemplary approach. "One must see these workers, one must know with what pride they say: 'We are not fighting for bonuses, or for towels and soap, but for the rights and the honour of the workers' commission'—one must know all this, I say, to realise what a

22

<sup>&</sup>lt;sup>222</sup> J. V. Stalin, "The Oil Owners on Economic Terrorism," in Works, Vol. 2, 117.

<sup>&</sup>lt;sup>223</sup> Stalin, "Oil Owners," 117. In the final section of the piece on Baku, Stalin repeatedly derided the "Asiatically aggressive tactics" of the oil owners (wage lowering, reducing schools and housing, raising prices and fees, employing violence, etc.), and encouraged owners to "take the path of cultured European-style relations," which included dealing equitably with workers and unions.

change has taken place in the minds of the workers." Stalin accused company owners of dividing and setting back workers by indoctrinating them to accept baksheesh (or beshkesh), in this context meaning irregular payments or "bonuses" rather than consistent reasonable wages and benefits. As a result of workers becoming more open to the active intervention of unions, strikes were more organized and effective. Workers made a "few important demands capable of uniting the masses" rather than long lists of petty demands, and pursued them with greater perseverance. 224 This account of course presents an excessively rosy view typical of Bolshevik propaganda; more important is what this communicates about the assumptions held by Bolsheviks about the nature and motivations of Muslim workers, which shaped the ways in which Bolsheviks then interacted with their increasingly non-Russian membership and others they wished to recruit, as well as their treatment of the Baku oil industry and its workers following the Bolshevik takeover in May 1920.

Following the strikes of 1908, the atmosphere in Baku remained, on the surface, relatively quiet until 1913, when widespread striking again returned to the oil industry. The rights that workers had gained due to previous strikes had gradually been weakened over some years as employers took advantage of small opportunities to withdraw or circumvent concessions. In addition, with oil prices again on the rise, workers saw a new opportunity to make demands. In July of 1913, a strike at the Rothschild oilfields in Balakhani grew to include dozens of other firms and tens of thousands of workers.<sup>225</sup>

<sup>&</sup>lt;sup>224</sup> J. V. Stalin, "What Do Out Recent Strikes Tell Us?" in Works, Vol. 2, 101-104.

<sup>&</sup>lt;sup>225</sup> In this article, Altstadt states that 19,000 workers were included, but in her book of a few years later, she states that it was around 40,000. Altstadt-Mirhadi, 308; Altstadt, *The Azerbaijani Turks*, 45.

Strikers made both economic demands (such as better wages and working hours) and demands related to cultural and social improvement (such as education in native languages, better educational opportunities, and days off during Muslim holidays). This strike ended in August of 1913, when individual company owners agreed to most of the workers' demands, but the sense of discontent apparently continued.<sup>226</sup> Individual strikes still regularly appeared, and in late June 1914, on the eve of war, some 30,000 workers were on strike.<sup>227</sup> When the war began at the end of July, troops forced workers to resume work, but the workers' grievances remained.

Both the accounts of contemporary industrialists and later scholars interpret the demands that workers were making in 1913-1914 as again reflecting an upward trajectory toward "enlightenment." In her analysis of the rhetoric of Azerbaijani elites at the time, Altstadt finds that, after 1905, their cultural agenda came to include much more political language, adding matters of civil rights, social justice, legal equality, and political representation to their agenda. Owners' records show that by 1914 the workers had "a new-found solidarity.... Only the beginning of the war and mobilization, however, put an end to the crisis. However, it is not clear how important these issues were to Azerbaijani workers, many of whom still did not self-identify according to ethnicity or nationality, or whether Azerbaijani oil company owners belonging to the national elite

<sup>&</sup>lt;sup>226</sup> Altstadt, *The Azerbaijani Turks*, 45.

<sup>&</sup>lt;sup>227</sup> Alstadt-Mirhadi, 308.

<sup>&</sup>lt;sup>228</sup> Altstadt, *The Azerbaijani Turks*, 46.

<sup>&</sup>lt;sup>229</sup> Ibid., 64-65.

<sup>&</sup>lt;sup>230</sup> Altstadt-Mirhadi, 308.

welcomed any but the most tightly controlled dissemination of these ideas. Altstadt notes that industrial owners of different ethnicities, nationalities, or religious affiliation for the most part did not respond to worker demands in noticeably different ways; the major exception, she notes, is that Azerbaijani owners who had made significant philanthropic contributions to the community, such as mosques or night schools, might have resented workers' "ungratefulness" in striking when they had already received so much.<sup>231</sup> This implies that Azerbaijani cultural and political elites were not always primarily moved by ethnoreligious affiliation, but in a number of ways identified more according to socioeconomic class.

# War to Revolution: 1914-1920

Following the Russian Empire's entry into World War I in the summer of 1914, war, politics, and interethnic disputes overtook the Baku oil industry, at first threatening normal operations, then undermining all production, and finally causing severe destruction. Although the arena of war did not reach Baku until 1917, the initial war years were quite demanding, as oil products were newly significant in World War I. The Baku oil industry was considered war-critical by the Russian state, meaning that most oil workers were permitted draft deferments, and that oil companies were required to serve state orders for fuel before their own priorities. The latter policy was poorly received. Although by 1914 the overwhelming majority of European nationals involved in the Baku oil industry were associated with the Allied countries, oilmen continually fought the demands of the Russian state, in the end acting mostly according to their own

<sup>&</sup>lt;sup>231</sup> Altstadt, *The Azerbaijani Turks*, 47.

priorities. This included shutting down production and fleeing Baku as national and local circumstances deteriorated.<sup>232</sup>

Even as fighting elsewhere in the Caucasus resulted in hundreds of thousands of military and civilian casualties, Baku remained relatively untouched by violence until 1917. The Viceroyalty of the Caucasus and all other imperial offices ceased to exist along with the monarchy as a result of the February Revolution, creating a vacuum of power in Baku that several groups fought to occupy. As in Moscow, Petrograd, and many other large cities throughout the former Russian Empire, the two main centers of power that arose in Baku were representatives of the Provisional Government and the local soviet. In Baku, the Provisional Government was embodied in the Special Transcaucasian Committee (Osobyi Zakavkazskii Komitet, or Ozakom), comprised of moderate Russians and Transcaucasians. Although it was in theory a replacement for the Viceroyalty, Ozakom held little effective authority. The Baku soviet was dominated by Bolsheviks, who had gradually edged Mensheviks out of the city's leftist political scene in the years since the 1905 Revolution. For much of 1917, the Baku soviet held much of the decision-making power in the city.<sup>233</sup>

The political landscape contained more factions than Ozakom moderates and the Baku soviet Bolsheviks, however, which accounts for the convolutions of the following few years. As Anastas Mikoyan recognized during his time there in 1917, "in Baku, as in the Caucasus as a whole, the situation is now very worrying. Baku is a node where all

<sup>232</sup> Ibid., 74-75.

<sup>&</sup>lt;sup>233</sup> Ibid., 79. For a deeper dive into the 1914-1923 period, see Sicotte, chapter three.

national and class contradictions unite and fight with each other and seek solutions."234

He sensed that the Bolsheviks had an uphill battle before them. Actions by both Ozakom and the Baku soviet to muffle Azerbaijani political expression gradually drove more locals to Musavat, an Azerbaijani nationalist political party founded in Baku in 1911.

While the Baku Bolshevik Party had a number of prominent Transcaucasian members, including Shaumian, Mikoyan, and Japaridze, Armenians and Georgians were far better represented than Azerbaijanis, stirring local resentment against the party. In the soviet elections of November 1917, Musavat won the most seats, and the Dashnaktsutyun, an Armenian nationalist party, came in third. The uezd, guberniia, and Transcaucasia regional elections were also dominated by Musavat, the Dashnaktsutyun, and Ittihad, a radical anti-imperial, Islamist political party founded in Baku in September 1917. The Bolsheviks nullified the city elections, declaring them rigged, and continued to fill the soviet with their own supporters, but they were clearly in a tenuous position, outnumbered and geographically isolated.<sup>235</sup>

The Baku soviet remained in power until the summer of 1918, but their tenure was challenging and violent. In March 1918, ten thousand Bolshevik-ambivalent Transcaucasian troops, the "Savage Division" left over from the imperial era, arrived in Baku. After brief negotiations, they fell to fighting with the Baku soviet's six thousand men and its several thousand Dashnak allies. The Baku soviet won the contest, forcing the Savage Division to retreat, a result that caused tensions between Azerbaijani and

<sup>&</sup>lt;sup>234</sup> Anastas Mikoyan, *Tak bylo* (Moscow: Vagrius, 1999), http://militera.lib.ru/memo/russian/mikoyan/index.html.

<sup>&</sup>lt;sup>235</sup> Altstadt, The Azerbaijani Turks, 81-82.

Armenian civilians in Baku to boil over. The subsequent conflict, known as the March Days, gave rise to the second series of interethnic massacres in the city. Much as in 1905, thousands of Azerbaijanis and Armenians died over the course of just a few days (March 30 to April 3), and the precise death tolls and origins of the violence are still debated. The most widely reported accounts stated that Dashnak fighters, unhappy that the Savage Division had been permitted simply to leave and burning for a fight, embarked on a rampage through the city's Muslim sections. Panicked by the violence and political hostility, thousands of Azerbaijanis, including many community and political leaders, left Baku for the countryside, further undermining local opposition to the Bolsheviks for the time being. Leftists in the city, dominated still by the Bolsheviks, formed a new city government: the short-lived Baku Commune, with Shaumian at its head. 237

Azerbaijani nationalists forged ahead, ultimately linking up with the Ottoman effort to exert control in Transcaucasia. On May 28, 1918, encouraged by Ottoman backing, Azerbaijani representatives declared the creation of the independent Azerbaijan Democratic Republic (ADR). Together, Azerbaijani, Turkish, and Daghestani volunteers formed the Army of Islam, between 16,000 and 18,000 men commanded by Nuri Pasha, the brother of Ottoman leader Enver Pasha. The force began making its way east across Transcaucasia to Baku in early summer 1918.<sup>238</sup>

The British, interested in seizing Baku oil and controlling Transcaucasia for geostrategic reasons, had meanwhile been mustering forces to make their own advance

<sup>236</sup> Ibid., 85-87.

<sup>&</sup>lt;sup>237</sup> Ronald Grigor Suny, "The Baku Commune," *Jacobin*, November 7, 2017, https://www.jacobinmag.com/2017/11/baku-commune-october-revolution-lenin-bolsheviks.

<sup>&</sup>lt;sup>238</sup> Altstadt, The Azerbaijani Turks, 89-91.

on Baku. In January 1918, the British military pulled together a group of Commonwealth officers to make a move on Baku from Baghdad under the command of General Lionel Dunsterville. The goals of the "Dunsterforce" were to take or destroy the Baku oilfields to keep them from the Central Powers, to gather intelligence on the Bolsheviks in Transcaucasia, to accumulate a fighting force as they traveled, and to lead the remaining tsarist forces in the region against the Ottomans.<sup>239</sup>

As the Army of Islam and the Dunsterforce were advancing on Baku, power was again changing hands in the city. The Baku Commune had proved incapable of feeding and supplying the city, and support for the Bolsheviks was at an all-time low. Faced with an imminent takeover by either the Ottomans or the British, non-Bolsheviks asserted themselves in city government, offering an invitation to the Dunsterforce to fend off the Ottomans, arresting twenty-six of the Commune's most Bolshevik-leaning leaders, and forcing the dissolution of the Baku Commune.<sup>240</sup>

The Dunsterforce arrived in Baku in mid-August with some equipment, but its men were utterly depleted by the long journey across Persia, and the city had little to

<sup>&</sup>lt;sup>239</sup> Ibid., 91-92.

<sup>&</sup>lt;sup>240</sup> The Twenty-Six Commissars, as they came to be known, were imprisoned in Baku. They attempted to flee Baku with much of its weaponry in August but were caught by anti-Bolshevik forces and returned to Baku. During the Battle for Baku, they again fled, were again caught, and were eventually executed by White forces. Shaumian and Dzhaparidze were among them. Mikoyan, who was a friend of Shaumian and went to great effort to rescue the commissars, carried the trauma of the event with him for the rest of his life. The Twenty-Six Commissars were considered revolutionary martyrs during the Soviet era. Suny, "The Baku Commune"; Mikoyan, *Tak bylo*.

offer them.<sup>241</sup> Soon after, the fresher and better-equipped Army of Islam approached Baku and began limited attacks. On September 15 and 16, the Army of Islam launched its final assault on Baku, causing the Dunsterforce to evacuate back to Baghdad almost immediately. Local Azerbaijanis took this opportunity to exact retribution for the Armenian attacks during the March Days.<sup>242</sup> During the September Days, yet another interethnic massacre in Baku, Azerbaijanis killed perhaps ten thousand Armenians.<sup>243</sup>

With Ottoman support, the Azerbaijan Democratic Republic became the region's official new government, headed in Baku, and remained so until the Bolshevik takeover in May 1920. When the Ottoman Empire was forced into an armistice in October 1918, British forces under Lieutenant General W.M. Thomson arrived to occupy and administer Baku. Although Baku was yet again under foreign power, Thomson's conviction that the ADR was the new rightful government of Azerbaijan provided strong backing. 244 The end of British occupation in August 1919 denoted the start of true independence for the ADR, but the country was vulnerable without such a powerful ally. True multiparty politics in late 1919 gave the Bolsheviks another opportunity in Baku. By the end of

<sup>&</sup>lt;sup>241</sup> Dunsterville blamed the cowardice and laziness of the city's Armenians, whom he expected would support him, for his inability to pull together an effective defense of the city (his diary contains racist remarks also about his Turkic enemies). Lionel Dunsterville, "The Diaries of General Lionel Dunsterville, 1911-1922: 1918," *The World War I Document Archive*, http://www.gwpda.org/Dunsterville/Dunsterville 1914.html; Artin H. Aslanian, "Dunsterville's

http://www.gwpda.org/Dunsterville/Dunsterville\_1914.html; Artin H. Aslanian, "Dunsterville's Adventures: A Reappraisal," *International Journal of Middle East Studies* 12, no. 2 (Sept. 1980): 199.

<sup>&</sup>lt;sup>242</sup> Altstadt, *The Azerbaijani Turks*, 92.

<sup>&</sup>lt;sup>243</sup> Cynthia Brown and Farhad Karim, eds., "Playing the 'Communal Card': Communal Violence and Human Rights," *Human Rights Watch*, https://www.hrw.org/reports/1995/communal/.

<sup>&</sup>lt;sup>244</sup> The ADR's management of legitimate multiparty elections in December 1918, the mounting failures of anti-Bolshevik forces elsewhere in the former Russian Empire, and more talk of self-determination convinced Thomson that the ADR was the new rightful government of Azerbaijan. Until Lloyd George removed him from Baku in August 1919, deeming occupation of the Caucasus a waste of resources, Thomson remained a sort of ally to the ADR. Altstadt, *The Azerbaijani Turks*, 92-96.

1919, Bolshevik activists had gained control over all socialist-leaning parties in Azerbaijan. The Azerbaijan Communist Party, or AzCP(b), was founded in February 1920. In its Central Committee were several ethnic Azerbaijanis, but the party itself was dominated by ethnic Russians and Armenians. When Bolshevik pressure came from the outside as well, Baku had little hope of avoiding another takeover. In late 1919, the White forces led by Denikin finally collapsed, removing the last anti-Bolshevik holdout standing between Russia and Azerbaijan. The Red Army made its way to Baku during the following spring, arriving in May 1920 to provide military support for the political takeover by the AzCP(b). 246

Throughout the political upheaval of 1917-1920, the oilfields continually deteriorated. Baku in this period was not a welcoming environment for the oil business, at first because authority and chains of command were unclear, later due to material destruction and social disruption in the city. The Baku oil industry was effectively cut off from European markets in February 1917, and most of the European oil company owners who had remained in the city even after the war had begun to turn against Russia now took the opportunity to flee. <sup>247</sup> For the greater part of the Civil War years, 1918 to 1920, Baku remained cut off from markets in Russia, the other great consumer of its oil. In early 1918, the Bolsheviks had attempted to nationalize the oil industry, but their time in power that year was too brief to make much headway on such a massive reorganization

<sup>245</sup> Ibid., 96.

<sup>&</sup>lt;sup>246</sup> Ibid., 96-98.

<sup>&</sup>lt;sup>247</sup> ARDTA, f. 22, op. 2, del. 82.

project.<sup>248</sup> In June 1918, the government of the Azerbaijan Democratic Republic, then still attempting to assert real control, decreed the nationalization of the oil industry for its part, looking ahead to the revenue it would need to sustain itself as an independent country.<sup>249</sup> The ADR also made little progress on the nationalization issue, however: the industry still required significant foreign private investment, and British administration of Baku between October 1918 and August 1919 was hostile to the possibility of nationalized industry. After the departure of the British, the ADR was never quite able to get the industry back on its feet.<sup>250</sup>

Meanwhile, the intense social disruption that resulted from years of political upheaval created an unreliable workforce. The oil industry's downturn had resulted in mass unemployment; groups of angry out-of-work laborers crowded the streets and harassed political leaders. Industrial leaders, whose enterprises were hemorrhaging money, added to the upset by failing to pay their workers. Thousands of Bakuvians fled the city between 1917 and 1920 due to material deprivation and violence. The clashes between Azerbaijanis and Armenians, who made up the largest part of the industry's laborers, disrupted the industry's operations to an unprecedented degree. Not only were many oil workers suffering death, injury, and other personal tragedies due to interethnic violence and repeated military invasions of the city, the fighting itself frequently resulted in damage to infrastructure vital to the oil industry. Setups that

<sup>248</sup> Mikoyan, *Tak bylo*.

<sup>&</sup>lt;sup>249</sup> Alekperov, 164-167; Sicotte, 113-114.

<sup>&</sup>lt;sup>250</sup> Sicotte, 114.

<sup>&</sup>lt;sup>251</sup> Mikoyan, *Taky bylo*.

required regular human intervention and maintenance, such as wells and distillation equipment, were abandoned to decay without the personnel needed to attend to them.

#### Conclusion

At the turn of the twentieth century, Baku had reached its prime, producing half of the world's oil, but the productivity of the industry rested on an unstable network of social and political systems that repeatedly cascaded into crisis. Some of the relevant factors originated outside of the oil industry's reach, including the Russo-Japanese War, World War I, and the 1917 revolutions; others had been built into the oil industry's makeup from the start. Unequal labor relations and deep ethnic divides spiraled and intersected as Russian imperial authorities lost their control.

The social instability of this period stemmed from a variety of factors, but underpinning it were rising demographic and labor tensions instigated by the rapid and largely ad hoc growth of the oil industry and the careless nature of Imperial Russian governance in the Caucasus, as well as the influence of political unrest plaguing the entire empire. Moments of labor and interethnic violence in this period had specific triggers, but each represented the culmination of longer-term economic and demographic trends. The oil industry had grown rapidly and with few regulations, leading to abuses by employers and poor living and working conditions that disposed workers to strike when, after decades of consistent growth, the oil industry took a turn for the worse after 1901. Worker grievances were therefore to a significant degree similar to those that spurred workers and activists elsewhere in the Russian Empire to resort to protest and violence in the early twentieth century; the striking that took place in Baku in 1905 was a particularly

severe instance of a trend that troubled the industry from 1901 until 1920. However, the unrest of those decades took on different forms in each locality; in Baku, the protests of 1905 were shaped by the nature of the industry and the makeup of the industrial workforce and surrounding population, in conjunction with concentrated and pervasive ethnoreligious hostility.

Baku's initial boom of the late nineteenth and early twentieth centuries had prompted extraordinary population growth in the region, chiefly due to labor migration, bringing large numbers of Muslim Azerbaijanis and Christian Armenians into contact with one another in a situation that fostered antagonism. Although the formation of these two now-national groups should not be "naturalized," it can be seen that in the decades leading up to 1905, the combination of, on the one hand, unequal and divisive treatment by the tsarist Russian administration, and, on the other hand, urban-industrial growth that brought these groups together to make the inequality obvious, was a decisive incubator of "group-ness" that led to national development. Similar but less severe clashes took place in other major cities of Transcaucasia, including Shusha, Ganja, Tiflis, and Batumi. Although violence between Azerbaijanis and Armenians subsided for a time after 1906, the clashes of 1905-1906 inaugurated overt hostilities that reappeared in 1918 in a massacre that took tens of thousands of lives, and acted as a pretext for further violence in the late 1980s and in more recent years. These local disruptions, concurrent with negative developments in the international oil industry, contributed greatly to a crisis in the Baku oil industry that was not fully corrected until the late 1920s.

By 1919, the oil industry of Baku had been severely hobbled. An article at the end of the year in *Neftianoie delo* (Oil Business), the official organ of Baku oil industrialists,

despaired over the industry's future. "What is currently being experienced by the oil industry can only be called a severe test. This is not a crisis with logic and laws and therefore proceeds normally, like a disease in nature, but something out of the ordinary, some kind of paralysis, which does not allow for a prognosis, a kind of deadening wave." No oil center had ever experienced such a rapid downturn. Given that oil production was the reason for Baku's existence as a noteworthy urban-industrial site in the modern era, its future was unclear.

<sup>&</sup>lt;sup>252</sup> "Respublika nefti—respublika khimii," *Khimiia i zhizn: nauchno-populiarnyi zhurnal* 1 (Jan. 1967): 30.

#### **CHAPTER IV**

# RESTORATION OF THE BAKU OIL INDUSTRY, 1920-1928

After many victims, after long years of bloody battle, we won. Neither the governor, nor the police, nor the Nobels or Mantashevs [remain]. They do not exist and will never again. But the battle is not over, and will not end until we achieve world communism. Baku workers continue their work, carrying the banner forward. We stand as the source of oil.

—"Under the Old Banner," Bakinskii Rabochii (1921)<sup>253</sup>

When Bolshevik forces arrived in the Baku region in May 1920, they discovered its oil industry in a "state of ruin."<sup>254</sup> Across the Absheron Peninsula, formerly prolific oil wells sat inactive, gradually filling with groundwater, surrounded by deteriorating or damaged pumps, rotting wooden derricks, rusting pipelines, and other decaying industrial paraphernalia.<sup>255</sup> In the city itself, empty were the local headquarters of grand oil companies such as those owned by the Nobels and the Rothschilds, who had been driven from Baku along with most other industrial leaders in the time since the 1917 Bolshevik Revolution. As supplies and work opportunities dwindled, many industrial personnel and other residents of Baku escaped to the Transcaucasian countryside or more distant places of origin. Oil production fell to the level of 1889, before the industry's turn-of-the-

<sup>&</sup>lt;sup>253</sup> "Pod starym znamenem," *Bakinskii Rabochii*, January 1, 1921.

<sup>&</sup>lt;sup>254</sup> "Economic Survey from the State Bank of the U.S.S.R., Head Office, Moscow, April 7, 1929," in *Oil Resources in Eastern Europe and the Caucasus: British Documents, 1885-1978, Volume 3, 1922-1938*, ed. A.L.P. Burdett (Cambridge: Cambridge University Press, 2012), 489.

<sup>&</sup>lt;sup>255</sup> Ia.D. Gurevich, "Rozhdennaia revoliutsiei (1917-1922)," in *Neft SSSR (1917-1987 gg.)*, ed. V.A. Dinkova, 10-18 (Moscow: Nedra, 1987), 18.

century "boom."<sup>256</sup> Multiple crises of authority, the ejection of capitalist industrial leaders, and extensive local interethnic violence between February 1917 and May 1920 had brought the Baku oil industry to its nadir.<sup>257</sup>

The Bolsheviks set themselves the task of restoring the Baku oil industry to its former productivity—no small commitment for the young and still-embattled government. The expense and effort that rebuilding posed were extreme, but the perceived economic and strategic value of Baku's oil resources was high enough to merit dedicated attention from Bolshevik authorities. Because possession of the industry appeared to be a zero-sum game, the new regime would have been eager to protect Baku from falling into the hands of its Civil War enemies and other belligerents in any case. However, the importance of Baku's oil went well beyond depriving capitalist opponents of a source of further enrichment; it promised the renewal of industry throughout what

<sup>&</sup>lt;sup>256</sup> Between 1917 and the early 1920s, Baku's oil production fell to its lowest point in the 20<sup>th</sup> century, roughly equal to production in the late 1880s and early 1890s. Heinrich Hassmann, *Oil in the Soviet Union*, trans. Alfred M. Leeston (Princeton: Princeton University Press, 1953), 147-148.

<sup>&</sup>lt;sup>257</sup> Soviet sources were eager to lay blame on foreign capitalists for any destruction; one later Soviet oil official asserted that, having failed to recover their oil concessions in the Caucasus, departing British and French forces deliberately inflicted "serious damage" on industrial structures. I have not encountered evidence to support this assertion. E. Gurov, "The Export of Crude Oil and Petroleum Products," (1967) in *Communist Trade in Oil and Gas: An Evaluation of the Future Export Capacity of the Soviet Bloc*, by Robert Ebel (New York: Praeger Publishers, 1970), 206. In a piece included in the November 5, 1921 issue of *The Toiler*, Karl Radek similarly claimed that it was "English troops" who had devastated the Baku oil industry during the Civil War, while other belligerents destroyed important industrial centers such as the Donets coal basin and the ironworks in the Urals. Karl Radek, "The Russian Famine and the Capitalist World," in *The Toiler* No. 195, Vol. IV (November 5, 1921), 13.

would become the Soviet Union, a strong trade position, and acceptance of its legitimacy by other world powers.<sup>258</sup>

For the city of Baku itself, the 1920s were a period of remarkable transition and turbulence. The focus of this chapter is the nationalization and beginning processes of reconstruction of the Baku oil industry under the Bolsheviks from their takeover in May 1920 until the onset of the First Five-Year Plan in 1928. Very soon after the Bolsheviks took control, Aleksandr Pavlovich Serebrovskii, a close colleague of Lenin, was installed as the local authority in charge of restoring the oil industry. His work, and that of Bolshevik municipal officials, over the course of the decade brought around the industry and the urban community associated with it. Authorities in Moscow and Baku dealt out directives to effect a transition from physical devastation and (in the view of the new authorities) abusive capitalism to a socialist industrialism characterized by progressiveness, rationality, and mindfulness of workers' wellbeing. The early evolution of Soviet industrial administration in Baku manifested in efforts to reconstruct and reorganize the industry, improve working and living conditions, and renovate the spatial environment of the Baku region.

However, like many of the Bolsheviks' early efforts, in this period the reshaping of administration and implementation of policy in Baku was often partial and experimental, a distinct contrast from the forthright approach of the later Five-Year Plans.

Occupied with reestablishing some measure of order and control, local and central

<sup>&</sup>lt;sup>258</sup> In 1920, Baku remained one of very few locations outside of the United States with major known oil reserves, making it attractive to oilmen, to say nothing of the Bolsheviks' enemies in war, despite wartime disorder. Even after the Red Army had marched into Baku and nationalized its oil industry, some investors continued to pursue oil interests there, convinced that the Bolsheviks would soon lose their hold on the Caucasus. Daniel Yergin, *The Quest: Energy, Security, and the Remaking of the Modern World* (New York: The Penguin Press, 2011), 51.

authorities had little opportunity to implement grand socialist infrastructural projects fully in these early years. Real-world obstacles hashed revolutionary expectations—industrial reconstruction suffered from internal administrative conflicts and shortages necessitated cooperation with foreign capitalists. Utopian urban planning clashed with the infrastructural needs of industrial development and the new regime's inability to cope with Baku's demographic growth, resulting in an urban environment characterized by elements of innovative design, grim industrialism, and the leftovers of previous eras. Decision-making regarding the Baku oil industry was fairly decentralized for a time, open to the influence of competing visions and interests, especially between local and central leaders.<sup>259</sup> Given the divisions and mutations of early Bolshevik visions, the policies that guided urban and industrial development in Baku changed repeatedly during the 1920s. In retrospect, this period in Baku's history was a time of transition between the incoherent capitalism of the old regime and the single-minded drive of the early Five-Year Plan era.

State interest in reconstruction extended beyond the industry proper to the community that surrounded it. A study of the physical development of Baku, examining the interrelationship of community and environment, will round out this chapter. The architecture of industry itself is key to a discussion of labor experience, as demonstrated by Stephen Kotkin in his study of Magnitogorsk.<sup>260</sup> In the case of Baku, it demonstrates well the varied impacts of the Soviet administration. Adding to the city's ancient golden-

<sup>&</sup>lt;sup>259</sup> See William G. Rosenberg, ed., *Bolshevik Visions: First Phase of the Cultural Revolution in Soviet Russia* (Ann Arbor: Ardis Publishers, 1984) for discussion of this concept in other applications.

<sup>&</sup>lt;sup>260</sup> Stephen Kotkin, *Magnetic Mountain: Stalinism as Civilization* (Berkeley: University of California Press, 1995).

hued, Persian- and Turkish-influenced Old City and its gray, straight-backed Russian administrative and military establishments, the Soviets inserted their own inventive modernist styles. Even as the most visible parts of the city acted as a site to experiment and to display power and ideology, residences for the lower and working classes remained much as they had for decades, with a few exceptions: in this period, the Soviet authorities did occasionally attempt to alleviate some obstacles for workers by improving transportation and housing.

This chapter contributes to the history of the early years of Bolshevik power in the non-Russian regions of the Soviet Union, adding to current understandings of peripheral urban-industrial adjustment to the new regime. My focus on a significant peripheral capital, once suffused by colonial administration and Russian influences, then undergoing rapid and disruptive renovation under Bolshevik hands, finds some parallels in Jeff Sahadeo's *Russian Colonial Society in Tashkent, 1865-1923.*<sup>261</sup> In addition to the creation of new institutions and enterprises, the demands of the early Bolshevik state required adaptation by far-flung urban-industrial centers that had an established character and purpose (often colonial in nature) in the Russian Empire. The situation in cotton-growing Tashkent clearly mirrored the exploitative colonial relationship between industrialized center and resource-rich periphery that had existed in tsarist-era Turkestan. In comparison, oil fostered relations between Baku and the center of a somewhat different

20

<sup>&</sup>lt;sup>261</sup> Jeff Sahadeo, *Russian Colonial Society in Tashkent, 1865-1923* (Bloomington: Indiana University Press, 2007), 209, 226. In both cases, the overriding objective was economic: oil from Baku, and cotton from Turkestan. The different natures of these two resources was vital, however, shaping the nature of relations between the center and the peripheral capital in distinct ways. See also Matthew J. Payne, *Stalin's Railroad: Turksib and the Building of Socialism* (Pittsburgh: University of Pittsburgh Press, 2001); Paul Stronski, *Tashkent: Forging a Soviet City, 1930-1966* (Pittsburgh: University of Pittsburgh Press, 2010); Beatrice Pénati, "Le commité du coton et les autres: Secteur cotonnier et pouvoir économique en Ouzbékistan, 1922-1927," *Cahiers du Monde Russe* 52, No. 4 (2011).

nature. The Baku region could not choose between producing oil or another product, and no party had any incentive to halt production. For reasons of geology the industry was spatially concentrated, and for reasons of geography and transportation oil had to be refined locally, so the city was necessarily heavily built up and industrialized. Finally, whereas Tashkent was comparatively expendable in the early 1920s, Baku and its oil were, the Bolsheviks believed, critical to the survival of the new regime; as I will describe in this chapter, the center agonized over the food shortage in Baku, fearing that it would somehow lead the region to break away or fall into enemy hands.

In focusing on this center-periphery relationship (Moscow and Baku) defined by oil, my work adds to the growing body of scholarship related to Azerbaijan's oil history in the early Soviet years. The relevant administrative history of the Baku oil industry under the Bolsheviks, as well as crucial international context, has been explored in part by Sara Brinegar, in her 2014 dissertation "Baku at All Costs: The Politics of Oil in the New Soviet State." More recently, Jonathan H. Sicotte delved into Sovietization as related to the pacification of Baku in the 1920s and 1930s in his dissertation "Baku: Violence, Identity, and Oil, 1905-1927." Examining the messy process of centerperipheral reorientation that consumed early Soviet Baku specifically as related to its oil industry adds to the perception of early Soviet outreach as experimental and vulnerable, shaped by both local and international circumstances, plainly not a clean break from the previous era.

<sup>&</sup>lt;sup>262</sup> Sara Brinegar, "Baku at All Costs: The Politics of Oil in the New Soviet State" (PhD diss., University of Wisconsin-Madison, 2014).

<sup>&</sup>lt;sup>263</sup> Jonathan H. Sicotte, "Baku: Violence, Identity, and Oil, 1905-1927" (PhD diss., Georgetown University, 2017).

The Bolsheviks encountered significant obstacles in their attempts to bring the Baku oil industry back to its pre-revolutionary production levels. The tensions of this era may be conceptualized in subtly different ways: the dramatic changes that the Bolsheviks wished to implement were blunted by the presence of foreigners and practical shortages; a grand transformation was effected despite the foreigners and shortages; or the urgent need for oil prevented the Bolsheviks from moving beyond foreign assistance but they were able to initiate a "spatial revolution" in any case. The difference, in essence, is whether the results by 1928 were for the Bolsheviks cause more for optimism or disappointment. I conclude that, in spite of the Bolsheviks' ideologically-compromising agreements with foreign oil experts, issues of administrative conflict, and widespread shortages, by the end of the 1920s Soviet officials had succeeded in reorienting the Baku oil industry to serve its own practical and ideological imperatives. The immense pressure on the Baku oil industry that came with the onset of the First Five-Year Plan in 1928 reflected not the Soviet authorities' frustration with the state of the Baku oil industry itself, but rather the stepped-up need for oil associated with broader crash industrialization. The first decade of Soviet control in Baku was in many respects awkward, but ultimately the city and its industry emerged as one of the early Soviet state's most promising projects.

#### Bolshevik Takeover and Nationalization of the Industry

Upon their entry into Baku in May of 1920, the Bolsheviks promptly nationalized the oil industry, completely altering the organizational structure of the industry's administration and irreversibly erasing former boundaries of private and state ownership.

Disregarding the forceful protests of previous owners, the Bolsheviks took control of oil fields, production facilities, and means of transportation, erasing all former divisions to bring every aspect of the industry under state control. The new administration reorganized the different elements of the Soviet oil industry geographically, putting the oil industry of the Baku region under the administration of the Azneft group (*ob'iedinieniie*). The sector controlled by Azneft was further divided into ten trusts (*tresty*), associated with certain fields and industrial facilities.<sup>264</sup> Geographically, the oil regions (and the settlements within them) were divided into six departments that roughly accorded with the main oil districts of the previous era: Balakhani, Sabunchi, Ramani, Bibi-Eibat, Surakhani, and Binagadi.<sup>265</sup> The intention behind this reorganization was to make the operation of the industry more rational and efficient, thereby improving production and the wellbeing of those working for it.

Bolshevik leaders believed that the Baku oil industry had a uniquely important role to play in sustaining the new regime. As historian Sara Brinegar has put it, the industry represented for the Bolsheviks not only a means "to develop its industrial capacity but also, and even primarily,...a political tool which they could leverage strategically to gain diplomatic recognition, attract foreign investment, obtain hard currency on the international market, and conclude trade agreements."<sup>266</sup> That is, in the view of Bolshevik leaders, Baku oil would not only contribute fuel and capital to the war effort and the rebuilding and growth of domestic industry, but would also significantly

<sup>&</sup>lt;sup>264</sup> Hassmann, 33-34.

<sup>&</sup>lt;sup>265</sup> Gurevich, 18; ARDTA, f. 22, op. 2, d. 67.

<sup>&</sup>lt;sup>266</sup> Brinegar, 2.

boost the Bolsheviks' bid to gain international recognition as a legitimate state and trading partner. However, in a more immediate sense, Lenin and many of his compatriots were convinced that without Baku oil, the Civil War could not be won, and the new state could not survive. In the immediate post-revolutionary years, the domestic demand for oil products was quite low in comparison to that during the crash industrialization of the early Five-Year Plan era a decade later, but demand existed nonetheless. <sup>267</sup> Without a proper supply of coal and oil, many trains had been converted to burn timber, causing them to creep along at an intolerably slow rate, which disrupted the war effort and basic operations. <sup>268</sup> Lenin acknowledged in 1920 that, without the capital obtained from the sale of Caspian oil, the new state could collapse; in that same year, the oil industry of Baku was at its lowest state in decades and remained very vulnerable geographically, surrounded by war in progress, which prevented most transportation and left it open to invasion from several sides. <sup>269</sup> In spite of these significant drawbacks, the prize of oil

<sup>&</sup>lt;sup>267</sup> Due to loss of territory, widespread loss of life, and general disruption between 1914 and the early 1920s, the population of the early Soviet Union was significantly smaller than that of the Russian Empire in 1913. According to Soviet estimates, the population of the Russian Empire in 1913 was roughly 170 million, whereas the 1926 Soviet census accounted for 148.6 million people (even accounting for official distortions, the difference was substantial). Thus, domestic demand for oil products (particularly kerosene) was lower overall. Robert Ebel, *Communist Trade in Oil and Gas: An Evaluation of the Future Export Capacity of the Soviet Bloc* (New York: Praeger Publishers, 1970), 15; M. E. Falkus, *The Industrialisation of Russia, 1700-1914* (London: The MacMillan Press Ltd., 1972), 17; *Vsesoiuznaia perepis naseleniia 1926 g. SSSR, Respubliki i ikh osnovnye region*, http://demoscope.ru/weekly/ssp/ussr\_26.php?reg=30.

<sup>&</sup>lt;sup>268</sup> Brinegar, 24.

<sup>&</sup>lt;sup>269</sup> Alex Marshall, *The Caucasus under Soviet Rule* (London: Routledge, 2010), 155. Brinegar also discusses this in some depth.

encouraged Bolshevik authorities to invest not only in rebuilding the infrastructure of industry, but its urban community as well.<sup>270</sup>

However, for reasons both political and practical, recovery proceeded relatively slowly until 1928. The improvement that the Baku oil industry saw in this period was perfectly respectable, given the difficult circumstances of the early 1920s, but the rate of increase in oil production does appear fairly modest when compared to the exceptional booms of the turn of the century and the early Five-Year Plans. The rate at which oil was extracted and processed was related directly to the health of the industry itself—unclear administration and damaged infrastructure significantly and sometimes entirely impeded extraction, refining, and transportation. Between 1921 and 1928, the annual oil production of Azerbaijan increased by a few hundred thousand metric tons per year (Table 5). In large part, the gradualness of this progress was due to the difficulties of repairing the industrial infrastructure, adjusting to a drastically different style of administration, and reconstituting a sufficient and stable workforce. The development of Baku and its oil districts in the 1920s involved not just the restoration of damaged and neglected existing infrastructure, but also the introduction of new technology, in order to "catch up" to the progress of the global oil industry, and new standards of labor imposed by the Soviet state.

The oil industry required more than administrative reworking to survive, of course. The actual reconstruction of Baku's oil industry was put almost entirely in the

<sup>&</sup>lt;sup>270</sup> Despite their explicit denunciations of tsarist imperialism, the Bolsheviks deftly rationalized their conquest of the resource-rich areas of the former Russian Empire as a necessary step in the successful transition to socialism. This "re-colonization" relied on the assumption of Bolshevik authorities, particularly those at Gosplan (the State Planning Committee) and its predecessors, that the new regime had a given right to develop and exploit the territory's natural resources. Francine Hirsch, *Empire of Nations: Ethnographic Knowledge and the Making of the Soviet Union* (Ithaca: Cornell University Press, 2005), 78.

hands of Serebrovskii, a long-time revolutionary who had gained Lenin's personal trust by 1920, having taken part in revolutionary activity in Petrograd in 1917 and having occupied multiple leadership positions within the Red Army. In April 1920, Serebrovskii met in person with Lenin, who requested that he take charge of affairs in Baku, given his leadership experience and background in both industry and engineering.

<b>Table 5.</b> Azneft Share of Soviet Oil Production, 1920-1930 <sup>271</sup>				
Year	Azneft Share of	USSR Oil	Azneft Oil	Azneft Change
	USSR Oil	Production	Production	from Preceding
	Production (%)	(metric tons)	(metric tons)	Year (%)
1920	65	3,851,000	2,500,000	
1921	65	3,781,000	2,450,000	-2
1922	67	4,658,000	3,120,000	+20
1923	69	5,277,000	3,640,000	+14
1924	67	6,064,000	4,060,000	+10
1925	67	7,061,000	4,730,000	+14
1926	67	8,318,000	5,570,000	+15
1927	66	10,285,000	6,790,000	+18
1928	66	11,625,000	7,670,000	+11
1929	63	13,684,000	8,620,000	+11
1930	57	18,451,000	10,520,000	+18

Serebrovskii was credited by both contemporaries and later observers as *personally* responsible for the reconstruction of the Baku oil industry. Anna Louise Strong, an American journalist who traveled through Baku in the early 1920s, described Serebrovskii as "the oil king of the district." Through assiduous labor and personal sacrifice, "It is he who has brought order out of chaos," she wrote. His wife's failing health, either tuberculosis or malnutrition, was "only one little part of the price of

<sup>&</sup>lt;sup>271</sup> During most of these years, Baku oil and oil products comprised the majority of Azneft's production. Ebel, *Communist Trade*, 20. A.A. Igolkin, *Sovetskaia neftianaia promyshlennost' v 1921-1928 godakh* (Moscow: Rossiiskii gosudarstvennyi gumanitarnyi universtitet, 1999), 183. Ebel and Igolkin use both official Soviet and archival figures, but these numbers cannot be counted as strictly reliable; rather, they provide a general indication of trends.

rebuilding Baku" for Serebrovskii.<sup>272</sup> His responsibilities were great, and his command very broad. "Ilyich's mandate," as Serebrovskii's later opponents referred to it, included increasing the productivity of Baku's oil industry as much as possible and arranging for the transportation of its products, all with the region's military and civil forces at his disposal.<sup>273</sup>

Indeed, Serebrovskii required all of these means to cope with the widespread and varied calamities befalling Baku. The damage done to the industry in the years between 1917 and 1920 continued to have a negative impact on oil production in the first years of Bolshevik administration, and crises continued to arise. Over the course of 1920, oil production dropped significantly. Authorities fretted constantly about the threat of flooding in Baku fields. Abandoned oil wells were gradually filling with water, which took great effort to remove, but the industry lacked the personnel and organization to bail them out and restore them to working order. The longer the wells were left alone, the more difficult it became to restore them. According to the Bolsheviks' own statements, imparted in a 1921 report from the United States Department of Commerce, the number of viable wells and overall oil production continued to drop precipitously after the Bolsheviks took control of the industry. In 1917, there had been over 3,000 producing

<sup>&</sup>lt;sup>272</sup> Anna Louise Strong, *The First Time in History* (New York: Boni & Liveright, 1925), 101.

<sup>&</sup>lt;sup>273</sup> Brinegar, 29.

<sup>&</sup>lt;sup>274</sup> Strong, 108.

wells in the Baku region; by January 1921, there were just 828 operational wells. Fifteen percent of these, according to the report, had been rendered unusable by flooding.<sup>275</sup>

In addition, the workforce itself was in poor shape. A general and ongoing food shortage, likely caused by supply disruptions, depleted the workforce and generated unrest among the local population. Many Azerbaijani workers had retreated to the relative stability of the countryside, while Persian workers attempted to return to their homeland. In the first few years under the Bolsheviks, the proportion of Russians working in Baku's oil industry grew to a solid majority, while the number of Persian and Armenian workers dropped considerably.<sup>276</sup> As Persians had traditionally made up the majority of the industry's bailers, one of the more lowly jobs, their departure required reshuffling of personnel. This loss of workers was noted by local authorities as a chief cause of the continued decline in production in the early 1920s; in sharp contrast to the overabundance of workers that existed in the Baku oil industry in the pre-war era, there were now not enough laborers to do the work required to rebuild the industry. The Bolsheviks' reports noted worsening shortages of workers: in August 1920 there were roughly 22,000 "employees" in the oil fields; this had dropped to about 16,000 by January 1921.<sup>277</sup> Those who stayed were constantly malnourished due to food shortages and unable to perform their jobs competently. They did not receive proper compensation

-

<sup>&</sup>lt;sup>275</sup> U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, Commerce Reports Nos. 152-203, Volume 3 (July and August 1921): 284, 285. A 1921 report by Russian geologist I.M. Gubkin stated similar findings: in 1913 there had been 3500 wells operating in the Baku area; by 1921 there were just 960 operating. G.P. Ovanesov, V.V. Tolmachev, K.P. Chenikov, and P.P. Kozhevnikov, "Kladovye nefti," in *Neft SSSR (1917-1987 gg.)*, ed. V.A. Dinkova (Moscow: Nedra, 1987), 208.

<sup>&</sup>lt;sup>276</sup> Igolkin, Sovetskaia, 75.

<sup>&</sup>lt;sup>277</sup> U.S. Department of Commerce report, 285.

because the new regime did not have the resources to pay them.<sup>278</sup> Finally, working and housing conditions were exceptionally poor, leading to yet another mass labor strike in April 1921. Unlike previous strikes, which usually consisted of Russian and Azerbaijani workers, this strike encompassed a broader swathe of the community, including Persian bailers, who traditionally had stayed away.<sup>279</sup>

The Bolshevik leadership seemed to fear that, if they were not able to put Baku to rights it might be lost to them, falling to an outside power or attempting to detach itself independently. On June 1, 1920, a month after the Bolshevik takeover of Baku, Lenin received a telegram from Serebrovksii and Z. N. Dosser, the Chairman of the Chief Oil Committee, reporting on the food shortage in Baku. The Special Food Commissar, A. Y. Belenky, had failed to send food from the North Caucasus to Baku, but also refused to allow workers to obtain food from the North Caucasus themselves. The following day, Lenin made a note to himself to telephone Nikolai Bryukhanov, the Chairman of the Special Supplies Commission of the Eastern Front and the head of the Main Supplies Directorate of the Red Army. "If Belenky does not absolutely guarantee the delivery, and quickly, then it is obligatory at once to permit independent procurements. It is criminal to lose Baku because of the idiocy or obstinacy of officials of the Food Commissariat,"

Food shortages continued well into the following year. On April 9, 1921, Lenin sent a reply to a telegram from Ordzhonikidze regarding "the desperate food situation in

<sup>278</sup> Brinegar, 42-43.

<sup>&</sup>lt;sup>279</sup> Ibid., 30-32.

<sup>&</sup>lt;sup>280</sup> V. I. Lenin, "Instruction to the Secretary," in *Lenin Collected Works, Vol. 44* (Moscow: Progress Publishers, 1975), 380-381.

Transcaucasia." He noted that Moscow had attempted some solutions, including giving gold to Armenia (presumably in exchange for food and other basic supplies) and transmitting special instructions to the Commissariat of Food. However, he noted that Moscow was also "in great need," and could offer only limited help. The suggestions that he subsequently offered all required independent action from local authorities in Transcaucasia: improve relations among the three Transcaucasian states, advance irrigations efforts in Azerbaijan "with the help of the resources in Baku," and to buy more supplies "even if it be from abroad." In closing, Lenin instructed Ordzhonikidze to pass this information on to Serebrovskii in Baku.<sup>281</sup>

The widespread troubles that the Bolsheviks encountered in the first few years of the project to nationalize the Baku oil industry give some indication of the reasons that, earlier, the Baku Commune and the Azerbaijan Democratic Republic had been unable to make progress on similar endeavors. Over the course of at least five decades, the industry had developed conventions that were difficult to overcome. In any case, shortages of basic goods and the constant threat of invasion were major obstacles in themselves. In these circumstances, the Bolsheviks required outside help.

# The NEP Era and Foreign Assistance in Reconstruction

It is appropriate here to address the War Communism and New Economic Policy (NEP) eras as related to the Baku oil industry, given that the issue of supplying the population's basic needs was a major factor in the transition from the former to the latter.

<sup>&</sup>lt;sup>281</sup> V. I. Lenin, "Telegram to G. K. Ordzhonikidze," in *Lenin Collected Works, Vol. 35* (Moscow: Progress Publishers, 1976), 483.

The Bolsheviks' late arrival in Baku (relative to the RSFSR) meant that the traditional periodization of War Communism followed by NEP does not fully apply in this case. While it is likely that many other locales also differed from the "norms" of War Communism in European Russia, and that therefore Baku may not represent an exception to a rule so much as part of a trend that presents a larger challenge to the usual periodization of the early Soviet period, it is worth pointing out that the period just preceding the introduction of NEP in Azerbaijan did not see the sort of ruthless confiscations that so alienated rural inhabitants elsewhere. Brinegar suggests the alternative term "Revolutionary Communism" for Baku between May 1920 and September 1921, during which time Azerbaijan experienced the "same ideological militancy and harsh punishments as War Communism but allowed trade and did not requisition foodstuffs from the peasantry." 1282 In some ways, then, this era in Baku resembled the situation of the NEP era in other locations of the future USSR.

The Bolsheviks' openness to outside help in the reconstruction of the oil industry truly signaled the region's advancement toward NEP-era economic policies. As part of the "commanding heights" of the Soviet economy, the oil industry remained firmly under state control during the NEP period, but administration of individual trusts became relatively decentralized. Each trust was intended to be run productively in order to cover the costs of recovery. However, throughout the 1920s, Baku, a former hub of international interactions, remained dependent on "bourgeois specialists" from capitalist countries and oil companies. Bolsheviks both central and local eagerly accepted

<sup>282</sup> Brinegar, 31-32.

<sup>283</sup> Ibid., 248.

equipment and professional advice from foreign oil firms and other specialists throughout the 1920s. Progress toward industrial recovery was apparent by the middle of the decade in no small part due to this foreign aid. Without the technological and other guidance of foreign experts in the early to mid-1920s, the Soviet oil industry simply could not have recovered at the pace that it managed.

Until the late 1920s, when the Soviets began to innovate oil industry technology of their own, and Stalin began to lead the country down an increasingly isolationist path, authorities in the oil industry unreservedly sought out the most advanced methods of oil production and personnel training from American, European, and Japanese firms. 284

These "technical-assistance agreements" involved no permanent foreign investment, but were instead limited to technical and managerial guidance and short-term contracts for a fixed fee. Rather than jeopardize their ideological superiority by inviting real concessions from foreign parties, Bolshevik authorities "rented" foreign enterprises' expertise regarding industrial technology, transactions for equipment, and labor discipline. 285 One example is the Barnsdall Corporation, an American company that aided in the oil industry's recovery from 1921 to 1924. Barnsdall did little more than advise and drill wells for Azneft, an arrangement comfortable to the NEP-era Bolshevik conscience, and nothing like the far-reaching concessions made under the tsarist regime. 286 With the use of Barnsdall's advanced equipment for drilling and pumping, the Baku oil industry

<sup>&</sup>lt;sup>284</sup> John P. McKay, "Foreign Enterprise in Russian and Soviet Industry: A Long Term Perspective," *The Business History Review* Vol. 48, No. 3 (Autumn 1974): 353; Marshall I. Goldman, *The Enigma of Soviet Petroleum: Half-Full or Half-Empty?* (London: George Allen & Unwin, 1980), 25.

<sup>&</sup>lt;sup>285</sup> McKay, "Foreign Enterprise," 352.

<sup>&</sup>lt;sup>286</sup> Louis Fischer, *Oil Imperialism: The International Struggle for Petroleum* (London: George Allen & Unwin, Ltd., 1926), 169.

gradually recovered some of its former productivity, and by 1924 intensive drilling had resumed.<sup>287</sup>

In addition to inviting foreign expertise, authorities in Baku also traded extensively with American and European powers, exchanging primarily Azneft's own oil for basic supplies and industrial equipment, as most of the oil equipment that had been left in Baku in 1917 had been damaged or become obsolete. Serebrovskii traveled in the early 1920s to the United States to learn from its oil experts and purchase equipment. During his trip, Serebrovskii had arranged for the purchase of 52 million francs' worth of American equipment for Azneft.<sup>288</sup> Another trade, an exchange in Constantinople in April 1921 with the French association "Socifross" (Société Commerciale, Industrielle et Finiancière pour la Russie et les Pays Limitrophes [Commercial, Industrial, and Financial Association for Russia and Neighboring Countries]), highlights the intersection of the struggle to obtain equipment for rebuilding the industry and supplies for the community and the decentralization of decision-making in the first few years of Bolshevik power in Azerbaijan. Serebrovskii had apparently arranged the Socifross agreement with little or no consultation from the center. In a letter written in June 1921 to A. M. Lezhava, then the Deputy People's Commissar for Foreign Trade of the RSFSR, Lenin expressed anxiety over Serebrovskii's agreement with Socifross, which had previously done some business with the Whites. <sup>289</sup> Serebrovskii had already concluded a number of trades with

<sup>&</sup>lt;sup>287</sup> Goldman, 24; Edgar Wesley Owen, *Trek of the Oil Finders: A History of Exploration for Petroleum* (Tulsa, OK: The American Association of Petroleum Geologists, 1975), 1361.

<sup>&</sup>lt;sup>288</sup> "M. Serebrowsky est à Paris, April 11, 1925," in Oil Resources. Volume 3, 377.

<sup>&</sup>lt;sup>289</sup> V. I. Lenin, "To A. M. Lezhava," in *Lenin Collected Works, Vol. 45* (Moscow: Progress Publishers, 1970), 198-199. Andrew J. Williams, *Trading with the Bolsheviks: The Politics of East-West Trade, 1920-1939* (1992), 111.

Constantinople in exchange for supplies, which Lenin noted he did "not at all object to," but he then insisted on getting the details of purchases from Constantinople and Socifross. The tone of the letter suggests Lenin's frustration at feeling disconnected from the situation in Baku. Serebrovskii apparently became offended by Lenin's inquiry and glumly offered to resign, but in a subsequent telegram to Ordzhonikidze Lenin took care to note that he found Serebrovskii to be "a most valuable worker" and was simply "worried over the future of Baku." He then proceeded, in the same telegram, to demand to be "supplied with exact information about the results of improving the oil industry in Baku, and also about the results of foreign trade operations."290

Particularly salient here is Brinegar's discussion of relations among three clusters of Baku-oriented authorities: the central Bolshevik leadership, represented primarily by Lenin; local nonnative Bolsheviks, especially Serebrovskii, Kavburo chairman Sergo Ordzhonikidze, and Ordzhonikidze's deputy, Sergei Kirov; and native Azerbaijani Bolsheviks, chiefly Nariman Narimanov. The changing balance of power among these groups describes the transition from relatively decentralized to centralized decisionmaking, and a generational shift in Bolshevik tactics, from militancy and (in Narimanov's case) international revolution to a more composed focus on effecting socialism in one country.<sup>291</sup> The center seemed to accept the need for Baku authorities to exercise considerable autonomy in these early years, but was concerned still that local authorities do their utmost to stick to the Party line.

<sup>&</sup>lt;sup>290</sup> "Telegram to G. K. Orjonikidze," Lenin Collected Works, Vol. 45, 199.

<sup>&</sup>lt;sup>291</sup> Brinegar, 19.

Notwithstanding spats within the leadership and legions of practical hurdles, the oil industry of Baku did in fact recover the productivity experienced under tsarist administration (Table 6). The oil industry's new authorities oversaw the reconstruction of factories, derricks, and pipelines; repurposed office space that had once been the headquarters of capitalist oil industrialists; and set out on new ventures. In 1923, they completed a land reclamation project in the Bibi-Eibat Bay, just south of Baku, that had been started in 1909 and had stalled in 1914 due to lack of funding. <sup>292</sup> In a time when offshore oil extraction was still unviable, the only way to capture the oil that was known to lie beneath the seabed was to extend the land to provide a base for derricks. Bibi-Eibat was one of the most prolific fields in the region for decades. <sup>293</sup> Following this success, engineers created a number of artificial islands for the same purpose in the shallow waters just off the coast of the Absheron Peninsula. <sup>294</sup>

<b>Table 6.</b> Approximate Crude Oil Production, Azneft, 1901-1926 (selected years) (metric tons) <sup>295</sup>			
1901	11,000,000		
1913	7,664,000		
1920	2,500,000		
1926	7,670,000		

<sup>&</sup>lt;sup>292</sup> F. Willoughby Smith, "Russia. Batum.," Supplement to Commerce Reports 13d (October 1915): 5; Tatiana Speranskaia, "Ponomarev Georgii Nikolaevich – inzhener-puteets, 1877-1935," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ Пономарев\_Георгий\_Николаевич\_—\_инженерпутеец.

<sup>&</sup>lt;sup>293</sup> Bülent Gökay, "The Background: History and Political Change," in *The Politics of Caspian Oil*, edited by Bülent Gökay (New York: Palgrave, 2001), 8.

<sup>&</sup>lt;sup>294</sup> Igor S. Zonn, Aleksey N. Kosarev, Michael Glantz, and Andrey G. Kostianoy, *The Caspian Sea Encyclopedia* (New York: Springer, 2010), 68.

<sup>&</sup>lt;sup>295</sup> Igolkin, *Sovetskaia*, 181, 183.

Retaining control of the region and improving oil production were not the Bolsheviks' only goals for Baku, as I will discuss below, but they were paramount. Bolsheviks proudly broadcast this recovery, incremental as it was, depicting their leadership as its driver. A contemporary American journalist, Louis Fischer, took a more nuanced view of the industry's progress, but still credited the Bolsheviks. During his trip to the region in the mid-1920s, Fischer observed that, despite various deficiencies, the oil industry of the Soviet Caucasus was showing signs of progress. "To be sure," he wrote, "the Russian refining industry is backward. The varieties of oil manufactured by the Baku plants are very few; the processes used in the Caucasus for 'cracking' and extracting benzine are not up-to-date; much goes to waste and many by-products are not utilised. Nevertheless there has been improvement all along the line." In the fields, "more primitive methods" of drilling for oil were being replaced with advanced rotary methods pioneered by Americans (likely a reference to the activity of companies such as Barnsdall). 296 "Inevitably," Fischer noted, "Russia will lag behind... for a number of years, but the realisation is general that modernisation is imperative, and every effort is being made to increase efficiency, productivity, quality and variety."297 Certainly the Soviet Union did lag in oil production during the 1920s, "catching up" to other major oil centers only with the early Five-Year Plans, but its recovery remains impressive

-

<sup>&</sup>lt;sup>296</sup> During his 1925 European junket, Serebrovskii also boasted of the "Americanization" of the Caucasian oil industry, which had already increased oil production with less intensive labor required, he said. "M. Serebrowsky est à Paris, April 11, 1925," 377.

<sup>&</sup>lt;sup>297</sup> Fischer, 121, 170.

nonetheless, due largely to the Bolsheviks' openness to foreign expertise and trade, leniency in food distribution policies, and prioritization of heavy industry.<sup>298</sup>

### Refashioning Baku

The recovery of industrial output was gradual, but the transformation of labor and urban life effected by the Bolshevik takeover and nationalization of the industry was remarkable. In part, this change represented intentional, if piecemeal, alterations made by Bolshevik leaders seeking to revive the industry according to revolutionary ideals. The appearance of Baku, the outlying oilfield settlements, and industry itself underwent reconditioning at varied paces, according to varied needs. Accompanying spatial change was a transformation of the feel and pace of the lives and work rhythms of those who inhabited this region. In this era, the industrial community of Baku saw the onset of what eventually fully evolved into the Soviet industrial management regime, characterized by efforts to plan oil production, refining, and transportation according to detailed quotas set by the central state; rationalized work practices in the field and on the factory floor; rational distribution of workers; mixed attempts (by the mid-1920s) to promote Azerbaijanis and Azerbaijani language and culture within the industrial community; and an effort to develop the industrial community physically via rational urban planning. As the nature of the industry changed, so too did the lives of those tied to it.

By about 1922, the conclusion of open warfare in Transcaucasia, relatively stable administration in Baku, and clear attempts to reconstruct the city, industry, and supply

<sup>&</sup>lt;sup>298</sup> International recognition of the Soviet oil industry's recovery of a competitive edge in trade may also be inferred from Standard Oil's repeated efforts in 1925 to create arrangements to buy Soviet crude, to no avail. Ebel, *Communist Trade*, 16.

lines had begun to attract workers who had abandoned Baku after the 1917 revolutions. Most Baku oil industrial personnel had either remained near the city or in nearby villages; as work opportunities became available, they began treading familiar tracks back to their former places of work. The usual migration routes continued to bring in workers from the Transcaucasian hinterlands, central Russia, and, for a time, northern Persia. Work availability was advertised in northern Persian newspapers through the mid-1920s, indicating that labor demand kept borders open for the time being.<sup>299</sup> Because the employee records of imperial-era oil companies had largely been removed or destroyed, the reintegration of workers required some special vetting by new employers. Managers held over from the previous era provided personal testimonies to vouch for the experience and diligence of returning workers. 300

This was not the unprecedented wave of migration of the late 1920s and early 1930s (discussed in chapter five), but the arrival of new and veteran workers nevertheless required accommodation. The Bolshevik takeover involved far more than a singular focus on increasing industrial production; it was the new regime's stated goal to remake the country into a proletarian paradise. In Baku, planning extended to the overhaul of living and working conditions, from the oil fields and factories to worker settlements and central Baku itself. In 1925, Azneft director Serebrovskii predicted that "in two years, those who saw Baku before the war, or immediately after it, will not recognize it anymore, because the physiognomy of the region will have changed so much."301 This

<sup>&</sup>lt;sup>299</sup> ARDA, f. 1032, op. 1, d. 1, 6.

<sup>&</sup>lt;sup>300</sup> ARDA, f. 1032, op. 1, d. 1, 12-13.

<sup>301 &</sup>quot;M. Serebrowsky est à Paris," 377.

drive was in part a grassroots movement, coming from workers' committees themselves, but also represents to some degree the leadership's pursuit of the revolution's promises.

Improvements were selective and partial, but striking to inhabitants in any case.

To begin with, the new regime attempted to create a sense of community conceptually, bonding Baku together while tying the industrial community to the revolutionary project itself. External stressors, both war and the impression that the country was encircled by belligerents, contributed greatly, reinforcing the notion that the industry had a mission. Oil was not yet a primary fuel for the prosecution of war, but the oil industry of Baku had a financially important role to play in any case, keeping the emerging Bolshevik state afloat, and was still an attractive target for other belligerents and private oil firms. <sup>302</sup> In particular, media and the establishment of social gathering places were used by authorities to promote a sense of urgency and unity in the Baku oil community. Recognizing the need to placate restless workers during the early grim years, in October 1922 Lenin penned a message in *Bakinskii Rabochii* addressed to the workers of the Baku oil industry.

Dear Comrades.

I have just heard Comrade Serebrovsky's brief report on the situation in the Azerbaijan oilfields. The difficulties of the situation are by no means small. I send you my cordial greetings and urge you to do all you can to hold on for the

<sup>&</sup>lt;sup>302</sup> Henri Deterding, the president of Royal Dutch-Shell, had purchased all of the Rothschild holdings before World War I, and in early 1920 was actively negotiating with the Nobels, who had already fled Russia, for their entire oil operation in the region. In his correspondence with Calouste Gulbenkian, a British-Armenian oilman who had had business in Baku, Deterding averred, "The Bolsheviks will be cleared, not only out of the Caucasus, but out of the whole of Russia in about six months." Deterding found competition in Standard Oil of New Jersey, who concluded an agreement with the Nobels for half of their Russian holdings in July 1920, three months after the Bolsheviks had seized the Baku oil industry. As the Civil War went on, the Bolsheviks' hold on the Caucasus seemed tenuous enough to parties such as Standard Oil and Deterding that they were willing to take the risk of purchasing oil land and industrial infrastructure that had already been formally claimed and nationalized. Yergin, 238.

immediate future. Things are always particularly difficult at first. Later on it will be easier. We must win, and we shall do so at all costs.

Once more, my most cordial communist greetings.

V. Ulyanov (Lenin)<sup>303</sup>

*Bakinskii Rabochii* represented the chief means of communication with the working community of Baku. It had been founded in 1906 as an organ of the RSDLP and was now refashioned as the Azerbaijan Communist Party's conduit to communicate with the Baku proletariat. Although the newspaper's name does not specify oil workers, because the oil industry was primary in the area, its articles and other features were largely geared toward such a reading audience. Notably, the newspaper was published exclusively in the Russian language from its first issue, but its content was clearly meant not only to appeal to all workers, but to create a sense of community among its readers.<sup>304</sup>

The 1921 New Year's issue of *Bakinskii Rabochii* sought to emphasize continuity in the history of the newspaper in the community, reinforcing its own legitimacy and that of the new order by creating a sense of unbroken comradeship with the reader since the first issue, in 1906, despite the political and administrative upheavals of the recent past. In an article entitled "Under the Old Banner," it was proclaimed, "Workers of all kinds know that it has been fifteen years [since the founding of *Bakinskii Rabochii*]. Many 'veterans' in Baku industries well remember our first issue....After many victims, after long years of bloody battle—we won." Later in the same issue, another article

<sup>303</sup> V. I. Lenin, "To the Workers of Baku," in *Lenin Collected Works, Vol. 33* (Moscow: Progress Publishers, 1965), 373.

134

<sup>&</sup>lt;sup>304</sup> Zaur Gasimov, *Historical Dictionary of Azerbaijan* (London: Rowman & Littlefield, 2018), xxviii.

<sup>&</sup>lt;sup>305</sup> "Pod starym znamenem," *Bakinskii Rabochii*, January 1, 1921, 1.

discussed how workers had celebrated the new year. It described workers gathering together near their factories to celebrate, while other "comrades" rushed around, washed up, cleaned house, and prepared food for the occasion. "Let this be the first New Year that Baku workers will meet and pledge friendship and the happiness of world workers," the article continued. Not uncommon to such Party media, *Bakinskii Rabochii* formulated its content to make readers feel as though they were members of a shared effort, and surrounded by comrades who acted and believed in common.

The party and state, often via *Bakinskii Rabochii* and other media, further encouraged a sense of comradeship and common goals with recurrent references to the ongoing foreign and domestic struggles that Baku oil production could ameliorate. In the period between the Bolshevik takeover of Baku and the resolution of the Civil War in 1922, *Bakinskii Rabochii* consistently encouraged workers to raise oil production and improve oil transportation in order to strengthen the revolution and protect it from enemies large and small. As long as the Civil War continued, *Bakinskii Rabochii* constantly reiterated to workers the importance of the Baku oil industry to the war effort and by extension the fate of communism. "A Pood of Oil Is a Step Toward Communism," one headline read. "Now a pood of oil counts as an enemy of the Whites! A barrel of oil greases the wheels of Soviet locomotives!" Oil production could also solve the Soviet Union's domestic shortage problems. In the July 1923 issue of *Soviet Russia Pictorial*, an extreme leftist "graphic monthly review of Russian affairs," reporter I. Amter wrote on Soviet Russia's desperate need for manufactured products and credits.

<sup>306</sup> Ibid., 2.

<sup>307</sup> Ibid., 1.

If granted international credits, Amter wrote, Soviet Russia would be able to unleash its true industrial potential and therefore feed its "hungry millions." "Perhaps Baku oil, after which the world is scrambling and of which the United States is in such great need, will bring Soviet Russia credits. A sage prophet would even forecast that *oil will bring about the recognition of the Soviet Government*," Amter wrote. Amter was quick to note that the hunger did not stem from a true famine, which the Soviets had corrected, but rather from blockade and civil war. The country needed agricultural and mining machinery, a "forest of tractors," in order to correct its hunger problems. He entreated "capitalism" to "compromise for the sake of Baku oil, and give the Russian workers and peasants machinery and credits."

According to Anna Louise Strong, in the early 1920s a sense of conspiracy also pervaded the oil industry. Strong reported rumors that, when the February revolution occurred, Gustave Nobel ordered some of his employees to remain in Russia to act as "economic spies." Taking advantage of the new regime's reliance on specialists, they were to pursue upper-level positions in the government, using them to send secret reports abroad, including to Wrangel's office in Paris, and otherwise sabotage the oil industry, the story went. "They held themselves ready, when the time came, to paralyse the oil industry, and thus destroy Russia, burning up oil fields and oil reserves if necessary." According to Strong, these "spies" were eventually located by the Cheka and would have been shot had they not been foreigners. 309 Whether or not there is any truth to this

<sup>&</sup>lt;sup>308</sup> I. Amter, "Russia Still Needs Our Help," *Soviet Russia Pictorial* (July 1923), 138. Emphasis in original.

<sup>&</sup>lt;sup>309</sup> Strong, 102.

account, the impression remained into the early 1920s that enemy elements remained active, requiring constant vigilance and internal unity.<sup>310</sup>

More obvious were the physical renovations begun in the early 1920s. This section enters into some existing scholarship on the changes to the built environment in Baku in the early Soviet era. In noting that the cyclical nature of Baku's booms and busts is laid visible in its architecture, making oil the primary driver of its urban development since the nineteenth century, I am linking to work by Eve Blau, who has developed a useful argument regarding oil and the physical evidence of transformation. Recent work by architectural historian Christina E. Crawford on early socialist urbanism also bears well on the development of Baku in this period. Applicable is her argument that "early Soviet planners were motivated not by form but by process—and specifically praxis, that is, the critical engagement with existing conditions in order to [effect] systemic change." Baku was one of several urban-industrial sites on the periphery of the country that in the early 1920s acted as "living laboratories for urban experiment." However, the deliberateness of "choosing" Baku as a site of experimentation, and the potential motivations for this choice, is still a matter of debate. 1313 I argue that Baku

<sup>&</sup>lt;sup>310</sup> Sicotte examines the security side of these developments in a chapter of his dissertation. Sicotte, 256-301.

<sup>&</sup>lt;sup>311</sup> Eve Blau, "Baku: Oil and Urbanism at the Edge of the New Europe," in *In the Life of Cities*, ed. Mohsen Mostafavi (Zürich: Lars Müller Publishers, 2012), 52-53.

<sup>&</sup>lt;sup>312</sup> Christina E. Crawford, "Soviet Planning Praxis: From Tractors to Territory," *Centerpiece / Weatherhead Center for International Affairs, Harvard University* 29, no. 2 (2015): 14. Emphasis in original.

<sup>&</sup>lt;sup>313</sup> It is possible that this will be addressed more clearly in Crawford's forthcoming book project, *Spatial Revolution: Planning and Building the Early Soviet State, 1917-1932*. The book will focus on three "socialist settlements"—Baku, Magnitogorsk, and Kharkiv—in order to examine how early Soviet architects and planners handled ideological demands and material shortages. See <a href="http://www.christinaecrawford.com/spatialrevolution/">http://www.christinaecrawford.com/spatialrevolution/</a>.

became a site of experimental development because it was already undergoing drastic industrial renovations, which created greater opportunity for experimentation, but that the depth and systematic nature of this overhaul should not be overstated. Emphasized here is planners' and inhabitants' engagement with preexisting urban-industrial forms.

Urban planning was spearheaded by Aleksandr Platonovich Ivanitskii, a Russian civil engineer. In 1925, the Baku City Council tasked Ivanitskii with drafting a general plan for the new Baku. In collaboration with brothers Viktor and Alekandr Vesnin and A.V. Samoilov, all architects, Ivanitskii produced the 1927 General Plan of Baku, which included a layout scheme for the Baku region's development over the following thirty years, as well as specific development projects for at least five of the city's worker suburbs and various elements of its transportation network. Ivanitskii's plan was truly holistic, taking into account transportation, communications, sanitation, education, healthcare services, and sports and other recreational activities. The underlying assumption was that Baku would experience major population growth in the subsequent years and decades, "driven by such an exceptionally powerful economic force as Azneft." 314

Several of the plan's major elements had been implemented by 1930, but despite the ambitions of the Baku City Council, urban development throughout the 1920s remained irregular. The center of Baku remained the highest priority. The millennia-old Inner City and the Russian colonial settlement had been built with an eye toward both form and practicality, as they represented the administrative hubs of the region and its

<sup>314</sup> Tatiana Speranskaia, "Ivanitskii Aleksandr Platonovich – gradostroitel," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ Иваницкий\_Александр\_Платонович\_-\_градостроитель.

industry but were not mired in industry itself. In the early Soviet era, the same priorities remained. Two of the projects implemented earliest were the renovation of the waterfront structures, including both its restful promenade and the business-related wharves, and the repaying of streets in the city center.<sup>315</sup>

Beyond practicality, however, municipal authorities still showed a particular concern for appearance, but now according to quite different tastes. As in other rapidlyexpanding peripheral cities of the time, Baku became ground on which Moscow architects and planners tested models of urban planning, housing design, modernist architectural styles, and social infrastructure. 316 In the late 1920s and early 1930s, experimental housing blocks that many other Soviet cities later adopted were first installed in Baku, making the city "at the forefront of Soviet architecture." Now layered upon the pre-colonial architecture of the Inner City and the Western and Victorian-style additions of the Russian colonial era were the sporadic avant-garde experiments of the modern Constructivist school. Constructivist architectural renovations and additions in central Baku were far from systematic; rather, the city offered an opportunity for early Russian Constructivist architects, including Ivanitskii, the Vesnin brothers, and architect Semen Pen, to try new styles.<sup>317</sup> Several workers' clubs designed by the Vesnin brothers, including those in Staenka Razin, Black City, Surakhani, and Bailov, combined Constructivist experimentations with adaptations to local conditions; the buildings'

<sup>&</sup>lt;sup>315</sup> Tsypylma Darieva, "Reconfiguring a Public Place. Baku Promenade between Europe and Asia," in *Orient on Orient: Images of Asia in Eurasian Countries*, eds. Koshino Go and Tetsuo Mochizuki (Sapporo: Hokkaido University Press, 2013), 123-126.

<sup>&</sup>lt;sup>316</sup> Blau, "Baku: Oil and Urbanism at the Edge of the New Europe," 52.

<sup>&</sup>lt;sup>317</sup> Ibid., 52-53.

facades were blocky, awkward, and patently modern, but the buildings included traditional shady, green courtyards to provide some relief from Baku's exhausting sun and wind. The construction of new, elaborate workers' clubs in each of Baku's districts was a statement of the new regime's priorities. <sup>318</sup> Palaces of culture and other spaces of education and socialization, such as these workers' clubs, spread into each neighborhood of Baku, offering the opportunity for a rearrangement of community social life. When workers managed to drag themselves to a palace of culture after work or on days off, they rarely came for conferences or educational purposes, but rather for simpler entertainment. Per driller Said Kuli's estimation of the Surakhani workers' club, "It is a good club—even when there's no movie, all come to the buffet." <sup>319</sup>

In other respects, worker settlements, whether part of established industrial suburbs such as the Black City and Akhmadly, or barracks constructed by imperial-era oil companies on the oil fields themselves, saw only piecemeal improvement efforts. Though quite flawed in terms of actual implementation, the Bolshevik regime did selectively attempt to improve the living and working conditions of industrial personnel according to a rational ideal.<sup>320</sup> The new municipal authorities initially aimed to have a separate dwelling for every oil worker by October 1923, and made some progress in that respect by refurbishing abandoned barracks and appropriating lavish colonial-era residences for

<sup>&</sup>lt;sup>318</sup> Selim Khan-Mahmedov, "Arkhitektura sovetskogo avangarda," *Arkhitektura Istoriia*, http://www.alyoshin.ru/Files/publika/khan\_archi/khan\_archi\_1\_115.html.

<sup>&</sup>lt;sup>319</sup> ARDA, f. 2914, op. 1, d. 971, 2.

<sup>&</sup>lt;sup>320</sup> By 1925, three-quarters of Baku and the surrounding oil fields had been electrified using equipment imported from the United States. Fischer, 11.

worker accommodations.<sup>321</sup> In an April 1925 interview with the French journal *Revue Petrolifère*, Serebrovskii touted his "Americanization" not only of the oil exploitation methods used in the Caucasus, but also a sort of "Americanization" of its personnel and housing. He mentioned the development of Staenka Razin (now Bakikhanov, a settlement in the northeastern part of Baku). The village, he said, was "constructed on the model of Long Beach, [California]," with 2,700 American-style houses. In this effort, Serebrovskii and locals had been aided by two American engineers, one of whom settled semi-permanently in the area with his family. In addition to advising on matters of industrial development, the engineers directed the construction of the community's housing "per American plans. Only the styles of the façades correspond to local color. Even the furniture is of the American type."<sup>322</sup> The adoption of American-style community development did not remain a common practice in Baku, but rather corresponded with the general openness of leaders to foreign expertise during the 1920s.

Staenka Razin was not the only oil village that benefited from rebuilding in this period. Renovation of several other worker suburbs had been specifically included in Ivanitskii's plans, including Surakhani, Balakhani, Romanov, Montin, Binagadi, and the White City.<sup>323</sup> It appears that some degree of improvement had been implemented by 1928, when Maxim Gorky visited the area. Gorky was effusive:

Almost every house has its own architectural physiognomy, and this variety of types makes villages surprisingly fun....Wide concrete streets, water supply, sewage, playgrounds for children's games—everything was done to put workers in the proper cultural conditions. Everything is very skillful and very clever. Two

321 Khan-Mahmedov.

322 "M. Serebrowsky est à Paris, April 11, 1925," 377.

323 Speranskaia, "Ivanitskii Aleksandr Platonovich."

or three old barracks were preserved in the fields so that children could see in what dirty caves the capitalist masters kept their fathers....In each village, a family of Turks lives side by side with Russian families, children are brought up together, and this inspires hope that in two decades there will be no Turks or Russians, but only people firmly united by the idea of a worldwide brotherhood of workers. 324

Gorky's words must be taken with some skepticism, as he was no impartial observer, and quite keen to embellish the truth, but in fact municipal authorities were directing resources to improve conditions in worker settlements as they could, partial and gradual as it was. Between 1925 and 1932, the state constructed a large housing estate, which they named for Stepan Shaumian, specifically to house oil workers near Baku, a manifestation, one Soviet author noted, of "the paternal concern of the state" for oil workers. The focus on accommodating every person or family in an individual house became less feasible by the late 1920s, however, as the city was inundated with more new arrivals than it could comfortably house. Communal housing, including dormitories, large apartment buildings for families, and oilfield barracks for single workers, became the norm during the 1930s. 326

Developments of transportation also demonstrate this sort of limited improvement. Resources were directed toward the most visible problem areas. The Baku-Sabunchi-Surakhani line, which had originally opened in 1880, by 1924 had 12 trains sluggishly rolling along the ten miles between the Baku city center and two of its satellite

32

<sup>&</sup>lt;sup>324</sup> Irina Rote, "Generalnyi 'Novyi plan g. Baku 1927 g.' arkhitektura A.P. Ivanitskogo," Nash Baku: Baku istorii i bakinets, https://www.ourbaku.com/index.php/ Генеральный\_"Новый\_план\_г.\_Баку\_1927г."\_архитектора\_А.П. Иваницкого.

<sup>&</sup>lt;sup>325</sup> Ia.M. Kazan, "Goroda neftianikov," in *Neft SSSR (1917-1987 gg.)*, ed. V.A. Dinkova (Moscow: Nedra, 1987), 339.

<sup>&</sup>lt;sup>326</sup> Khan-Mahmedov.

oil field settlements. In 1926, the line and its wagons were electrified, making this the first electrified railway in the Soviet Union. Electrification doubled the speed of travel to nearly 20 miles per hour, thus accommodating the travel of the city's growing worker population, and was touted as an example of the Soviet regime's great innovation and modernization. However, this sort of improvement was not widely implemented, and little was done about improving transportation within oilfield settlements, which were often quite expansive. Oil workers frequently complained about the difficulty of getting to work on time or to workers' clubs in the evening or on weekends. Most seem to have been forced to walk long distances without the aid of public transportation. This attests to the sprawling nature of Baku's raiony. To excuse poor attendance of events at the Surakhani palace of culture, for instance, workers complained that they felt too tired after work to make the long trek by foot. He was a support of the sprawling to the sprawling that they felt too tired after work to make the long trek by foot.

Despite grand intentions to effect a wholesale reconstruction of Baku according to rational socialist urban ideals, including ample housing and social services, large open spaces, and a regular grid, urban planning had to contend with the oil industry's imperative to extract, process, and transport as much of the region's oil as possible. Industrial construction expanded in every direction, on land and into the Caspian Sea, as refineries, derricks, pumps, pipelines, and all the other trappings of the oil industry proliferated, becoming part of the city's landscape. In addition, planned urban housing

<sup>&</sup>lt;sup>327</sup> Tatiana Speranskaia, "Sabunchi (Baku)," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ Сабунчи\_(Баку); Jahangir Selimkhanov and Farah Aliyeva, "Baku Culture," in *Memories of Baku*, ed. Nicolas V. Iljine (Seattle: Marquand Books, 2013), 131.

<sup>&</sup>lt;sup>328</sup> ARDA, f. 2914, op. 1, d. 971, 2.

<sup>&</sup>lt;sup>329</sup> Blau, "Baku: Oil and Urbanism at the Edge of the New Empire," 53.

simply could not keep up with in-migration, so migrants found or built housing as they could. Public health remained abysmal until the 1930s, as Baku municipal authorities struggled to organize basic services such as sewage systems, garbage disposal, and water. The death rate in Baku remained disproportionately high in comparison to the rest of Azerbaijan through the end of the 1920s. Baku workers did not remain quiet as they endured such living conditions. Worker representatives on the Baku municipal committee repeatedly urged those in power to provide regular utilities and to continue further housing construction. The Baku committee estimated that in 1925 and 1926, some ten thousand Bakuvians were living on the street or in shantytowns, even as industry authorities demanded more laborers than the city could house. <sup>330</sup> Despite the Bolsheviks' promises to create a workers' paradise, maximum production of oil remained the highest priority. <sup>331</sup>

The steps that both Azneft and the Baku city government took to remake the industrial community were incomplete and often ad hoc, but it was nevertheless a project that was key both to the industry's productivity and to the principles of the revolution. The two sides of this community—the strictly industrial and the urban—were distinct but closely connected entities; the recovery of the one was not possible without the other. Together, these programs set in motion the larger project of adapting Baku and its oil industry to the new regime's practical and ideological imperatives.

22

<sup>&</sup>lt;sup>330</sup> Baberowski, Vrag est vezde, 365.

<sup>&</sup>lt;sup>331</sup> Ibid., 363.

#### Conclusion

The Baku oil industry of the 1920s was in transition between, on the one hand, the inefficient tsarist government, abusive capitalist ownership, and largely underdeveloped proletariat of the *ancien régime* and, on the other, the progressive enlightenment of the new era, in the Bolshevik view. Anastas Mikoyan, who first arrived in Baku in March 1917 to work with the local RSDLP, much later described the striking difference between what he saw then, "a seedy city buried in dust and rubbish," and the "majestic and well-maintained" industry and city that he observed growing under Soviet power in the decades after they took the region. <sup>332</sup> For the new Soviet regime, remaking Baku was an indication of socialism's power to overcome the wastes of colonial capitalism.

In her vivid description of Baku in the early 1920s, Anna Louise Strong depicts in bald terms the contrast between old and new, traditional and modern, "backward" and progressive. "It is desolate, and as fascinating, as hell," she wrote of the industry and surrounding region.

Up the narrow streets in the Tartar City the Mussulman women toil, drawing their veils across their faces with one hand and balancing heavy water-buckets with the other. At their feet lies a city brilliant with electric lights, full of giant refineries where a hundred streams of machine-oils pour constantly, day and night, winter and summer. Here is a modern power plant larger than any in Europe, sending current out to operate the distant fields. Here is modern industrialism on a foundation of primitive Asia; workers whose dialects have hardly been reduced to writing, operating rotary oil-drills fresh from America....An industrial oil city, modern, mechanical, ruthless. In it live children orphaned by famine, and veiled women of the East, and men, Russians and Tartars and Persians and Armenians and the tribes of Central Asia who have not yet learned to read and write but who can produce oil for rebuilding a nation.<sup>333</sup>

<sup>332</sup> Mikoyan.

<sup>&</sup>lt;sup>333</sup> Strong, 99-100.

Throughout her account, Strong, a far left-leaning journalist, wavers between frank narrative and open approbation of the new approach ushered in by the Bolshevik experiment. Strong's account by and large glosses over the less-heroic struggles of Baku's industry and society, instead focusing on the new regime's confrontation with "primitiveness," but nevertheless highlights the sense that Baku was *in between*.

The changes to life, work, and production in 1920s Baku seem hesitant and half-hearted when compared to the measures taken during the Soviet "Great Break"—that is, the intense industrialization that was foundational to the early Five-Year Plans (discussed in the next chapter). However, it is worth isolating the 1920-1928 period from that chronological context for a moment to recognize the gains that the new state achieved in abysmal circumstances. On the whole, Soviet authorities succeeded in making its industry work for the country in a time of dire need.

#### CHAPTER V

## THE BAKU OIL INDUSTRY AND THE EARLY FIVE-YEAR PLANS, 1928-1939

Newspapers shout in all the cities of Europe: "Holy war against the Bolsheviks!" "Europe must destroy the robbers!" "All of Europe against the power of the Soviets!"

These cries reach the Soviet workers. "It's not so easy to catch up with us," they answer the capitalists. "We will be able to protect ourselves. We will build our own socialist economy. In five years, we will catch up and overtake you."

"Not in five years, not in four, not in three—in two and a half years!"

—Evgenii Khazin, *Neft* (1931)<sup>334</sup>

The onset of the First Five-Year Plan in 1928 prompted several years of rapid growth in the Baku oil industry, fueling the industry's second major boom in its longer trajectory of surges and lulls. During most of the 1920s, restoration of the oil industry progressed rather gradually; in contrast, the 1930s were a time of revolutionary transformation for the Baku industrial community. Technological and infrastructural investments by the central Soviet state pushed the oil industry to new production levels. As in the past, growth in the industry required masses of additional workers, most of them rural-to-urban migrants, as well as new attempts to accommodate them. The city and industry that these workers entered was, however, very unlike the circumstances that the initial wave of labor migrants had encountered in the late decades of the nineteenth century. It was in the early Five-Year Plan era, roughly the late 1920s to the late 1930s, that Soviet authorities attempted to apply urban and industrial policies that were both strictly in line with their socialist ideology and stood the best chance of speeding the USSR into modernity, security, and prosperity. State-driven policy provoked changes in

<sup>334</sup> Evgenii Khazin, *Neft* (Moscow: Molodaia Gvardiia, 1931), http://pudl.princeton.edu/viewer.php?obj=gf06g540q#page/1/mode/2up.

patterns of urbanization and rural-urban migration that brought many workers into contact with the demands, rhythms, and constraints of the Soviet industrial setting for the first time.

In discussing the rapid industrialization and urbanization of Baku during the years of the Great Break, this chapter aligns with some of the aims of Stephen Kotkin's Magnetic Mountain. Kotkin's arguments regarding Magnitogorsk and Magnitostroi apply well to the situation in Baku during the early Stalinist years. In both urban-industrial sites, the Soviet regime attempted to destroy elements of the old and to create a new socialist civilization, involving a complete transformation of "property relations, social structure, the organization of the economy, political practice, and language," as well as human nature; in both urban-industrial sites, Soviet citizens adapted to and avoided the demands of the new system as they could. 335 However, in Baku, unlike in Magnitogorsk, the Soviet regime was building on an already highly developed urban-industrial site, rather than working from scratch; there were therefore somewhat greater limits to the physical transformation of Baku. Furthermore, the complex ethnoreligious landscape of Transcaucasia deeply affected Baku's development and the experiences of its residents to a degree not evident in Kotkin's study of Magnitogorsk. Examination of the Soviet nationalities policy—another element of socialist civilization—as implemented in a "hard line" industrial setting such as Baku speaks to another dimension of the revolution's possibilities and limits.<sup>336</sup>

<sup>335</sup> Kotkin, 2.

<sup>336</sup> Ibid., 18.

This chapter discusses the development of Baku's oil industry during the first three Five-Year Plans, with a particular focus on the period of the First Five-Year Plan, as it prompted the most radical shift in the running of the oil industry and the lives of those associated with it. The principal focuses of this chapter are demography and Baku society. This period in Baku's history offers a telling illustration of the demographic effects prompted by the central Soviet regime's intense industrialization drive, most significantly in terms of migration trends. I will elucidate the connections, often successive, between the Soviet state's drive for modernization; the resulting movement and conglomeration of laborers; and the effect of both forces on the industrial community in Baku and individuals' experiences of it. Inquiries here address the effect of labor migration on the character of the city and industry, factors that caused the Russian population in the area to increase rapidly, Russians' influence on the city's development, whether migration was in accordance with the state's interests, and the experiences of both Russians and non-Russians in the early Five-Year Plan era. The development of the Baku oil industry illustrates the ways in which Soviet industrial progress metamorphized communities with a specific value to the union—that is, in this case, how Baku was changed to meet the needs of an external power.

#### The First Five-Year Plan (1928-1932)

In 1929, the "Year of the Great Break," Stalin declared that the industrializing Soviet Union was "becoming a country of metal, an automobilized country, a tractorized

country."337 This future relied on the extraction of vast amounts of crude oil. The Five-Year Plan system that Soviet leaders initiated in 1928 was designed to spur rapid economic growth by setting production quotas for nearly all economic sectors throughout the Soviet Union, with an emphasis on the promotion of heavy industry, one of the regime's most conspicuous sources of insecurity. The drive to "catch up" to the developed nations of Europe and North America must involve the spread of machinery and other advanced technology, as well as the development of natural resources as fuel and for trade. The country's sophisticated agricultural sector would be made efficient not only by collectivization, but also by mechanization—the widespread use of tractors demanded more oil by-products of all kinds, but especially lighter petroleum fractions such as gasoline, which previously had largely been exported.<sup>338</sup> Few Soviet citizens had personal automobiles, but did benefit from oil-driven mass transit. Many still used kerosene lamps and/or other forms of lighting that used oil by-products. Other heavy industries relied on machinery that operated on internal combustion engines, which have historically run on petroleum products almost exclusively. All branches of the military relied directly or indirectly on oil-byproducts, as fuel for military vehicles and other machinery with internal combustion engines, as lubrication, and for the fabrication of plastics and other products. Finally, as noted by former Azneft planner Andrei Naidenov, improvement of oil production, in addition to boosting the country's industrial

-

<sup>&</sup>lt;sup>337</sup> Quoted in Kotkin, 29. The "Year of the Great Break" refers to 1928-1929, when the Soviet Union decisively turned away from the NEP and began to focus on agricultural collectivization and industrialization.

<sup>&</sup>lt;sup>338</sup> Owen, 1360-1361.

transformation, was meant to make the Soviet Union more independent in anticipation of war.<sup>339</sup>

The relatively gradual reconstruction of the Baku oil industry during the early and mid-1920s had yielded encouraging results: by 1928, Baku had reached pre-World War I levels of production. The plans for the oil industry changed repeatedly in the years leading up to 1928. Gosplan and VSNKh (Supreme Soviet of the National Economy) each put out several competing plans; the final version, composed by Gosplan, was approved only in March 1929. Under this plan, Soviet oil production was to increase by 85.1% each year, until it reached 21.7 million tons per year. And indeed, with the onset of the First Five-Year Plan, oil production improved dramatically in Baku, primarily due to greater attention from the central state, which assumed responsibility for centrally planning all aspects of industrial oil production, from geological prospecting and extraction to transportation and final consumption. Azneft received about 55% of the state's capital investment in the oil industry as a whole in 1928 and remained the single largest recipient of state investment in the oil industry until after World War II.

Andrei Naidenov, "Management of the Azerbaijan Industry," Andrei Naidenov Papers, Box 1, Folder 20, Hoover Institution Archives, 3.

<sup>340</sup> Gurevich, 22.

<sup>&</sup>lt;sup>341</sup> A. A. Igolkin, *Neftianaia politika SSSR v 1928-1940-m godakh* (Moscow: Rossiiskaia Akademiia Nauk Institut Rossiiskoi Istorii, 2005), 28.

Azneft's share of the central government's oil industry investment dropped considerably from 1929 to 1930, remaining at about 45 percent in the mid-1930s, as oil prospects elsewhere in the Soviet Union were developed. Igolkin, *Neftianaia politika*, 135. Naidenov stated that, in this era, the subordination of the cotton and oil industries in Azerbaijan directly to Moscow left republican officials in charge of just one quarter of its budget, which indicates the portion of the republic's budget devoted to oil. Naidenov, 4.

Figures released by Soviet sources show that, after increases of just one to two million tons of crude oil per year throughout most of the 1920s, between 1929 and 1930 production rose by about five million tons (Table 7).<sup>343</sup> This increase in the Baku oil industry's productivity was the result of new policies and pressures, primarily from the central leadership, that effected similar results in many other enterprises across the Soviet Union in this period. Bolshevik authorities had implemented full vertical integration of the oil industry in 1920, believing it to be the arrangement best suited to rapid recovery, maximum productivity, and worker wellbeing.<sup>344</sup> During the First Five-Year Plan, state agencies renewed their attention to all components of the oil industry "chain," from exploration to marketing, in an endeavor to drive the industry to its fullest potential. For oil and other heavy industries that had remained in the grip of the central state during the NEP era, the Five-Year Plan system meant a significant expansion of the degree of state control over their operations, but few dramatic changes in direction. In the Baku oil industry, the implementation of the First Five-Year Plan policies entailed higher quotas set by Gosplan, more intense scrutiny of output per person and per *promysl*, more extensive coordination regarding local and extra-local transportation of goods and people, a labor recruitment campaign coordinated at the local and state levels, formal and informal pressure on laborers to work harder and better (Stakhanovism), and greater financial investment from the central state.

<sup>343</sup> Ebel, Communist Trade, 20.

<sup>&</sup>lt;sup>344</sup> Hassmann, 33-34.

<b>Table 7.</b> Production of Crude Oil in the Soviet Union, 1927-1933 (millions of metric tons) <sup>345</sup>	
Year	Quantity
1927	10.2
1928	11.6
1929	13.6
1930	18.4
1931	22.3
1932	21.4
1933	21.4

A newly-intensified industrial work culture, dominated by the Stakhanovite and *udarnik* ethos, played a large part in pushing forward Azneft's ambitious projects to improve every element of the vertical integration chain. Increased oil production relied on rapid expansion of urban and interregional transportation, processing facilities, and equipment manufacturing. The local industry newspaper, *Bakinskii Rabochii*, daily applauded workers' productivity, attempting to reset standards of work and to generate an environment of good-natured competition. On January 1, 1930, for instance, the paper detailed the accomplishments of a team of well-drillers of the Leninskii outfit, who had completely "spontaneously" exceeded their quota by 70%, apparently driven by patriotic zeal. <sup>346</sup> Workers laying pipelines, operating distillation plants, and discovering new oil hotspots were similarly featured for going above and beyond the call of duty. This sort of

<sup>345</sup> Ebel, *Communist Trade*, 20.

<sup>&</sup>lt;sup>346</sup> "Burilshchiki v avangarde," *Bakinskii Rabochii*, January 1, 1930, 1.

recognition was frequently balanced by prompts to engage in self-criticism in order to recognize and eradicate shortcomings in oneself and others.<sup>347</sup>

One result of the state's greater investment (literal and figurative) in the Baku oil industry was the advancement of Soviet oil science and its practical application in the field. Petroleum geologists began to employ more advanced instruments and methods in geological explorations, mapping the subsurface structures of the region using exploratory drilling, seismological, and electrical methods. The studies completed in the 1930s remained among the most thorough, definitive records of the Baku region's geology until the 1990s; well into the post-Soviet era, Azerbaijan's leaders relied on the mapping projects of the early Soviet era in enticing foreign investors. As a result of these studies, Soviet geologists began to discover enormous, highly productive oil fields on par with those exploited in the late tsarist era. The small discoveries of the 1920s were trivial in comparison to massive fields such as the Karachukhur-Zykh and Neftechala fields, discovered in 1928 and 1931, respectively.<sup>348</sup> Technological innovations extended beyond exploration to extraction and processing. Using normal distillation processes, the crude obtained in the Caucasus yielded relatively little gasoline, a product that was increasingly sought after in a country of automobiles and tractors. Thermal cracking, a still-developing method of separating crude oil into its constituent fractions, was therefore very promising. In the late 1920s and 1930s, the Soviets reported, Baku-based scientists Vladimir Shukhov and Matvei Kapeliushnikov developed a new method of

<sup>347</sup> Ibid., 2. This trend fits well with Stephen Kotkin's notion of "speaking Bolshevik": understanding and expressing oneself according to the new regime's values, whether one believed those values or not. Kotkin, 220, 236.

<sup>&</sup>lt;sup>348</sup> Owen, 1361-1362.

catalytic cracking and oversaw the construction of a new cracking plant in Baku, which later provided high-octane fuel for military aircraft.<sup>349</sup>

The rapid increase in production after 1928 prompted authorities to revise projections for 1932 from 22 million tons to a wildly optimistic 40-55 million tons. In fact, oil production for 1932 turned out to be roughly that of the previous years, and oil production numbers for the following years indicate that the industry plateaued for a time. Despite this leveling-off in production, Azneft generated roughly 58% of Soviet oil in 1932, the last year of the plan, remaining the country's primary oil producer. States

In March 1931, G.I. Lomov, then the deputy chairman of Gosplan, announced that Azneft had achieved a "shining victory!"; just two and a half years into the First Five-Year Plan, the Baku oil industry had already fulfilled its plan quotas, according to official estimates. <sup>352</sup> In a statement published in *Pravda* on April 1, 1931, Stalin offered his congratulations to the administrative and technical personnel of Azneft and Grozneft

<sup>&</sup>lt;sup>349</sup> M.F. Mir-Babayev, *Kratkaia istoriia azerbaidzhanskoi nefti* (Baku: Azerneshr, 2009), 236-237. Sherman R. Abrahamson, "Petroleum in the Soviet Union: An Appraisal of a Recent German Study," *Economic Geography* 29, No. 3 (Jul., 1953): 270-271.

<sup>271. &</sup>quot;Soviet cracking" and other thermal cracking methods were eventually surpassed by the invention of catalytic cracking in 1937.

<sup>&</sup>lt;sup>350</sup> Hosking, 151.

<sup>&</sup>lt;sup>351</sup> Ebel, *Communist Trade*, 20; Igolkin, *Neftianaia politika*, 133-34. Baku's natural gas output, although miniscule by today's standard, reflecting the minor importance of this resource at the time, also increased significantly during the First Five-Year Plan. In spite of relatively low demand, Soviet natural gas production, largely from Baku, jumped from 8 billion to 31.7 billion cubic feet per year between 1926 and 1932. Before World War II, the natural gas present in the Baku region was not highly valued as an export; the natural gas produced as a side effect of oil extraction was largely used locally, as fuel for steam-boilers and gas engines in the oil fields. Owen, 1366.

<sup>352</sup> Igolkin, Neftianaia politika, 32, 34.

on their accomplishment.<sup>353</sup> Masses of workers in all sectors of the oil industry received commendations and prizes for having helped achieve the First Five-Year Plan in half the time, and, although it impossible to judge their sincerity, many workers and administrators spoke about this achievement as though it were a personal point of pride.<sup>354</sup> Much was made of this achievement in the Soviet press as proof that the Five-Year Plan system more broadly was not only worth the hardship, but would indeed bring Soviet industry to the level of more "advanced" Western countries. It seemed that the expedited top-down industrialization of the plan system had had its intended effect.

# Migration and Ethnicity

Integral to industrial buildup anywhere is the migration of labor, be it rural-urban or urban-urban, temporary or permanent, internal or international. Associated with the late-1920s crash development of the Baku oil industry was an unprecedented movement of people and a great reorganization of life in the region. Between the late 1920s and the early 1940s, the communities associated with the oil industry of Baku transformed as the city's population swelled exponentially with laborers and other migrants journeying from all parts of the vast Soviet Union. Not unlike other centers of industry, Baku's labor force inflated with a greater proportion of workers of agrarian backgrounds, whose difficulty in

- 3

<sup>&</sup>lt;sup>353</sup> J. V. Stalin, "Greetings to the Staffs of Azneft and Grozneft," in *Works: From Marx to Mao* (Moscow: Foreign Languages Publishing House, 1954): 47. These exclamations of success were, perhaps expectedly, rather misleading – historian A.A. Igolkin notes that although the industry did indeed rapidly meet its goals in terms of oil production, fulfillment of the drilling quota fell far behind. Igolkin, *Neftianaia politika*, 34. A contemporary writer, Sergius Prokopovich, made a similar observation in 1931, noting that plan quotas were met only for oil production and certain measures of technological progress. Sergius Prokopovich, "The Crisis of the Five-Year Plan," *The Slavonic and East European Review* 10, No. 29 (Dec. 1931): 321-322.

<sup>&</sup>lt;sup>354</sup> ARDA, f. 2914, op. 1, del. 835.

adjusting to city life and the industry's increasingly demanding workplace culture led to rapid turnover and disillusionment.

In their survey of Russian and Soviet migration, Lewis Siegelbaum and Leslie Page Moch declare cities "the great victors of the twentieth century." In the period between the censuses of 1926 and 1939, the urban population of the Soviet Union grew from 18% to 33% of the total population, nearly doubling. Some of this can be attributed to natural growth and the redrawing of urban boundaries, but in this period the most significant growth resulted from in-migration, usually prompted by the prospect of labor in industrializing urban centers. Urbanization, as defined by Richard H. Rowland, differs from simple urban growth in that it represents a "battle" between urban and rural change in a given region. Given the drastic growth in the percentage of Azerbaijan's total population living in urban centers in comparison to rural population, it can be said that Azerbaijan was definitively urbanizing in this period, primarily due to net rural-urban migration. In addition to the usual surplus of rural labor that drove typical seasonal

<sup>355</sup> Lewis H. Siegelbaum and Leslie Page Moch, *Broad Is My Native Land: Repertoires and Regimes of Migration in Russia's Twentieth Century* (Ithaca: Cornell University Press, 2014), 13.

<sup>&</sup>lt;sup>356</sup> *Ibid.*, 98-99.

Richard H. Rowland, "Urbanization and Migration Data in Russian and Soviet Censuses," in *Research Guide to the Russian and Soviet Censuses*, ed. Ralph S. Clem (Ithaca: Cornell University Press, 1986), 113, 114. The Russian and Soviet censuses give a better idea of overall urbanization (according to this definition), as population movement and natural growth are not represented well. It must be noted that census and other official data from the Soviet state are not without significant flaws, such as inaccuracies both accidental and deliberate, and inconsistent or imprecise categories (for instance, the nationality designation for Azerbaijani Turks changed more than once). However, the numbers appear to be reliable enough to indicate broad trends that are supported by other sources. For figures and calculations related to population growth and national composition in Transcaucasia, the Azerbaijan SSR, and Baku, other than those given in census data from 1926 and 1939, I rely primarily on those reported by Richard Pipes in "Demographic and Ethnographic Changes in Transcaucasia, 1897-1956." This article, although produced in 1959, appears to remain dependable in terms of data, which come from information released by the Soviet government at various points. Richard Pipes, "Demographic and Ethnographic Changes in Transcaucasia, 1897-1956," *Middle East Journal* 13, No. 1 (Winter 1959): 41-63.

migration, the pressures of agricultural collectivization prompted a mass migration from the countryside to the city. Regions with a high degree of collectivization tended to see the largest rate of rural-urban migration; this was the case in Azerbaijan, where collectivization was a fraught process. Census figures from 1926 and 1939 indicate that the urban population growth rate of the Azerbaijan Soviet Socialist Republic (AzSSR) easily outstripped rural growth in the inter-census period, growing by 78%, most rapidly in the first half of the inter-census period, 1926-1932; in comparison, the overall population increase of the Azerbaijan SSR was roughly 38%, and the rural population grew by just 23%. Nearly all of Azerbaijan's urban growth took place in Baku, as labor migrants came seeking work generated by the oil industry. In 1926, the population of Baku stood at 453,333; by 1939, it had grown to 809,347, an increase of 79%.

Some of this migration was planned or expected by state and industrial leaders.

The success of industrial endeavors of the Stalin era, especially those that exploited a

<sup>&</sup>lt;sup>358</sup> Sheila Fitzpatrick, "The Great Departure: Rural-Urban Migration in the Soviet Union, 1929-33," in *Social Dimensions of Soviet Industrialization*, ed. William G. Rosenberg and Lewis H. Siegelbaum (Bloomington: Indiana University Press, 1993), 22.

Vsesoiuznaia perepis naseleniia 1926 g. SSSR, Respubliki i ikh osnovnye region, http://demoscope.ru/weekly/ssp/ussr\_26.php?reg=30; Vseosoiuznaia perepis naseleniia 1926 g., Belorusskaia, Ukrainskaia, Zakavkazskaia, Uzbekistanskaia, Turkmenskaia respubliki i ikh osnovnye region, http://demoscope.ru/weekly/ssp/ussr\_26\_b.php?reg=63; Vsesoiuznaia perepis naseleniia 1939 g., Chislennost gorodskogo naseleniia SSSR po gorodskim poseleniiam i vnutrigorodskim raionam, http://demoscope.ru/weekly/ssp/rus\_pop\_39\_3.php; Vsesoiuznaia perepis naseleniia 1939 g., Chislennost nalichnogo naseleniia SSSR po soiuznym respublikam, kraiam, oblasti i avtonomnym respublikam, http://demoscope.ru/weekly/ssp/rus\_pop\_39\_1.php; Svetlana Soboleva, *Migration and Settlement: 8. Soviet Union* (Laxenburg, Austria: International Institute for Applied Systems Analysis, 1980), 5; Pipes, 53-54, 55, 57. The overall population increase in Georgia and Armenia was roughly the same as in Azerbaijan. The rate of urban growth in these two republics was somewhat stronger, as they had begun the Soviet period less urbanized, and therefore had more ground to make up. See Pipes and Lorimer for more detailed comparisons.

localized natural resource, relied on moving people where they were needed. <sup>360</sup> Wherever there existed a "noncorrespondence between demographic density and natural resources," resettlement was likely, voluntary or not. <sup>361</sup> As Stalin continued to consolidate his hold on power, control over the population and its movements became stricter, and more ambitious attempts were made to distribute the population rationally according to the location of natural resources and associated industries, as in Baku. <sup>362</sup> Unskilled laborers, who came primarily from the surrounding countryside, were in greater demand in the Baku oil industry in this period than in previous years. In most places, industry had sufficiently developed or recovered by the end of the NEP era to offer new jobs, and the prejudice against those who were not "real proletarians" waned for a time. <sup>363</sup> In June 1931, the Central Committee decided that, in the interest of industrial progress, peasants were free to leave the kolkhoz for temporary industrial work, with no penalty if they then decided to remain there permanently. On the eve of the great famine, there was yet no pressing reason to curtail the peasant exodus from the countryside. <sup>364</sup>

The agenda of the Soviet state was only one major influence among several that influenced migration to Baku. The city's growth and change during the early Five-Year Plans were induced by an industrializing drive that originated in Moscow, but the industrial community of Baku was in addition shaped by influences beyond the control of

<sup>&</sup>lt;sup>360</sup> Siegelbaum and Moch, 392; Fitzpatrick, 15.

<sup>&</sup>lt;sup>361</sup> Siegelbaum and Moch, 388.

<sup>&</sup>lt;sup>362</sup> Ibid., 3-4.

<sup>&</sup>lt;sup>363</sup> Fitzpatrick, 16-17.

<sup>&</sup>lt;sup>364</sup> Fitzpatrick, 18-19.

the state. Individual migrants made the decision to move based on the expectation of a better existence for themselves and their kin, heedless of either the city's capacity to accommodate them or the state's ambition to move labor where it was needed in a controlled manner. Furthermore, many new rural-urban migrants found that they could not cope with Soviet urban-industrial life and soon departed, a trend of unsettledness that aggravated state planners. Far from a passive community helplessly manipulated by an omnipotent totalitarian state, migrants utilized methods old and new—migrant networks of communication and urban support, artels, buying or forging documents—in order to move to areas of greater economic opportunity.<sup>365</sup>

Migration to Baku in the era of the early Five-Year Plans differed from that of the pre-revolutionary era in terms of rapidity and volume, and in that far more migrants were Azerbaijanis of rural origin. Pushed by collectivization and pulled by the new jobs offered in industrial centers, tens of millions of peasants throughout the USSR made the decision to leave once relatively stable agricultural livelihoods for the uncertain promises of urban-industrial wage labor. The Sovietization of life in Baku offered an additional challenge to rural-urban migrants, demanding adaptation to a Tayloristic work tempo, the ideological scrutiny of peers and officials, and the imposition of alien politics and culture. The Five-Year Plans demanded more of the oil industry's entire workforce, but most

-

<sup>&</sup>lt;sup>365</sup> David L. Hoffman, "Moving to Moscow: Patterns of Peasant In-Migration during the First Five-Year Plan," *Slavic Review* Vol. 50, No. 4 (Winter 1991): 857. Siegelbaum and Moch would describe this as the incongruence that often existed between state "regimes" of migration and individual migrants "repertoires" of migration in twentieth-century Russia and the Soviet Union. Each side had its own imperatives, the state wishing to compel migration to underpopulated and underdeveloped areas and keep peasants where they were needed, while migrants made individual decisions that seemed most likely to benefit themselves and their families. Siegelbaum and Moch, 5-6.

especially of peasants who were encountering for the first time the industrial aspirations of the revolution.

In addition to this increase in migration from the rural regions of Azerbaijan was continued labor migration from Russia. Migration from Russia to the Baku oil industry was a long-established pattern that continued well into the Soviet era. Nearly all Russian migrants to Transcaucasia after 1897 settled in urban centers, a large number traveling specifically to Baku in order to work in its oil industry. The influx of Russians spiked at the end of the nineteenth century and during the years of the First Five-Year Plan, with outflows from the onset of World War I until the early 1920s, indicating that Russian nationals migrated to Baku when the industry was expanding and more work was available, and tended to depart in large numbers otherwise. The 1926 and 1939 censuses show a distinct increase in the Russian population in Baku. In 1926, Azerbaijanis, who made up 62% of the total population of the Azerbaijan SSR, accounted for just 37% of the urban population. Russians, who made up 9.5% of the AzSSR population, constituted 25-27% of its urban population, and 35-37% of the population of Baku. 367 By 1939, the Russian population of the republic had grown to 16.5% of the

<sup>&</sup>lt;sup>366</sup> Pipes, 58, 63.

<sup>367</sup> Both censuses reveal that, other than those identifying as Azerbaijani and Russian, the remaining 30 percent or so of Baku's population was a very diverse group. Large numbers came from other Soviet republics, especially Georgia, Armenia, and Ukraine. Victor Kozlov, *The Peoples of the Soviet Union* (Bloomington: Indiana University Press, 1988), 59; Audrey L. Alstadt, *The Politics of Culture in Soviet Azerbaijan, 1920-1940* (London and New York: Routledge, 2016), 166; Vsesoiuznaia perepis naseleniia 1926 goda, Natsionalnyi sostav naseleniia po regionam respublik SSSR, http://demoscope.ru/weekly/ssp/sng\_nac\_26.php?reg=2278.

overall population, and around 30% of the urban population.<sup>368</sup> In total, between 1926 and 1939, the Russian population of Azerbaijan grew by 307,000, 78% of whom were migrants.<sup>369</sup>

The vastness and diversity of the Soviet Union made internal migration often a very different experience than that in most other modern states; a Belorussian migrating to Kazakhstan arrived in an utterly foreign environment without ever having crossed international borders. Siegelbaum and Moch term this "transnationalism in one country."<sup>370</sup> However, the extremity of the transition for Russians migrating to Baku should not be overstated. A large number of Russians coming to Baku were already experienced industrial wage laborers, not peasants, entering another Russianized industrial community, often to ply the same trade, or one similar, that had employed them previously.<sup>371</sup> It is apparent that Russians traveling to Baku in this period were far less likely than Azerbaijani migrants to be entering unskilled positions. Census data indicate that migrants to Transcaucasia came primarily from central Russia, especially the Central

<sup>&</sup>lt;sup>368</sup> Vsesoiuznaia perepis naseleniia 1939 goda, Natsionalnyi sostav naseleniia po respublikam SSSR, http://demoscope.ru/weekly/ssp/sng\_nac\_39.php?reg=5; Vsesoiuznaia perepis naseleniia 1939 g., Raspredelenie gorodskogo i selskogo naseleniia SSSR i soiuznykh respublik po natsionalnosti i polu, http://demoscope.ru/weekly/ssp/sng\_nac\_39\_gs.php?reg=4&gor=1&Submit=OK.

In the same time period, 224,000 Russians migrated to Georgia, and 30,000 to Armenia. Pipes, 56. Lorimer cites somewhat different figures for Russian migration to the three republics, 1926-1939: 232,000 to Azerbaijan, 206,000 to Georgia, and 80,000 to Armenia. Lorimer, 169. The Azerbaijan SSR was clearly the most Russianized of the three Transcaucasian republics during this period; in 1926, 9.5% of its population was Russian, compared to 4% in Georgia and 2% in Armenia. However, the Transcaucasian republics were far from the most Russianized in the Soviet Union. Census. Kozlov, 63-64; Robert A. Lewis, Richard H. Rowland, and Ralph S. Clem, *Nationality and Population Change in Russia and the USSR: An Evaluation of Census Data, 1897-1970* (New York: Praeger Publishers, 1976), 149.

<sup>&</sup>lt;sup>370</sup> Siegelbaum and Moch, 388.

<sup>&</sup>lt;sup>371</sup>ARDA, f. 2914, op. 1, d. 835.

Industrial, Central Chernozem, and Volga regions, and the North Caucasus.<sup>372</sup> It is likely that many did come from peasant backgrounds, but attracting Russian workers of any kind to Baku was made less challenging because a large Russian community already existed there; a constant feature of migration in any era is reliance on preexisting networks and community ties.<sup>373</sup>

Migration from Russia had the effect of perpetuating the Russification of Baku in spite of Moscow's program to promote non-Russian national minorities within the Soviet Union. This effort, known as *korenizatsiia* (indigenization, lit. "putting down roots"), was a reaction to the "Great Russian chauvinism" of the country's imperial past, and was meant to advance, in the case of Azerbaijan, Azerbaijani culture, leaders, institutions, language, and so on. The Baku industrial community clearly demonstrates a major limitation of this program, in which, per Terry Martin's terminology, the Soviet state's "soft-line" policy of korenizatsiia ran up against its "hard line" of industrialization. The requirements of the latter were invariably privileged. 374 Although clearly some effort was made to promote Azerbaijani culture and officials in Baku and the AzSSR, within the oil industry itself korenizatsiia was irregularly implemented.

Baku of the 1930s represents a particularly striking case of the challenges facing the Soviet nationalities policy. As one of the oldest industrial centers in the Soviet Union, there existed in Baku long-established Russian districts, Russia-centric modes of

<sup>372</sup> Vsesoiuznaia perepis naseleniia 1926 g., Naseleniia nemestnykh urozhentsev v respublikakh, raionakh, ASSR i kraiakh SSSR po mestu rozhdeniia (http://demoscope.ru/weekly/ssp/rus\_nemes\_26.php?reg=28).

<sup>&</sup>lt;sup>373</sup> Kozlov, 55-56.

Kozlov, 55-56

<sup>&</sup>lt;sup>374</sup> Terry Martin, *The Affirmative Action Empire: Nations and Nationalism in the Soviet Union, 1923-1939* (Ithaca: Cornell University Press, 2001), 21-22.

industrial and urban administration, and paths of migration from Russia. Until the institution of the nationalities policy, Russian dominance had not represented an ideological dilemma. In the late 1920s, at a time when Soviet authorities were most loudly asserting their commitment to a fair nationalities policy, Russian migrants poured into Baku in their greatest numbers, disproportionately occupying positions as skilled laborers, managers, city and state officials, and students. Authorities made meager efforts to promote Azerbaijani culture and language, but Russian remained the language of industry. Ultimately, non-Azerbaijani people continued to rise to the top of the Baku oil industry, one of the Soviet Union's most precious industrial regions. Because the oil industry appeared vital to the success of the Soviet industrial project, Soviet leaders were unwilling to leave it in the hands of indigenous workers and administrators seen as less competent than Russians. Although Soviet authorities did organize attempts at de-Russification in the Baku region and Azerbaijan more broadly, only the more superficial programs were implemented to any meaningful degree.

The oil industry, crucially important to the Soviet state, was the realm in Baku that remained most dominated by Russians in the era of the First Five-Year Plan, even as the workforce swelled with new recruits of all backgrounds. Despite the increased rate of rural-urban migration, native Azerbaijanis remained a minority in the unskilled and especially the skilled labor forces of the Baku oil industry. In October of 1924, native Azerbaijanis made up just 10.5% of workers. Russians comprised 40%, Iranian Azerbaijanis 21.5%, and Armenians 17%.<sup>375</sup> Seven years later the balance had somewhat improved; at the first Transcaucasian Meeting of Workers of the Oil Industry of the

<sup>375</sup> Altstadt, *Politics of Culture*, 78.

USSR, held in Baku in April 1931, Azerbaijanis made up 39% of the delegates in attendance.<sup>376</sup> This change in the balance of the workforce may have been due in part to increased promotion of Azerbaijanis under the nationalities policy, but the larger part likely resulted from the flood of local rural-urban migration during the First Five-Year Plan. A combination of prejudice and a genuine lack of skilled and experienced native workers and officials led to the marginalization of non-Russians.<sup>377</sup> According to the Party line, Azerbaijan, having suffered exploitation and poor economic development prior to the Bolshevik takeover, required the aid of the more experienced Russian proletariat.<sup>378</sup>

Accordingly, positions of leadership in the city and industry were also largely filled by Russians. Essential to the progress of this particular industrial community was increasing the number of state officials, managers, technicians, and other authority figures ("career migrants"), many of whom had benefited from better opportunities for social mobility under Stalin.<sup>379</sup> State planning extended to the assignment of officials and specialists where they were needed. As in the tsarist era, the leadership of the oil industry remained distinctly, although not exclusively, Russian.<sup>380</sup> Serebrovskii, who headed Azneft from 1920 to 1926, and his immediate successor were both Russian. The latter,

<sup>&</sup>lt;sup>376</sup> ARDA f. 2914, op. 1, d. 34, l. 91.

<sup>&</sup>lt;sup>377</sup> Kozlov, 55-56.

<sup>&</sup>lt;sup>378</sup> Altstadt, *Politics of Culture*, 44-45.

<sup>&</sup>lt;sup>379</sup> See Sheila Fitzpatrick, "Stalin and the Making of a New Elite, 1928-1939," *Slavic Review* Vol. 38, No. 3 (September 1979), 377-402.

<sup>&</sup>lt;sup>380</sup> Altstadt, *Politics of Culture*, 78.

according to one Harvard Project interviewee, was known anecdotally to discriminate against Azerbaijanis in hiring, for which he was fired in 1933 or 1934.<sup>381</sup> The same respondent also felt that Russians tended to take most of the administrative posts at factories, in part because they were more likely to be experienced specialists.<sup>382</sup> In addition to the specialist cadres needed for industrial development, Baku received many more state officials as it grew into a major administrative center of the region. Another Harvard Project respondent observed that, although many "executive" and rural posts had been given to native Azerbaijanis by the 1930s, the Baku soviet was still made up largely of Russians and "other foreigners" (likely referring to Armenians), and positions such as the chairmen of education, culture, and the city council, as well as many deputies to the Baku soviet from important factories, were held by Russians.<sup>383</sup>

The number of non-Russians trained as specialists was simply not sufficient, it seemed, and training new personnel could not keep up with the demands of developing industry. This situation resulted from both the over-promotion of Russians and the lack of educational opportunities for Azerbaijanis that remained in this period. The imperative to educate new cadres of technical specialists that accompanied the industrialization and modernization drive tended to favor Russians, even at institutions in Baku. According to

<sup>&</sup>lt;sup>381</sup> Harvard Project on the Soviet Social System (http://hcl.harvard.edu/collections/hpsss/index.html), Schedule B, Vol. 8, Case 346, 2. The results of the Harvard Project interviews can be useful providing that one keeps in mind the context in which they were conducted. The interviews were sponsored by US federal agencies in 1950, at the height of the Cold War, and respondents had fled or been displaced from the USSR during World War II. These two factors would seem to increase the likelihood of responses particularly prejudiced against the Soviet system.

<sup>&</sup>lt;sup>382</sup> Ibid., 3.

<sup>&</sup>lt;sup>383</sup> Harvard Project, Schedule B, Vol. 7, Case 24, 25.

<sup>&</sup>lt;sup>384</sup> Kozlov, 55-56.

the Commissariat of Enlightenment, from 1927 to 1932 the number of students in Azerbaijan more than doubled, with factory schools showing among the largest increases. Students at lower-level schools were likely to be locals, but those at institutions of higher education were often migrants who had traveled to Baku specifically in order to attend the growing number of technical institutions recently founded there, or members of recently-migrated families. In November 1920, the Baku Polytechnic Institute opened, the first institute in Eurasia specifically intended to train engineers in fields related to the oil industry. At some point in the 1920s, it was seized by Azneft's Union of Miners, becoming the Red Banner Oil Institute in 1929-30. It continued to emphasize disciplines related to oil production and refining. The Azerbaijan Scientific Research Institute on Oil Processing opened in October 1929, and in 1931, the Azerbaijan Scientific Research and Project Institute of Oil Machine Building was established.

Nevertheless, technical education among native Azerbaijanis was rather slow to develop, as the system seemed to privilege Russian students. Quotas for incoming students according to social category proved disadvantageous for native Azerbaijanis—at most institutions in the late 1920s and early 1930s, about half of incoming students were supposed to be of worker background (at the Oil Institute it was 75%). Native

<sup>385</sup> Altstadt, Politics of Culture, 118, 121.

<sup>&</sup>lt;sup>386</sup> Mir-Babayev, Kratkaia khronologiia, 204.

<sup>&</sup>lt;sup>387</sup> Altstadt, *Politics of Culture*, 145. Several name-changes and reorganizations later, this institute exists today as the Azerbaijan State Oil and Industrial University.

<sup>&</sup>lt;sup>388</sup> Mir-Babayev, *Kratkaia khronologiia*, 236-237.

Azerbaijanis had long been a minority in their own industrial workforce, so many did not qualify.<sup>389</sup> Although many educational institutions held classes in the Azerbaijani language, and efforts were made to admit more Azerbaijani students into institutions of higher education, by the late 1920s fields associated with science and technology, especially those related to the oil industry, remained heavily Russified. A Harvard Project interviewee who attended school in Azerbaijan in the early 1930s opined that Russians took more of the positions in technical (what we today term "STEM") fields in educational institutions, and occupied a disproportionate number of university jobs of any kind. 390 According to mixed reports from various other Harvard Project interviewees, the number of Azerbaijani and Russian instructors at schools of various levels seems to have differed quite a lot from institution to institution.<sup>391</sup> Yet another respondent, who entered the Azerbaijan Oil Institute in 1933 after finishing tekhnikum, felt that Azerbaijanis had the same opportunity as Russians to secure decent positions in their chosen fields, with some exceptions, namely the oil industry. <sup>392</sup> For many students in this era, their schooling represented an introduction to the priorities and values of the Soviet regime. In 1928, one Harvard Project respondent reported, "the Soviets began to introduce new Proletarian culture."393

<sup>389</sup> Altstadt, Politics of Culture, 161.

<sup>&</sup>lt;sup>390</sup> Harvard Project, Schedule B, Vol. 7, Case 24, 10.

<sup>&</sup>lt;sup>391</sup> Harvard Project, Schedule B, Vol. 7, Case 89, 6; Schedule B, Vol. 8, Case 346; Schedule B, Vol. 7, Case 24, 25 Schedule B, Vol. 5, Case 427.

<sup>&</sup>lt;sup>392</sup> Harvard Project, Schedule B, Vol. 8, Case 346, 2.

<sup>&</sup>lt;sup>393</sup> Harvard Project, Schedule B, Vol. 7, Case 24, 32.

Thus, although the First Five-Year Plan demanded more of the oil industry's entire workforce, it was most challenging to peasants who were encountering for the first time the industrial and other aspirations of the Russian Revolution. For instance, there were some endeavors to introduce more of the Azerbaijani language into Baku daily life, but Russian could not be uprooted. While residents saw more billboards and public signage in Azerbaijani, telephone, postal, and medical services continued to operate largely in Russian.<sup>394</sup> The Russian language, which remained the *lingua franca* for the entire Soviet era, and certain Russian traditions continued to provide a "cementing bond" for social life and industrial progress, and served to lure more Russians into the oil industry's workforce. <sup>395</sup> Notably, stenographic reports of a number of oil workers' meetings at this time included full accounts only of the speeches given in Russian, inserting merely "in Turkish" (viz., Azerbaijani) when an Azerbaijani attendee spoke. 396 Attempting to translate constantly between the two languages created time lags, misunderstandings, and other inefficiencies that were viewed as unacceptable.<sup>397</sup> The transition from the countryside to the industrial community of Baku was made only more difficult by migrants' poor knowledge of the Russian language, which was often necessary to move beyond basic, unskilled work and to integrate fully into urban life.

<sup>&</sup>lt;sup>394</sup> Tadeusz Swietochowski, "Baku—The Oil City and Its People," in *Memories of Baku*, ed. Nicolas V. Iljine (Seattle: Marquand Books, 2013), 112.

<sup>&</sup>lt;sup>395</sup> Lubomyr Hadja, "Ethnic Politics and Ethnic Conflict in the USSR and the Post-Soviet States," *Humboldt Journal of Social Relations* 19, No. 2 (1993): 193-278. Baberowski notes that many Russian women migrated to Baku in the 1920s and 1930s to serve as telephone switchboard operators, as the service was entirely in Russian. Baberowski, *Vrag est vezde*, 319.

<sup>&</sup>lt;sup>396</sup> For example, see ARDA f. 2914, op. 1, d. 971, l. 122, 1280b (All-Baku Kultkonferentsiia Union of Oilworkers, January 23, 1932).

<sup>&</sup>lt;sup>397</sup> Baberowski, *Vrag est vezde*, 325.

Azerbaijanis who wished to advance, especially in technical fields, were virtually obligated to learn Russian. At every level those who better adapted to the Russified environment were more likely to succeed.

Although the industrial infrastructure was better developed in the Baku region than in some other industrializing areas of the USSR, this rapid influx of peasant workers overwhelmed the industrial community. Despite an excess of laborers, industries everywhere experienced labor shortages, in part due to the inability of labor-allotment authorities to adjust to the new conditions. <sup>398</sup> The workers entering the industrial workforce during the early Five-Year Plans tended to be inexperienced and less able to make the transition to permanent wage-labor successfully. The promotion of shockworkers (udarniki) created a culture of work discipline that encouraged workers to push themselves to their limits in order to meet plan goals. There was a high rate of turnover, which Stalin blamed on the lack of work incentive that the "Leftist' practice of wage equalization" created. <sup>399</sup> Peasant laborers' lingering ties to the countryside may also have provided an escape route from urban industrial life. In fact, in part due to rapid turnover, the overall number of workers employed by Azneft remained fairly stable even during the plan years. According to figures reported in Soviet sources, the Soviet oil industry in any given year between 1928 and 1932 employed 50-55,000 workers, about half of whom worked for Azneft. 400 Igolkin notes that the number of workers and other employees in the oil industry grew more slowly than in other industries of the USSR during this time

<sup>&</sup>lt;sup>398</sup> Fitzpatrick, 21.

<sup>&</sup>lt;sup>399</sup> Joseph Stalin, *Problems of Leninism* (Peking: Foreign Languages Press, 1976), 463.

<sup>&</sup>lt;sup>400</sup> Igolkin, *Neftianaia politika*, 156-157. ARDA f. 2914, op. 1, d. 34, l. 91.

also due to the technological advances that the regime had eagerly begun to apply, which required increasingly less manual labor, but more training.<sup>401</sup>

The oil industry in particular tended to favor stable, trained workers. Most oil workers who received awards or special recognition for their labor had been working in the oil industry for a number of years before the beginning of the First Five-Year Plan; in lists of distinguished workers, recently-hired former peasants are rare. The most common reason given for accolades was contribution toward fulfilling the First Five-Year Plan in two and a half years. 402 Tikhon Aleksandrovich Mikhelev, a long-time mechanic at the Ordzhonikidze plant in Baku, received the Order of Lenin for his enthusiastic work toward early fulfillment of the First Five-Year Plan, an honor that many other laborers of Azneft received in 1932. 403 Semen Vasilievich Parfenov, another worker in the mechanics' section at the Ordzhonikidze plant, received between 100 and 300 rubles for each of his useful "labor rationalizing suggestions." 404 Georgii Aleksandrovich Liubimov, an engineer of peasant origin who had been employed in the oil industry since 1923, was awarded the Order of the Red Banner of Labor for his innovation of several drilling-related devices.

<sup>&</sup>lt;sup>401</sup> Igolkin, *Neftianaia politika*, 156-157.

<sup>&</sup>lt;sup>402</sup> ARDA f. 2914, op. 1, d. 835. This folder is almost entirely devoted to lists of workers who received awards and distinctions; the great majority have Russian names.

<sup>&</sup>lt;sup>403</sup> ARDA f. 2914, op. 1, d. 835, l. 21.

<sup>&</sup>lt;sup>404</sup> Ibid., 1, 24.

<sup>&</sup>lt;sup>405</sup> Ibid., 1.27.

As in many other heavy industries growing during the First Five-Year Plan, the Baku oil industry experienced persistent issues with labor discipline. 406 At a March 1931 meeting of oil workers, after sitting through an exhaustive rundown of the status of the Baku-Batumi crude oil pipeline and description of the cracking plants and other installations pioneered in recent years, attendees voiced their grievances about the masses of underqualified and poorly educated workers in their ranks, which interfered with productivity and sapped morale. 407 Similar complaints were heard at the Baku General Cultural Conference of the Union of Oil Workers in January of 1932; speakers claimed that 80% of union workers were "politically illiterate," blaming a lack of "Turkic"language literature in local libraries and qualified cadres, and the inactivity of cultural workers. Questionnaires answered by an apparently random selection of the Surakhani club visitors indicate that most did not use the club's resources because they simply had to work too much, were occupied with looking after their children, or lived too far away. Many made time for it only when movies or theater performances were put on. One Comrade Kikava stated that the recent series of "breaches of work discipline, disruptions of productive work, and various abnormalities and insufficiencies" ought to be corrected through education, that is, attending more courses, seminars, and discussion circles. 408

The effects of Soviet antireligious policies in Baku workplaces are still somewhat unclear from my research. Like any number of other ethnic groups in the Soviet Union,

<sup>&</sup>lt;sup>406</sup> Fitzpatrick, 28. See also Donald Filtzer, "Labor Discipline, the Use of Work Time, and the Decline of the Soviet System, 1928-1991," *International Labor and Working-Class History* No. 50 (Fall 1996): 9-28.

<sup>&</sup>lt;sup>407</sup> ARDA f. 2914, op. 1, d. 22, l. 3, 24.

<sup>&</sup>lt;sup>408</sup> ARDA f. 2914, op. 1, d. 971, l. 1-27, 137-138, 171-171ob, 173.

Azerbaijani identity by the early twentieth century was tied closely to religion. The Soviet regime would hardly have tolerated Muslim practices such as prayer breaks and the practice of fasting during Ramadan, which not only represented unacceptable public expressions of religious belief, but also had potential to interfere with Soviet work schedules. Local authorities were actively implementing the regime's antireligious campaign in the 1920s and 1930s, including regular antireligious seminars in community programming. Extrapolating from the results of the antireligious campaign elsewhere in the Soviet Union, it seems likely that older Azerbaijani workers resented the policy and continued religious practices in secret, remaining Muslims at heart. There were limits to the enforcement of antireligious policies in the home. However, decades of secularization had their effect on successive generations—Azerbaijan is currently among the least religious countries in the Muslim world. 410

The ethnic dimensions of work discipline and complaints regarding a lack of it are complex. Some Soviet adherents seemed to have taken the nationalities policy quite seriously, and one Harvard Project respondent noted that as a factory worker he had never experienced conflict with other workers "on national grounds." In contrast, other reports seem to indicate tension especially in educational institutions related to the oil industry. Overall, however, no overt interethnic violence took place between Baku Armenians, Azerbaijanis, and Russians until the end of the Soviet era.

\_\_

<sup>409 &</sup>quot;Spravochnyi otdel," Bakinskii Rabochii, January 1, 1930, 4.

<sup>&</sup>lt;sup>410</sup> Azerbaijan's national revival in the post-Soviet period has involved greater emphasis on the country's Muslim identity, but regular practice remains low in the general population. Dobroslawa Wiktor-Mach, "Measuring Muslims: The Problems of Religiosity and Intra-Religious Diversity," *Annual Review of the Sociology of Religion* 3 (2012): 220.

<sup>&</sup>lt;sup>411</sup> Harvard Project, Schedule B, Vol. 8, Case 346, 3.

# Baku's Post-First Five-Year Plan Decline

The population trends that the First Five-Year Plan initiated continued to some degree during the Second and Third Five-Year plans, but with a few key differences. Crucially, in December 1932, the state introduced an internal passport system that restricted migration throughout the Soviet Union. As it related to industrial expansion, mass rural-urban migration again caused housing problems, a high rate of labor turnover, and poor discipline. In addition, in 1932-33 many parts of the western Soviet Union experienced a terrible famine, causing peasants to flee the countryside, which authorities wished stop. Passports were issued by the Commissariat of Internal Affairs primarily to urban residents; without a passport, a person was not permitted to reside in a city, and peasants were rarely issued passports. Workers at the leading industrial enterprises received passports first, and in February 1933 the passport system extended to Baku. 412 Throughout 1933, peasants and other undesirables were forced from the city and arrested. Peasant migration to Baku stalled for a few years; eventually, peasants again found their way to the city, legally and not, but never in the numbers seen during the First Five-Year Plan.

For reasons likely unconnected to the passport system, oil output began to level off in the mid- to late 1930s, despite greater capital investment from the state. The period of the First Five-Year Plan was in many ways the biggest peak for the Baku oil industry between the turn-of-the-century "boom" and the industry's revival in the 1990s. In terms of population growth, urban development, oil and gas production, and technological innovation, the years 1928-1932 were unparalleled in the Soviet era. However, oil

412 Fitzpatrick, 30-31.

production had begun to level off even before the end of the plan. Indeed, output for 1932 and 1933 fell behind that for 1931 by about a million tons each year, only recovering in 1934, under the Second Five-Year Plan (1933-1937). The results of the Second Five-Year Plan were rather disappointing—the Soviet oil industry on the whole received an investment of 2.5 billion rubles in the years of the second plan, more than doubling investment during the first plan, but by 1937 it was producing just 27.1 million tons of oil per year, falling far short of the expected 68.1 million tons. The Third Five-Year Plan (1938-1942), cut short by the onset of World War II, saw slightly better results.

It is most likely that this leveling off was the cost of the rapid industrial expansion of the previous years. In order to meet and exceed the quotas stipulated by the First Five-Year Plan, hasty and sometimes inexpert methods of extraction were employed, which appears to have had a negative effect on the long-term potential output of known oil reservoirs. As Peter Maass notes in *Crude World*, extracting oil too quickly from an oil reservoir or using incorrect recovery methods can permanently limit the quantity of oil that the reservoir can produce. 416

Intertwined with declining production was a wave of purges in the oil industry leadership, concomitant with upper-level purges across the country. During the turn against the political left, authorities targeted planners who had set inflated quotas for the

<sup>&</sup>lt;sup>413</sup> Ebel, Communist Trade, 20.

<sup>&</sup>lt;sup>414</sup> Abrahamson, 270; "Enclosure C, Secret, Comments on Ministry Supply Letter," in *Oil Resources in Eastern Europe and the Caucasus: British Documents, 1885-1978. Volume 4, 1939-1945*, ed. A.L.P. Burdett (Cambridge: Cambridge University Press, 2012), 139.

<sup>&</sup>lt;sup>415</sup> Igolkin, *Neftianaia politika*, 33.

<sup>&</sup>lt;sup>416</sup> Peter Maass, Crude World: The Violent Twilight of Oil (New York: Alfred A. Knopf, 2009), 16-17.

oil industry in previous years, notably L. K. Ramzin, an Armenian engineer who ultimately carried the responsibility for the extremely inflated production goal for 1932 (an increase from 22 million tons in 1931 to 40-55 million tons in 1932). For this "maximalist planning," Ramzin was made chief defendant in a show trial of industrial leaders, convicted, and sentenced to death (commuted to 10 years imprisonment).<sup>417</sup>

The state's increasing devotion to oil fields elsewhere in the Soviet Union gradually diverted its attention from improvement of Baku oil production. One reason for the development of oil fields elsewhere was the geographical vulnerability of the Caucasus to military action. Alk Although the Caucasus did continue to provide the vast majority of crude oil until after World War II, in the postwar years the "Second Baku," in the Volga-Urals region, and the "Third Baku," in the West Siberian basin, were prioritized for development. Azerbaijan's share of state investment in the oil industry fell from about 55% in the 1928/29 fiscal year to 33% in 1938, and continued to decrease thereafter. The region remained an important oil center, and continued to provide much of the oil equipment and many of the specialists for the development of the oil industry elsewhere in the Soviet Union (as discussed in chapter seven), but the Baku oil industry itself never regained the significance it had had during the First Five-Year Plan and before.

<sup>&</sup>lt;sup>417</sup> Hiroaki Kuromiya, *Stalin's Industrial Revolution: Politics and Workers, 1928-1932* (Cambridge: Cambridge University Press, 1988), 142-143. Ramzin ultimately served only a few years of this sentence, and until his death in 1948 continued to make significant contributions to Soviet science.

<sup>&</sup>lt;sup>418</sup> Ebel, Communist Trade, 24.

<sup>&</sup>lt;sup>419</sup> Owen, 1382.

<sup>&</sup>lt;sup>420</sup> Igolkin, Neftianaia politika, 135.

### Conclusion

During the early Five-Year Plan era, the metamorphosis of the Baku industrial community (or series of communities) was shaped by a confluence of the Soviet state's modernizing agenda, the habits and preferences of labor migrants, and the practical limitations of crash industrialization. Due to state prompting and their own ambitions, large numbers of workers from across the Soviet Union made their way to Baku, further upsetting and remaking the city. Idealistic Soviet planning clashed with the realities of the oil industry and its personnel, resulting in a muddle of innovation and decrepitude, calculation and improvisation, order and chaos. Regardless of the plateau and moderate decline of oil production and state investment, the Baku oil industry continued as the Soviet Union's primary oil center for the remainder of the 1930s. As described in chapter six, Baku's material contributions to the Soviet effort during World War II were immense, including eighty to ninety percent of all fuels used by Soviet forces. The rapid buildup of industry during the early Five-Year Plans had had the intended effect: Baku was prepared to meet the country's fuel needs in case of war. The value imbued in Baku during the 1930s, however, made it a tempting target for the Soviet Union's enemies.

#### CHAPTER VI

### BAKU DURING WORLD WAR II

Though perhaps a platitudinous contention it is presumed that if we are at war with Russia it is our intention to hit her most vulnerable and vital spots and it appears to me that without question the oil supply organization in [the] Caucasus is one of the first and most profitable objectives which should receive attention of [the] Allies. If it can be attacked from the very first outset of the war with Russia even its partial destruction must have [a] far-reaching effect on the ability of the Soviet and indirectly the Germans to continue the war.

—HQ RAF Middle East to Air Ministry (1940)<sup>421</sup>

During the period between the Soviet takeover of Baku, Azerbaijan, in 1920 and the onset of World War II in 1939, the Soviet regime built the Baku oil industry into the country's single largest producer of oil. The industry's importance to the Soviet Union is indicated not only by the resources that the regime directed toward it during World War II, but also by the targeting of the Baku oil industry by the Soviet Union's wartime enemies: initially by the Allied Powers, and then by the Axis Powers. The attention given to the Baku region during World War II adds to our understanding of wartime strategy motivated by the fueling needs of modern militaries. In addition, the unprecedented demand for fossil fuels during the war shifted major powers' approaches to satisfying their need for oil; specifically, it was during World War II that Soviet authorities were forced to contend with the vulnerability of energy resources concentrated in Baku, prompting urgent attention to the diversification of oil production in the country, as addressed in the next chapter. Although the enemy never reached Baku, the threats to it

<sup>&</sup>lt;sup>421</sup> "HQ RAF Middle East to Air Ministry," in *Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978, Volume 4, 1939-1945*, edited by A.L.P. Burdett (Cambridge: Cambridge University Press, 2012), 174.

and pressures placed upon it speak to oil's power to shape grander wartime strategy in this period.

The Soviet Union's enemies during the war were aware that the country's oil industry was concentrated almost entirely in the Caucasus; 70% or more of Soviet crude oil came from Baku, 20% from Groznii and Maikop in the North Caucasus, and the rest from other sites in the northern Caspian region. Refined oil came almost entirely from the same regions. The Baku oil industry itself was uniquely compact, with refineries and other infrastructure tightly packed into an area of just a few square miles. Further, transportation of oil and other products from Baku to the central Soviet Union or the warfront was limited to just a few rail and sea routes. It was a tempting target for those who wanted to undermine the Soviet war effort, deny the Soviet allies a major source of new oil, or control the source of oil for themselves.

During the first stage of the war, when the Soviet Union remained allied with Germany, Britain and France jointly investigated the possibility of destroying the Baku oil industry and its transportation routes via an aerial bombing campaign. The aim was to remove the Soviet Union from the war and to prevent it from sending oil to Germany. Following the German invasion of the Soviet Union in June 1941, which caused the Soviets to join the Allied Powers, Hitler set his sights on Baku as a source of fuel to carry

<sup>&</sup>lt;sup>422</sup> "Note on Vulnerability of Russian Oil Supplies," in *Oil Resources, Volume 4*, 142-143, 148.

<sup>&</sup>lt;sup>423</sup> "Record of Conversation between Plans 2 and Mr. Makhimoff," in Oil Resources, Volume 4, 178.

<sup>424 &</sup>quot;Comments on Ministry of Supply Letters," in Oil Resources, Volume 4, 138-139.

<sup>&</sup>lt;sup>425</sup> "Secret cypher message No. X.39 from HQ RAF Middle East, to Air Ministry, 21 February 1940," in *Oil Resources, Volume 4*, 174.

on his war effort. Axis forces headed toward southern Russia and the Caucasus but were ultimately diverted from seizing Baku after stalling at the Battle of Stalingrad.

During World War II, the convergence of international attention on oil as a strategic resource and Baku's difficult geographical position placed new pressure on the industry and city. Caught in the accelerating pace of Soviet war preparation, Baku responded by increasing oil production and turning to weapons manufacturing, all while preparing for possible aerial bombardment by the British and French. As the war wore on, and German invasion seemed imminent, the Baku oil industry deteriorated under the new pressures, a disheartening turn for its hardworking residents. Ultimately, Baku proved too vulnerable in wartime, setting the stage for the relocation of Soviet oil production in the postwar years.

# British Targeting of the Baku Oil Industry, 1939-1941

In the first years of World War II, the Allies turned their attention to the possibility of destroying the Baku oil industry in case of an open war with the Soviet Union, and to halt its supplying Germany with oil products. The British War Cabinet had named Baku a high-priority bombing target by October of 1939. Of the three major oil centers in Transcaucasia, Baku was the most important (the others being Groznii and Maikop). Ale In addition to producing the vast majority of crude oil, Baku also produced about 45% of all refined oil products for the country, as well as being a crucial source of

<sup>&</sup>lt;sup>426</sup> "Letter from the Ministry of Supply to the Secretary of State for Foreign Affairs, 31 October 1939," in *Oil Resources, Volume 4*, 132.

crude for the other primary refining centers of Groznii, Batumi, and Tuapse. 427 The British Ministry of Supply believed that the annihilation of Russian sources of oil "might have an immense deterrent effect," harming the Soviet war effort and that of its allies. 428 Due to the Allied blockade in the Atlantic, and the difficulty of transporting oil from Pacific ports to the Soviet Union's oil-needy locations, the loss of its primary domestic oil-producing centers could not be compensated for by imports. 429 It would remove the "carburetor" of the Soviet Union's "whole mechanized scheme," and "must sooner or later to the complete collapse of the war potential of the U.S.S.R.," an outcome "disastrous for Germany as well."

Furthermore, one result of the intensive industrialization and mechanization campaign of the first two decades of the Soviet era was the country's heavy reliance on fossil fuels by the eve of World War II. The military certainly needed fuels and lubricants for its ever-larger fleet of vehicles, but the country's agricultural sector was by that point similarly dependent on millions of tons of oil and gasoline per year to feed the trucks, tractors, and other machinery that most collectivized farms used, the era of horse-drawn

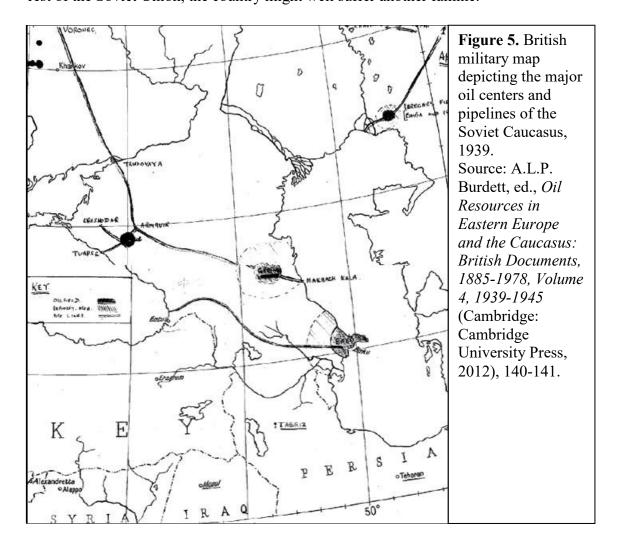
<sup>&</sup>lt;sup>427</sup> "Russia: Production and Distribution of Oil," in *Oil Resources*, 156; "Comments on Ministry of Supply Letter," in *Oil Resources, Volume 4*, 137.

<sup>428 &</sup>quot;Letter from the Ministry of Supply," 132.

<sup>&</sup>lt;sup>429</sup> "An Air Offensive Against the Russian Oil Industry," in *Oil Resources, Volume 4*, 200-201.

<sup>&</sup>lt;sup>430</sup> "Letter from the Ministry of Supply," 133; "RAF to Air Ministry Iraq," in *Oil Resources, Volume 4*, 174; "An Air Offensive Against the Russian Oil Industry," 201.

transport long in the past. If the oil industry were destroyed or at least cut off from the rest of the Soviet Union, the country might well suffer another famine.<sup>431</sup>



Furthermore, one result of the intensive industrialization and mechanization campaign of the first two decades of the Soviet era was the country's heavy reliance on

<sup>&</sup>lt;sup>431</sup> British military strategists were uncertain of how a famine might affect the USSR's war potential, reckoning that the dictatorial government might not be concerned about the welfare of anyone not involved with the war effort, and that perhaps the food shortage would strengthen the regime, "as happened in the famine of 1920/21, when the people soon learnt that only the staunchest supporters of the Party were able to obtain bread)." "An Air Offensive Against the Russian Oil Industry," in *Oil Resources, Volume 4*, 206; "Letter from the Ministry of Economic Warfare," 136; "Air Ministry minute, 28 March 1940, detailing Russian oil needs," in *Oil Resources, Volume 4*, 192-193.

fossil fuels by the eve of World War II. The military certainly needed fuels and lubricants for its ever-larger fleet of vehicles, but the country's agricultural sector was by that point similarly dependent on millions of tons of oil and gasoline per year to feed the trucks, tractors, and other machinery that most collectivized farms used, the era of horse-drawn transport long in the past. If the oil industry were destroyed or at least cut off from the rest of the Soviet Union, the country might well suffer another famine. 432

The British were also concerned to undermine the German war effort by denying them access to Soviet oil, which Stalin supplied to Germany in limited amounts before the German invasion of June 1941. 433 Before that event, the two sides had worked together on the fuel issue. Between August 1939 and June 1941, when the Germans had ever-increasing fuel needs, the Soviet Union delivered about 725,000 tons of oil to Germany. 434 This was a minor amount relative to the overall Soviet production of oil (the Soviet Union was then producing roughly 30 million tons of oil per year), but the Allies kept in mind that it could increase.<sup>435</sup>

The challenges in conducting an aerial bombing campaign against Baku were not insignificant, but the plan was ultimately a realistic one. The locations from which a bombing campaign would most likely originate were mainly in Iran and Turkey, a

<sup>&</sup>lt;sup>432</sup> British military strategists were uncertain of how a famine might affect the USSR's war potential, reckoning that the dictatorial government might not be concerned about the welfare of anyone not involved with the war effort, and that perhaps the food shortage would strengthen the regime, "as happened in the famine of 1920/21, when the people soon learnt that only the staunchest supporters of the Party were able to obtain bread)." "An Air Offensive Against the Russian Oil Industry," in Oil Resources, Volume 4, 206; "Letter from the Ministry of Economic Warfare," 136; "Air Ministry minute, 28 March 1940, detailing Russian oil needs," in Oil Resources, Volume 4, 192-193.

<sup>433 &</sup>quot;RAF to Air Ministry Iraq," in Oil Resources, Volume 4, 174.

<sup>&</sup>lt;sup>434</sup> Vagit Alekperov, Oil of Russia: Past, Present, & Future (Minneapolis: East View Press, 2011), 264.

<sup>&</sup>lt;sup>435</sup> Hassmann, 148.

situation dependent on shifting allegiances. The distance between Erdebil, in Iran, and Baku, for instance, is only about 180 miles, and major bases in Turkey were roughly twice that distance from Baku. Baku by 1939 was already the best-defended location in the Caucasus, protected by several hundred anti-aircraft weapons (other major cities, including Groznii and Krasnodar, appeared to have no anti-aircraft defenses) and a searchlight regiment. Pover time, Soviet authorities diverted more weapons of greater caliber to Baku. Baku also housed the headquarters for the 95th Air Brigade, as well as aerodrome installations that could accommodate several hundred aircraft. In May 1940, RAF Wing Commander Bennett reported that anti-aircraft defenses were ramping up all over the Caucasus, including the installation of more anti-aircraft batteries and machine guns and the deployment of more men to safeguard the Baku-Batumi railway and pipelines.

However, the British were relatively unintimidated by these defenses, comparing the situation to attacks on relatively well-defended oil sites in Spain the decade before.

This case demonstrated that "active defence measures have rendered many attacks abortive but they have failed generally to safeguard oil installations." Zhukov himself

<sup>&</sup>lt;sup>436</sup> "Distances from the principal Oil Wells in U.S.S.R. to Points within the Frontiers of Turkey and Iran respectively," in *Oil Resources, Volume 4*, 134.

<sup>&</sup>lt;sup>437</sup> "Note on Vulnerability of Russian Oil Supplies," in *Oil Resources, Volume 4*, 143; "Study of a Possible Air Attack on the Caucasian Oil Industry, Allied Military Committee, April 4, 1940," in *Oil Resources, Volume 4*, 258.

<sup>&</sup>lt;sup>438</sup> "Despatch from Intelligence Division, Naval Staff, Admiralty, to Wing Commander Bennett, Air Ministry, 18 March 1940," in *Oil Resources, Volume 4*, 186.

<sup>439 &</sup>quot;U.S.S.R. Various Items," in Oil Resources, Volume 4, 168.

<sup>&</sup>lt;sup>440</sup> "Plans 2, Wing Commander Bennett," in Oil Resources, Volume 4, 291.

<sup>&</sup>lt;sup>441</sup> "An Air Offensive," 240-241.

recalled feeling that Soviet air defenses would have been incapable of effectively protecting Baku from a concerted British or American air attack.<sup>442</sup>

The usual priority order of targets for air attack in Baku was the following: refineries, oil wells with pumping apparatus, transport installations (storage tanks, pumping stations, docks, etc.), key transportation points, and gusher wells. 443 The oil fields themselves were generally a low priority, given that an oil well was a small target and could be destroyed only with a direct hit. Individual derricks and pumps were relatively easy to replace. 444 However, in November 1939, Ministry of Economic Warfare secretary Desmond Morton reported that in Baku "the oil derricks are close together and might be destroyed by burning." 445 Other reports used the common "forest" of derricks metaphor to emphasize that an attack by incendiary bombs could have a devastating effect on certain oilfields. 446 The older fields, including Bibi-Eibat, Surakhani, and Balakhani-Sabunchi-Ramani, tended to be the most crowded and therefore the most vulnerable to bombing and fire. One report described these fields as "chaotic," noting that many derricks were within 50 yards of one another; that in the intervening space lay workmen's housing, the wreckage of old derricks, and other detritus, greatly increasing

<sup>&</sup>lt;sup>442</sup> Irina Rote, "Bomby na Baku – Voennye plany Frantsii i Anglii protiv SSSR (1939/1940 g.g.)," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/Бомбы\_на\_Баку\_-\_Военные\_планы\_Франции\_и\_Англии\_против\_СССР\_(1939\_/1940г.г.).

<sup>443 &</sup>quot;Note on Vulnerability of Russian Oil Supplies," in *Oil Resources, Volume 4*, 142.

<sup>444 &</sup>quot;Study of a Possible Air Attack," 260.

<sup>&</sup>lt;sup>445</sup> "Letter from the Ministry of Economic Warfare to Joint Intelligence Sub-Committee, The War Cabinet, 7 November 1939," in *Oil Resources, Volume 4*, 135.

<sup>&</sup>lt;sup>446</sup> "Comments on Ministry of Supply Letter," in *Oil Resources, Volume 4*, 137; "Record of Conversation," 183.

the risk of fire; and that the ground was saturated with crude oil.<sup>447</sup> Bibi-Eibat was in danger additionally because much of it was below sea level; if its enclosing wall were breached by a bomb, about a third of it could become flooded.<sup>448</sup>

The spatial concentration of the Baku oil industry's refineries was also a key factor in British calculations. The compactness of the industry's high-value installations made Baku an appealing target. He also a dozens of refineries were packed together into just three locations around the peninsula, two of them being White Town and Black Town; each of these groups was considered by the British air forces to be a single bombing target, with one bomb judged necessary to destroy multiple enterprises at once. He threat of an air raid could prove damaging to the refineries, which required continuous manning to keep temperatures and pressures in balance, and therefore could not safely remain evacuated for more than a few hours at a time without risking explosion or fires. He a British report from April 1940, "The Russian refineries offer exceptionally vulnerable compact targets; they are not dispersed for protection against the spread of fire as are modern refineries in England and Germany. Once a fire has got a firm hold in the refinery areas, particularly at Baku and Grosni, it is considered

<sup>447 &</sup>quot;Memorandum on the Russian Petroleum Industry in the Caucasus," 295-296.

<sup>448 &</sup>quot;Study of a Possible Air Attack," 261.

<sup>449 &</sup>quot;Record of Conversation between Plans 2 and Mr. Makhimoff," 177.

<sup>&</sup>lt;sup>450</sup> "Russian Oil Refineries in the BAKU-BATUM-GROZNY Districts," in Oil Resources, Volume 4, 161.

<sup>&</sup>lt;sup>451</sup> "An Air Offensive," 210-211.

that the Russians could not put it out until it had run its course." <sup>452</sup> It could take up to a year to rebuild a destroyed refinery.

Other elements of the industry were quite vulnerable as well. Steel tanks with the capacity to store up to 10,000 tons each of oil and oil products stood in close proximity to the oil refineries, and in some cases could be set on fire with just machine gun fire from aircraft. 454 Despite the extreme flammability of the products being processed or stored, precautions against fire were shoddy. 455 Similarly, there were three major power stations, one each in White Town, Black Town, and Bibi-Eibat. Not only would the stoppage of electrical power cause a damaging shutdown to a refinery, the elimination of any one of these power stations would significantly reduce the ability of the city and its industry to continue work. 456 The relatively small number of long-distance oil pipelines also made the Soviet oil supply quite vulnerable. Between Baku and Batumi, the Black Sea port devoted to processing Baku crude, ran just two pipelines. 457 The primary means of transporting oil to the center of the country was by tanker across the Caspian Sea and up

<sup>&</sup>lt;sup>452</sup> "Note on an Air Offensive against the Russian Oil Industry," 266.

<sup>&</sup>lt;sup>453</sup> "An Air Offensive," 213-214.

<sup>454 &</sup>quot;Record of Conversation," 183, 238.

<sup>&</sup>lt;sup>455</sup> "An Air Offensive," 202.

<sup>&</sup>lt;sup>456</sup> "Record of Conversation," 177; "An Air Offensive," 232.

<sup>&</sup>lt;sup>457</sup> "Comments on Ministry of Supply Letter," 138. The British also recognized that the city and industry could be crippled by the destruction of the single water pipeline that supplied them. On the eve of World War II, Baku still relied primarily on the pipeline that ran from the Shollar spring, over 100 miles north of Baku, which had been completed in 1917 to replace the city's traditional but insufficient sources of water (desalinated sea water, diverted rivers, and barrels shipped in via camel, sea, and rail). The pipeline supplied the city, surrounding villages, the oil industry, and the railroad. Ryszard Zelichowski, "Water – Not a Drop to Drink: How Baku Got Its Water – The British Link," *Azerbaijan International* 10, no. 2 (Summer 2002), http://www.azer.com/aiweb/categories/magazine/ai102\_folder/102\_articles/102\_shollar\_zelichowski.html; "Most Secret Plan," 272-273; "Record of Conversation," 184.

the Volga River, a vulnerable route because of the easy visibility of the Baku port, and by rail, either west across Transcaucasia or north toward southern Russia. 458 The disruption of any one of these transportation routes would create gridlock on the others.

Ultimately, however, the British did not go through with the bombing campaign. The French and British both recognized that an attack on the Caucasus would be likely to provoke open war with the Soviet Union, an undesirable result when the war with Germany was still consuming their attention. Furthermore, the British had depended on French collaboration for the planned attack, including the use of French air forces; any possibility of French support was of course eliminated upon the German occupation of most of France in June 1940. Plans were tabled until the German invasion of the Soviet Union in June 1941, when the advantages of destroying the Baku oil industry again became relevant.

### The German Advance toward Baku, 1941-1943

Hitler's desire to reach and take the oil resources of the Baku region was captured in a sensational moment on his 53<sup>rd</sup> birthday. On April 20, 1942, Hitler's staff prepared for him a cake that depicted the Caspian Sea and the Absheron Peninsula. In a widely-circulated propaganda video, Hitler ladles the chocolate or kirsch of the "Kaspisches"

<sup>459</sup> "Extract from 93<sup>rd</sup> Conclusions of War Cabinet meeting, 15 April 1940," 262.

<sup>&</sup>lt;sup>458</sup> "Comments on Ministry of Supply Letter," 138.

<sup>&</sup>lt;sup>460</sup> "Secret Cypher Message to Air Ministry from H.Q. R.A.F. M.E., 20 April, 1940," in *Oil Resources, Volume 4*, 263.

Meer" onto the Caucasus Mountains, then dishes up a slice of the cake speared with a flag reading "BAKU." 461

The Germans' move toward Eastern Europe and then the Soviet Union was motivated in no small part by their need for fuel. In September 1940, Dutch oilman Jean Baptiste August Kessler noted "the remote possibility of a German attack on Russia with the object of securing control of at any rate part of the Russian [oil] output." According to the records of several of Hitler's top officials, including Albert Speer, Minister of Armaments and War Production, and Colonel General Franz Halder, the desire to capture the Soviet Union's oil resources in the Caucasus was one of the primary incentives for invading the country in 1941. In his journal of July 31, 1940, Halder noted among the objects of Operation Barbarossa a "drive on Baku oil fields." In June 1942, the operation took on the name Case Blue, the object of which was to capture Transcaucasia.

Shortly after the invasion of the Soviet Union, Halder wrote that Germany hoped to reach Baku by early November of 1941. As German forces became bogged down at Moscow and other sites well north of Baku, the goals of the campaign moved accordingly, despite increasingly desperate circumstances. The invasion of Russia only

<sup>461</sup> Eve Blau, *Baku: Oil and Urbanism* (Zurich: Park Books, 2018), 157.

<sup>&</sup>lt;sup>462</sup> "Letter from J.B. Aug. Kessler to Sir Cecil Kisch, Petroleum Department (Mines Department), 5 September 1940," in *Oil Resources, Volume 4*, 346.

<sup>&</sup>lt;sup>463</sup> Joel Hayward, "Hitler's Quest for Oil: The Impact of Economic Considerations on Military Strategy, 1941-42," *The Journal of Strategic Studies* 18, no. 4 (December 1995): 94.

<sup>&</sup>lt;sup>464</sup> Franz Halder, *The Halder Diaries: The Private War Journals of Colonel General Franz Halder* (Boulder, CO: Westview Press, 1976), 145.

<sup>&</sup>lt;sup>465</sup> Franz Halder, War Diary: Daily Notes by the Chief of the General Staff of the Ground Forces, 1939-1942, 23 July 1941, http://militera.lib.ru/db/halder/1941\_07.html. The plan was then to continue moving south in order to reach the oil centers of the Middle East. Alekperov, 268.

further depleted German fuel resources, as the roads in the Soviet Union were frequently in very poor shape, worse at least than in much of the rest of Europe. Fuel consumption by military vehicles was double or triple that projected by German planners. In addition, the synthetic fuels that the Germans had become increasingly reliant upon did not perform well in the extreme cold of the northern Soviet winters. 466 In March 1942, Halder noted that the Germans still planned to make it to Baku and seize its oil resources. 467 In April, Hitler was presented with his Baku cake, and the planned date for the seizure of Baku moved to September 1942. 468 German forces had reached the northern Caucasus by July 1942. In August, the Germans took Maikop, one of the larger oil sites of the northern Caucasus. In preparation for the attack, locals set fire to stored fuel. 469 By October, German forces were within 50 miles of another major Caucasian oil site, Groznii, and had commenced bombardment of the city and its oil structures. Despite the attack, Groznii continued to produce a minor amount of oil for the Soviet war effort. 470 By August of that year, plans were still in place to reach Baku, but Halder noted increasing resistance to Axis forces in the Caucasus region and that additional Soviet forces had set out from Baku and were heading north toward Makhachkala.<sup>471</sup>

<sup>466</sup> Alekperov, 268.

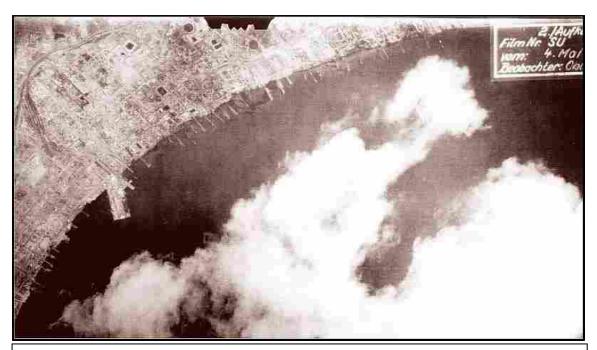
<sup>467</sup> Halder, War Diary, 18 March 1942, http://militera.lib.ru/db/halder/1942 03.html.

<sup>&</sup>lt;sup>468</sup> Blau, 157.

<sup>469 &</sup>quot;Caucasus Campaign," World War II Database, https://ww2db.com/battle spec.php?battle id=284.

<sup>&</sup>lt;sup>470</sup> Alekperov, 269.

<sup>&</sup>lt;sup>471</sup> Halder, War Diary, 16 August 1941, http://militera.lib.ru/db/halder/1942 08.html.



**Figure 6.** Luftwaffe aerial photo of central Baku, 1942. Source: https://www.ourbaku.com/index.php/ Люфтваффе\_-\_Разведывательные\_ аэросъемки\_Баку\_в\_1942г

Shortly after the German invasion of the Soviet Union commenced, the British began readapting their planned attack on the Baku oil industry with the intention of denying its resources to Germany. The plan remained roughly similar to that developed in 1939-1940: run a bombing campaign on Baku, concentrating on its oil refineries. The British ambassador to the USSR, Sir Stafford Cripps, corresponded with Stalin on the matter, and reported to Lord Hankey's War Cabinet Committee on Preventing Oil from Reaching Enemy Powers that Stalin was "determined that Caucasian oil should be destroyed rather than it should fall into the hands of the Germans." While retaining

<sup>&</sup>lt;sup>472</sup> "Secret Cypher Telegram, To Air Ministry, from HQRAFME, 7 July 1941," in *Oil Resources, Volume* 4, 375-377.

<sup>&</sup>lt;sup>473</sup> "War Cabinet, Lord Hankey's Committee on Preventing Oil from Reaching Enemy Powers," in *Oil Resources, Volume 4*, 389.

their Caucasian bombing plan, the British for the time being agreed to refrain from action until it became absolutely necessary.

## Buildup and Decline in Baku

It was well-known by the end of 1941 that the Germans had an eye on the southern Caucasus. The narrative of the Nazi enemy bearing down on Baku served well in Soviet propaganda used to generate support for the war effort. In addition to the usual films and leaflets, Soviet officials tailored propaganda methods to the regional tastes of Azerbaijan, using traditional Turkic literary figures and conventions, popular local songs about pushing out invaders, the worship services of newly-reopened mosques, and scholarly historical "revisions" that emphasized strong ties between Azerbaijan and Russia and the constant enmity of the Germans.<sup>474</sup>

Shortly after the German invasion began, Baku oil workers and organizations began performatively proclaiming their renewed commitment to the Soviet war effort, pledging to go to even greater lengths than before to increase production. On June 27, 1941, less than a week after the start of the invasion, a plenary session of the Soviet oil workers' union declared that oil enterprises would subordinate all work to the defeat of the "fascist invaders." They pledged to contribute to the war effort by "strengthening labor discipline as never before" and "using every minute productively." During rallies in various Baku districts, work teams at enterprises such as Leninneft and Azizbekovneft

 $^{474}\, Altstadt, \, The \, Azerbaijani \, Turks, \, 155-156.$ 

<sup>475</sup> V.A. Beliaeva, *Trudovoi geroizm rabochikh azerbaidzhana v gody velikoi otechestvennoi voiny (1941-1945 gg.)* (Baku: Aznefteizdat, 1957), 15.

declared that they would exceed quotas for oil production and drill new wells ahead of schedule. <sup>476</sup> In any case, those working in this war-critical industry were forced to adapt to a wartime schedule of twelve-hour working days with little time off. <sup>477</sup>

The initial push yielded positive results in the first month or so after the invasion. Several Baku oil trusts reported having exceeded planned oil production by many thousands of tons. He Like workers in other industries, oil workers contributed to defense funds to support the war effort, in many cases an automatic deduction from earnings (as decreed by the oil workers' plenum). Money also went toward construction of named tanks, airplanes, and ships for the war effort. Oil tankers leaving Baku by rail were boldly inscribed "Baku—frontu" (Baku to the front), a statement of the industry's direct link to the war effort. Local newspapers daily published stories of workers' heroics to keep spirits lifted. Around Baku, a slogan appeared: "People of Baku, remember: oil is needed everywhere—on land, in the air, and on the water!"

<sup>&</sup>lt;sup>476</sup> Mazaur Abasov, *Bakinskaia Partiinaia Organizatsiia v Gody Velikoi Otechestvennoi Voiny (1941-1945 gg.)* (Baku: Azerbaidzhanskoe Gosudarstvennoe Izdatelstvo, 1990), 22.

<sup>&</sup>lt;sup>477</sup> Irina Rote, "Baku v Vlikoi Otechestvennoi voine," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/ Баку в Великой Отечественной войне.

<sup>&</sup>lt;sup>478</sup> Abasov, 24, 47. The Baku oil industry ultimately produced 75 million tons of oil and oil products, including 22 million tons of gasoline, during the war years. Altstadt, *The Azerbaijani Turks*, 152-153.

<sup>&</sup>lt;sup>479</sup> Beliaeva, 15.

<sup>&</sup>lt;sup>480</sup> Alekperov, 269.

<sup>&</sup>lt;sup>481</sup> "Baku v period Velikoi Otechestvennoi voiny (1941-1945 gg.) – fotoalbom," Nash Baku: Istoriia Baku i bakintsev,

https://www.ourbaku.com/index.php/Баку\_в\_период\_Великой\_Отечественной\_войны\_(1941\_-\_1945г.г)\_-\_фотоальбом.

<sup>&</sup>lt;sup>482</sup> Natan Gimelfarb, *Zapiski opalnogo direktora* (Buffalo, 1999), http://natan.gimelfarb.com/PART1.pdf, 81.

<sup>&</sup>lt;sup>483</sup> Beliaeva, 16.

As in many industries around the world during the period of the war, in the Baku oil industry a significant shift in personnel took place as young men were drafted into the armed forces. The German invasion created new urgency in this regard. At the start of 1941, the Baku oil industry had employed roughly 60,000 workers. <sup>484</sup> Fully half of the workforce entered the armed forces soon after the invasion began, some 30,000 Baku oil workers. 485 The departure of these workers, many of them skilled, created a labor vacuum in the Baku industrial sector. The local Party organizations took on some of the burden of bringing new workers in to replace them, including women, students in local oil educational institutions, minors, the elderly, and those of undesirable backgrounds. 486 In addition, the Soviet oil workers' plenum had its local trade union organizations recruit "housewives and students" to contribute to oil production. 487 Perhaps 25,000 women and minors entered the oil industry during the war as replacements for departed workers, many of them called in from surrounding villages by the Komsomol. 488 They received minimal preparation, and most of their training happened on the job. 489 In 1941, these nontraditional workers made up one-third of the oil industry's employees; by 1944, their proportion had reached two-thirds. 490 The number of Komsomol brigades devoted to oil

<sup>&</sup>lt;sup>484</sup> Naidenov, 2.

<sup>&</sup>lt;sup>485</sup> Roughly half a million Azerbaijani men entered the armed forces during the war, of a population of 3.2 million. Altstadt, *The Azerbaijani Turks*, 152-153; Beliaeva, 16.

<sup>&</sup>lt;sup>486</sup> Abasov, 24-27.

<sup>487</sup> Beliaeva, 16.

<sup>&</sup>lt;sup>488</sup> Altstadt, *The Azerbaijani Turks*, 153; Rote, "Baku v Velikoi Otechestvennoi voine."

<sup>&</sup>lt;sup>489</sup> A.D. Budkov and L.A. Budkov, "Gody ispytanii (1941-1945)," in *Neft SSSR (1917-1987 gg.)*, ed. V.A. Dinkova, 31-59 (Moscow: Nedra, 1987), 40.

<sup>&</sup>lt;sup>490</sup> Rote, "Baku v Velikoi Otechestvennoi voine."

work in Baku increased from 43 in February 1943 to nearly 900 by the end of the war, mostly due to the necessity of recruiting minors to replace drafted workers. <sup>491</sup> By late 1942, Azneftemash, the oil industry's machine-building sector, estimated that nearly half of its workers were women, about 5,000 altogether. <sup>492</sup> Although most women workers remained in light industries such as food and textiles, in a few high-profile cases they entered skilled and/or high-risk positions that had previously been largely closed to them, including drillers and welders. <sup>493</sup> Toward the end of the war, Axis prisoners of war, predominantly Germans, were also pressed into oil industry work, primarily construction and equipment manufacture. <sup>494</sup>

Wartime administration of the industry also involved a radical shift in priorities.

Oil and oil products were more imperative than ever (80-90% of the Soviet Union's oil products came from Baku during the war), but some elements of the oil industry, especially enterprises devoted to exploration and drilling, could be temporarily reoriented without any notable decrease in oil production. Several enterprises that had formerly been devoted to producing low-octane fuel were refashioned to produce aviation gasoline by altering their distillation processes. An number of shops in the Azneftemash trust that had produced oil machinery turned to the production of weapons and ammunition,

<sup>&</sup>lt;sup>491</sup> Budkov and Budkov, 40.

<sup>&</sup>lt;sup>492</sup> Abasov, 30.

<sup>&</sup>lt;sup>493</sup> Ibid., 31-32.

<sup>&</sup>lt;sup>494</sup> Tatiana Speranskaia, "Nemetskie voennopolennye v Baku," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/Немецкие военнопленные в Баку.

<sup>&</sup>lt;sup>495</sup> Rote, "Baku v Velikoi Otechestvennoi voine.

<sup>&</sup>lt;sup>496</sup> Abasov, 44-45.

including machine guns, pistols, mortars, mines, aerial bombs, and grenades. <sup>497</sup> The shift toward the manufacture of weapons and new fuels was carried out messily, given that it required the quick and fundamental physical and administrative reorganization of several large enterprises, and that few in Baku had any experience in the manufacture of weapons and ammunition. <sup>498</sup> The demand for weapons produced in Baku became greater as the Germans advanced farther into the Soviet Union, an advance that prompted the dismantling and evacuation of industrial enterprises in now-occupied western regions. <sup>499</sup>

As a major urban center initially well behind the front lines, Baku had a further role as a medical center for wounded soldiers evacuated from the front. During the war, the city hosted 41 military hospitals with a combined capacity of over 30,000 beds. Any building with enough available space might serve, including universities and dozens of schools (the buildings are now marked with plaques indicating that history). Natan Gimelfarb, a Red Army soldier wounded in Ukraine, recalled a hospital being set up before his eyes in a school the night he arrived in Baku with a group of other injured men. Later, he was transferred to an improvised hospital in the main building of Azerbaijan State University. In his memoir, he remembers individually every nurse who cared for him at the several hospitals he stayed in over his seven months in Baku, their "fatal fatigue" as well as their "attention and care."

<sup>497</sup> Ibid., 51.

<sup>&</sup>lt;sup>498</sup> Ibid., 49.

<sup>&</sup>lt;sup>499</sup> Ibid., 56.

<sup>&</sup>lt;sup>500</sup> Irina Rote, "Bakinskie evakogospitali," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/Бакинские\_эвакогоспитали.

<sup>&</sup>lt;sup>501</sup> Gimelfarb, 80, 83.

Although spirits and production had initially increased after the invasion of June 1941, the pressures of the remainder of the war undermined both. By the end of 1941, Bakuvians' rations had been severely limited, especially for civilians, with workers in key industries and injured soldiers provided for first. Even basic food products, including cooking grains, bread, and butter, were distributed "po kartochkam"—by ration cards. Meat and fresh produce were increasingly hard to come by. 502 The wartime deprivations quickly undermined Bakuvians' vitality and enthusiasm. As Azerbaijani actor Tofig Mirzoev recalled, "reports from the front were getting worse and worse, and we knew that the war would not end in three months or even six months." As the situation deteriorated in Baku, Mirzoev's family made the decision to move to his mother's home village, where they lived in relative comfort for the remainder of the war. 503

Over the course of 1942, Baku became increasingly cut off from the Soviet center as the main lines of transportation were threatened or blocked by enemy action. By the autumn of 1942, the Germans had reached the Volga River, eliminating one of Baku's main rail and water connections to the Soviet center. Although industry officials improvised new transportation routes, redirecting as much oil as possible over the sea to Krasnovodsk, millions of tons of oil intended for recipients in the western regions of the Soviet Union, most importantly the military, could not leave Baku. Oil enterprises

---

<sup>&</sup>lt;sup>502</sup> Ibid., 81.

<sup>&</sup>lt;sup>503</sup> Tofig Mirzoev, "Deviatoe leto zhizni," Nash Baku: Istoriia Baku i bakintsev, https://www.ourbaku.com/index.php/Тофик Мирзоев. "Девятое лето жизни..."

<sup>&</sup>lt;sup>504</sup> Nikolai Baibakov, *The Cause of My Life* (Moscow: Progress Publishers, 1986), 41.

<sup>&</sup>lt;sup>505</sup> One new method of transportation was floating rail tankers full of oil products across the Caspian Sea when ship capacity was not sufficient. Rote, "Baku v Velikoi Otechestvennoi voine."

therefore had to improvise new storage methods, as in most cases an oil well's production could not be halted without causing long-term damage to the well's future productivity. Excess crude oil was directed toward nearby ravines and waste oil (stripped of gasoline) was pumped into derelict wells, to be recovered after the war. <sup>506</sup> It is likely that the movement of oil and oil products into unorthodox storage locations was also an attempt to remove these fuels from the sight of enemy surveillance and bombers.

As the Germans appeared to close in, a partial evacuation of Baku took place in the late summer of 1942. The Central Committee of the Azerbaijan CP had planned for such an evacuation in the early days after the invasion, recognizing that any oil experts, equipment, and technical documentation would be of immediate use to the enemy in restarting oil production upon the industry's capture. In the final stages, if it were certain that the enemy would take Baku, oil wells were to be capped off or destroyed. 507 Team leaders in the oilfields were given special instructions regarding the disabling and preservation of wells and equipment within 48 hours' notice. In case of greater urgency, the instructions were to destroy the wells by lowering into them explosives on strings, which would destroy a well's casing and possibly set fire to its contents. 508 Once the invasion of the Soviet Union began, elements of the evacuation plan were put into action. As part of the State Defense Committee's program to evacuate Soviet industry to the east,

<sup>&</sup>lt;sup>506</sup> Alekperov, 269; Baibakov, 41.

<sup>&</sup>lt;sup>507</sup> Abasov, 43; Baibakov, 40. Van der Leeuw writes that many of the wells were cemented shut during the war. I have not been able to find substantiation for this. Charles Van der Leewu, *Oil and Gas in the Caucasus: A History* (New York: St. Martin's Press, 2000), 109-110.

<sup>&</sup>lt;sup>508</sup> Irina Rote, "Plan unichtozheniia neftepromyslov Baku (avgust 1942 goda)," Nash Baku: Istoriia Baku i bakintsev,

https://www.ourbaku.com/index.php/План уничтожения нефтепромыслов Баку (август 1942 года).

and in a desperate bid to diversify the Soviet Union's oil supply, Baku authorities were directed to begin the partial evacuation of the Baku oil industry. <sup>509</sup> Oil industry equipment and personnel were shipped piecemeal across the Caspian Sea to Kazakhstan and Turkmenistan between 1941 and 1943. In all, more than 700 wells were shut off, and 81 drilling teams sent across the Caspian Sea to Central Asia. <sup>510</sup>

In charge of the evacuation was Nikolai Baibakov, then the Deputy People's Commissar of the Oil Industry, later the Minister of the Oil Industry and the head of Gosplan. In his memoir, *The Cause of My Life*, Baibakov recalled that the evacuation order to dismantle and send away drilling, extraction, and refining equipment was a new experience in loss of worker morale.<sup>511</sup>

In the course of two months or so all nine Baku drilling organisations, oil prospecting and development trusts, pipe yards and some other oil enterprises with all their personnel, machinery and equipment were transferred to the east. About 10,000 Baku oilmen, most of them accompanied by their families, moved to the east in an organised manner. The flower of the Azerbaijan oil industry was on the move, including celebrated experts in development and exploratory drilling, leading organisers of oil production, experienced engineers, technicians and Party organisers, skilled oilmen and repairmen, all of them devoted to their chosen field and difficult job.<sup>512</sup>

Abasov clarifies that it was the offices (*kontory*) of most drilling enterprises that were evacuated, leaving the necessary minimum number of workers to continue operations,

199

<sup>&</sup>lt;sup>509</sup> Baibakov, 40.

<sup>510</sup> Rote, "Baku v Velikoi Otechestvennoi voine."

<sup>&</sup>lt;sup>511</sup> Baibakov, 40.

<sup>&</sup>lt;sup>512</sup> Ibid., 42.

rather than masses of personnel from the entire oil industry.<sup>513</sup> Regardless, the evacuation was a distinct low point for the Baku oil industry.

By mid-1943, the tide of the war was turning against Germany, and the most serious danger to Baku had passed—the city's fate had effectively been determined by the German loss at Stalingrad.<sup>514</sup> Signs of the resumption of normal operations began to appear late in 1942, as exploration and drilling, activities not strictly essential to wartime production, started to resume.<sup>515</sup> However, in other respects the later years of the war saw a serious decline in oil production in Baku. The departure of experts to new oilfields in central Russia, the curtailing of new drilling, and the capping of some wells caused a sharp decrease in the number of working wells and average production per well after June 1941.<sup>516</sup> Many of the workers skilled in repair work had been drafted into the army. The introduction of women and minors into the workforce could not make up for the removal of 30,000 men for military service and another 10,000 to the eastern oil regions.<sup>517</sup> Baku managed to recover much of its normal oil production in the immediate postwar years, but by then Soviet authorities had commenced oil exploration and extraction in other regions of the country, as examined in the next chapter.

<sup>&</sup>lt;sup>513</sup> Abasov, 100, 104.

<sup>&</sup>lt;sup>514</sup> Azerbaijanis today still recognize the significance of the Red Army's sacrifice in that battle for averting the disastrous invasion of Baku. Rote, "Plan unichtozheniia neftepromyslov Baku (avgust 1942 goda),"

<sup>&</sup>lt;sup>515</sup> Baibakov, 43.

<sup>&</sup>lt;sup>516</sup> Abasov, 83.

<sup>&</sup>lt;sup>517</sup> Ibid., 80.

### Conclusion

The contributions and sacrifices of the Azerbaijan SSR toward the Soviet effort during World War II were considerable and were commended time and again by the Soviet regime. The Soviet narratives of course smoothed over suffering and highlighted bravery and devotion: an oil worker with four sons serving at the front swearing to produce every ounce of tank fuel that they would use; a pensioner offering to "beat the fascists" with a handbrake; a woman villager promising to master a machine-operating job so that she could replace her drafted brother. 518 The eventual loss of roughly 300,000 Azerbaijanis during the war, or about 10% of the republic's pre-war population, was praised as an invaluable sacrifice for freedom, although it was poorly rewarded in terms of military decoration, and constituted an irreparable loss to the republic. 519 Memoirs such as those by Baibakov and Mirzoev, as well as the recollections of Bakuvians in the post-Soviet era, offer more depth to this story, conveying the utterly disheartening experience of wartime deprivation and of witnessing the evacuation of large sections of the oil industry, as they understood the implication that violent conquest was approaching just over the horizon.

<sup>&</sup>lt;sup>518</sup> Beliaeva, 17-18.

<sup>519</sup> Estimates of the number of Azerbaijanis who served and died during the war vary significantly. While the US-based *World War II Database* puts the number of dead at 300,000 (210,000 military, 90,000 civilian), Azerbaijani historians provide higher estimates: at least 534,000; 350,000; 500,000 (or twenty-five percent of the population). Altstadt, *The Azerbaijani Turks*, 154-155; "Azerbaijan," *World War II Database*, https://ww2db.com/country/Azerbaijan; Vagif Agayev, Fuad Akhundov, Fikrat T. Aliyev, and Mikhail Agarunov, "World War II and Azerbaijan," *Azerbaijan International* (Summer 1995): 50-55; "Azerbaijan's Contribution to the Victory in the World War II," *Permanent Mission of the Republic of Azerbaijan to the United Nations*, http://un.mfa.gov.az/news/4/3086; "Azerbaijan Lost As Much As 25 Percent of Its Population in WWII," Meydan.tv, https://www.meydan.tv/en/article/azerbaijan-lost-as-much-as-25-percent-of-its-population-in-wwii/.

It was during World War II that the significance of oil to modern warfare became truly apparent, shaping strategy and objectives; it was during this period also that the location and spatial character of the Baku oil industry became concerning for Soviet authorities. It was easily reached by enemy air forces, was connected by just a few lines to the center, and was concentrated into a relatively small area on the end of a peninsula clearly recognizable from the air. Baku continued to be a major oil producer for the Soviet Union into the 1950s, but the threat of destruction by enemy powers during World War II prompted Soviet authorities to look elsewhere for its oil and natural gas.

#### CHAPTER VII

# A NEW VOCATION IN OIL: BAKU AND THE SOVIET OIL INDUSTRY, 1945-LATE 1980S

People from all over the Soviet Union...used to visit us [in Baku], to partake from our experience, and we went too. To Moscow we went for advanced things, and to us they came from Central Asia, from Moldova, from Siberia.

—"Ali," oil industry engineer<sup>520</sup>

The precipitous drop in Baku's share of Soviet oil production in the postwar era prompted and accompanied a shift in the city's vocation and character as an urban-industrial center. Histories of Baku in the postwar era tend either to neglect its oil industry or to emphasize elements of decline. Audrey L. Altstadt's otherwise thorough history of Azerbaijan centers on postwar political developments, with little mention of the oil industry. Those works that do target the Baku oil industry largely take a declensionist view. In a 1999 article, historian Nasib Nassibli offers a glum assessment of postwar Azerbaijan: despite Azerbaijan's remarkable achievements in the production of oil for the Soviet Union, its "share was poverty, ecological catastrophe, and lack of economic and social progress." Nassibli's main grievance is the considerable ecological damage evident on the Absheron Peninsula, undeniably one of the worst legacies of the Soviet era for Azerbaijan. His references to other dimensions of decline is a common motif in discussions of postwar Baku and its oil industry. However, although Baku did lose its status as a major producer of oil in the postwar era, it continued to contribute in

<sup>&</sup>lt;sup>520</sup> Quoted in Leyla Sayfutdinova, "Mapping the Mobility of Azerbaijani Soviet Engineers: Linking West and East?" *Labor History* 59, no. 3 (2018): 324.

<sup>521</sup> Altstadt, The Azerbaijani Turks.

<sup>&</sup>lt;sup>522</sup> Nasib Nassibli, "Azerbaijan: Oil and Politics in the Country's Future," in *Oil and Geopolitics in the Caspian Sea Region*, eds. Michael P. Croissant and Bülent Aras (Westport, CT: Praeger, 1999), 103.

important ways to the Soviet oil industry, and the city itself grew demographically and spatially.

The postwar decline of Baku's status as an oil-producing center was in fact only relative to the development of oil production within the Soviet Union at large, and especially, worldwide. Azerbaijan's actual production levels grew consistently (but slowly) until the end of the Soviet era, but a combination of wartime lessons and the USSR's rapidly increasing fuel demands caused the Soviet center to begin extraction in earnest at previously undeveloped oil sites elsewhere in the country. These sites soon began to overtake Baku oil production, recruiting the top Soviet oil experts, many of them relocated from Baku. In the context of the Soviet system, which valued large-scale improvement, dramatic progress, and exceeding plan quotas, Baku was no longer a rising star. Between the end of World War II and the years leading up to the breakup of the Soviet Union in 1991, the oil industry of Baku went from producing about 70% of all Soviet oil to just 2.4% by 1980. By the latter year, the industry was insignificant as an oil producer on the world stage as well. 523 The city's status thus underwent a dramatic change as an oil-producing center both nationally and globally.

Despite this decline in status, Baku retained its traditional association with oil, changing its particular vocation within the industry. Baku remained important to the Soviet oil and gas industries in capacities other than the extraction of crude. It continued to produce the majority of machinery used by Soviet oil enterprises around the country, and along with Moscow and Leningrad was one of the country's premier educational

<sup>&</sup>lt;sup>523</sup> Nassibli, 103; "Note on Vulnerability of Russian Oil Supplies," November 7, 1939, in *Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978, Volume 4, 1939-1945*, 142-143.

centers for oil research. It was also the Soviet Union's primary center for developing offshore oil drilling technology. The Oily Rocks complex, near Baku in the Caspian Sea, was the country's first foray into offshore development, and experimentation in new offshore technology continued in and near Baku until the end of the Soviet era.

One consequence of Baku's shifting role in the Soviet oil industry was the disconnect, to some extent, of the physical growth of the city from its previous status as a leading oil producer. In every era before this point, back to the mid-nineteenth century, Baku as a city had grown specifically because its oil production was growing. Under the coordinated direction of central Soviet and Baku municipal authorities in the postwar era, expansion of administrative and residential building continued despite the city's increasingly insignificant oil production. The demographic composition of the city reflected this change. Whereas previously the industry had been dominated by ethnic Russians and Armenians, who had traditionally enjoyed best access to the education and training required for middle and upper positions, now native Azerbaijanis moved into more leading roles. Non-Azerbaijani employees moved or were transferred to new oil sites as Baku's share in oil production declined. The trend compounded over time, affecting other administrative sectors in the AzSSR. This "nativization" of Baku and Azerbaijan was initially mostly demographic, under the ideological limits of the Soviet era, but nevertheless contributed to nationalist feeling that emerged violently in the 1990s.

Important here is the nature of the Soviet center's relations with peripheral republics in the postwar era. As outlined by Leyla Sayfutdinova, scholars have tended to take either the view that the Soviet Union was ultimately beneficial to peripheral

republics such as Azerbaijan because it invested heavily in their "modernization," including the development of industry, education, and urbanization, or the view that it was harmfully exploitative, investing in peripheral republics only so long as they were able to produce raw materials such as oil. Sayfutdinova concludes that Azerbaijanis in the postwar era tended to see the center-periphery relationship from a mixture of both views. The Soviets indeed contributed to Azerbaijan's modernization, and valued the contributions of Azerbaijanis to the Soviet system, but ultimately treated Azerbaijanis as inferior to Russians. My own examination of the Baku oil industry in the postwar Soviet context leads to similar conclusions; that is, although the Soviet center diverted resources away from oil extraction efforts in Baku, the city and its oil industry were recognized as important still to the Soviet oil industry, and were ultimately not in a state of decline until the very end of the Soviet era.

Baku in the postwar era did not achieve anything like the "success" that it had had as an oil center in the mid- to late nineteenth century and during the first three decades of Soviet rule. The Soviet system implicitly placed more value on those peripheral sites that could yield measurable commodities for the national good. Baku continued to contribute to the Soviet energy scene, but in less flashy ways than it had before World War II. However, the city continued to grow and change rather than deteriorate as a result of changes in the Soviet system more broadly and due to the gradual repossession of Baku by ethnic Azerbaijanis.

<sup>&</sup>lt;sup>524</sup> Sayfutdinova, 317, 328.

## Postwar Decline of the Baku Oil Industry

In the spring of 1945, World War II effectively ended for the western regions of the Soviet Union, including Azerbaijan. As explored in the previous chapter, it had become apparent to Soviet authorities during the war that there was real risk associated with having the country's oil industry so heavily concentrated in one location whose connections with the center might easily be cut off. Emerging Cold War anxieties only further added to the national security considerations at stake. By 1952, Turkey had become a NATO ally; Baku remained within easy range of its air force and missile sites.<sup>525</sup> In the immediate postwar period, Soviet authorities sought to monopolize oil agreements with Middle Eastern powers on the southern borders of the USSR so as to prevent NATO powers from drawing too near.<sup>526</sup> If another war were to break out, even a minor regional conflict, the Baku oil industry would be far too vulnerable.<sup>527</sup>

Beyond the issue of national security was the international posturing that characterized Cold War relations between, on the one hand, the USSR and its allies, and on the other, the US and its allies. Oil and natural gas had a vital role to play here.

Production of these commodities was both an indicator of national health, thus reflecting the relative superiority or inferiority of the two sides, and crucial to the advancement of

<sup>&</sup>lt;sup>525</sup> Tadeusz Swietochowski, "Baku—The Oil City and Its People," in *Memories of Baku*, ed. Nicolas V. Iljine (Seattle: Marquand Books, 2013), 114.

<sup>&</sup>lt;sup>526</sup> "Minutes," March 29, 1947, in *Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978, Volume 5, 1946-1950* (Cambridge: Cambridge University Press, 2012), 122.

<sup>&</sup>lt;sup>527</sup> Stalin explicitly acknowledged Baku's vulnerability more than once. "War Cabinet, Lord Hankey's Committee on Preventing Oil from Reaching Enemy Powers," August 2, 1941, in *Oil Resources, Volume 4*, 389; E. DeGolyer, "Foreword," in *Oil in the Soviet Union: History, Geography, Problems*, by Heinrich Hassmann, trans. Alfred M. Leeston, (Princeton: Princeton University Press, 1953), vi; Jamil Hasanli, *At the Dawn of the Cold War: The Soviet-American Crisis over Iranian Azerbaijan, 1941-1946* (Lanham, MD: Rowman & Littlefield Publishers, Inc., 2006), 266.

key sectors such as heavy industry, weapons and other military production, and chemicals. In the words of American oilman Everette Lee DeGolyer in 1953, oil was "a war munition of decisive importance....[It] is not the infantry but gasoline which is now queen of battles." For the Soviet system to progress and to have a chance at world dominance, unimpeded growth in the oil and gas industries was necessary.

The first major expansion of Soviet oil came in the final stages of the Second World War. Soviet forces seized all oil fields, refineries, and oil in storage that they came upon as they moved west toward Berlin in 1944. The most productive areas were in Poland and Romania; the Soviets were also interested in controlling oil and the oil trade also in Austria, Hungary, Czechoslovakia, and the Balkans.<sup>529</sup> In subsequent arguments over these oil resources, the British and other former Allied Powers claimed that the seizures had been illegitimate and that the Soviets now enjoyed unfair control over all oil resources in Eastern Europe. Soviet representatives asserted that because the Third Reich had been primarily responsible for the development of oil fields and infrastructure in these regions, the seizures constituted a valid claiming of "war booty" from its enemy.<sup>530</sup> Ultimately, the inability of the Soviet Union's Cold War opponents to disrupt the economic, political, and infrastructural consolidation between the USSR and its bloc meant that Eastern European oil production remained as much in the Soviet sphere as any other key commodity there.

<sup>&</sup>lt;sup>528</sup> DeGolyer, v.

<sup>&</sup>lt;sup>529</sup> "Review of Roumanian Petroleum and Gas Industry," in *Oil Resources, Volume 5*, 7. "British Oil Interests in Austria," September 11, 1946, in *Oil Resources, Volume 5*, 83.

<sup>&</sup>lt;sup>530</sup> "Paraphrase of Telegram from Moscow to the Foreign Office, Dated May 1st, 1946," in *Oil Resources, Volume 5*, 28.

These seizures helped make up for a marked drop in Soviet domestic oil production over the course of the war, the reasons for which are noted in the previous chapter. In 1943, total production for the USSR was 28.3 million tons; in 1944, this had risen to 38.5 million tons, much of the difference a temporary boost from seized oil and oil products in storage. During postwar settlements and establishment of new administrative divisions, Soviet output again dropped (to 21.3 million tons in 1945). More stable and enduring sources of oil within the Soviet Union were needed. In contrast to the sometimes wildly unrealistic goals of prewar economic plans, the oil quotas for the Fourth Five-Year Plan (1946-1950) were relatively modest. Planners aimed to reach just 35 million tons of oil by 1950. The country reached and somewhat surpassed that goal, however, producing roughly 37.6 million tons in that year. Baku remained the single largest producer in the country (40-45% of the total) (Table 8) at that time, but other sites were making up more of the remainder than ever before. S33

<b>Table 8.</b> Crude Oil Output, Total USSR and AzSSR, 1937-1970 (selected years) (millions of tons) <sup>534</sup>				
Year	Total USSR	AzSSR		
1937	28.5	21.4		
1945	19.4	11.5		
1950	37.8	14.8		
1955	70.8	15.3		
1960	147.8	17.8		
1965	242.9	21.5		
1970	353.0	20.2		

<sup>&</sup>lt;sup>531</sup> Hassmann, 148-149.

<sup>532 &</sup>quot;International Oil Position," in Oil Resources, Volume 5, 196.

<sup>533</sup> Hassmann, 50.

<sup>&</sup>lt;sup>534</sup> Campbell, *Trends*, 32-33, 100.

The first major oil sites outside of the Caucasus to undergo extensive development were in the Volga-Urals Basin, a region of about 200,000 square miles on the central-western flanks of the Urals Mountains that includes the cities of Perm, Ufa, Kazan, and Samara. 535 As in the Baku region, inhabitants had recognized signs that oil and gas were present at various sites in the Volga-Urals Basin for perhaps centuries. As long as Baku continued to produce sufficient oil and gas, however, Soviet authorities felt no pressing need to direct mass resources to extensive development of new sites. 536 In the late 1920s, after exploration by Soviet geologist I. M. Gubkin, oil was struck near Molotov in the Volga-Urals area. 537 The results were promising enough to prompt the 17<sup>th</sup> Party Congress in March 1939 to order the creation of a new oil base—the "Second Baku."538 By the 1940s, this designation was commonly used; it was a quasipropagandistic label that suited common Soviet messaging practices by saluting a site foundational to the Soviet Union while emphasizing newness and improvement. <sup>539</sup> In the years before the German invasion of 1941, the oil ministry made a few more advances in the region, striking oil in several more fields and constructing refineries and pipelines. Because of Baku's preeminence and due to infighting among Soviet geologists, however,

535 As Hassmann notes, "an area approximately the size of Spain." Ibid., 84.

<sup>&</sup>lt;sup>536</sup> Ibid., 8

<sup>&</sup>lt;sup>537</sup> Ibid., 86.

<sup>&</sup>lt;sup>538</sup> M. V. Slavkina, *Triumf i tragediia: Razvitie neftegazovogo kompleksa SSSR v 1960-1980-e gody* (Moscow: Nauka, 2002), 19.

<sup>&</sup>lt;sup>539</sup> The name derived only from the region's potential and actual oil productivity; unlike the Baku oil region, which was highly compact, the Volga-Urals oil region contained dozens (at least) of widely-scattered and separate oil structures. Hassmann, 85.

oil production from the Second Baku remained comparatively low until after the war (roughly 14% of total Soviet production in 1942).<sup>540</sup>

Following the exposure of Baku's vulnerabilities during the war, the shift in relative production was swift. By 1954, the Volga-Urals region and the Baku region were producing roughly equal amounts of oil per year. The Volga-Urals sites quickly began to draw a greater share of the state's investment in oil and gas. By 1965, the Second Baku produced over 70% of Soviet oil, decisively displacing Baku as the country's center of oil production. The 5500 planned wells to be drilled during the period of the Fourth Five-Year Plan, 3500 were to be in the Volga-Urals region. In addition to the area's safe distance from enemy attack, the fields of this region had advantages in terms of location and transportation. Not only was the Second Baku closer to the central industrial region of the Soviet Union, it had better access to water routes (including the Volga and Kama Rivers) and to existing railway networks.

<sup>&</sup>lt;sup>540</sup> A. Mikhailov and M. Dmitriev, "Increases Planned in Oil Production during the Next Five Years," *Embassy of the Union of Soviet Socialist Republics Information* Bulletin 6, no. 49 (May 25, 1946): 42; Robert E. Ebel, *The Petroleum Industry of the Soviet Union* (New York: American Petroleum Institute, 1961), 65.

<sup>&</sup>lt;sup>541</sup> Theodore Shabad, "Geographic Developments behind the Iron Curtain," *The Professional Geographer* 7, no. 2 (1955): 13.

<sup>&</sup>lt;sup>542</sup> Ebel, *The Petroleum Industry*, 22.

<sup>&</sup>lt;sup>543</sup> Robert W. Campbell, *Trends in the Soviet Oil and Gas Industry* (Baltimore: Johns Hopkins University Press, 1976), 32-33.

<sup>544</sup> Hassmann, 51.

<sup>&</sup>lt;sup>545</sup> Ibid., 87.

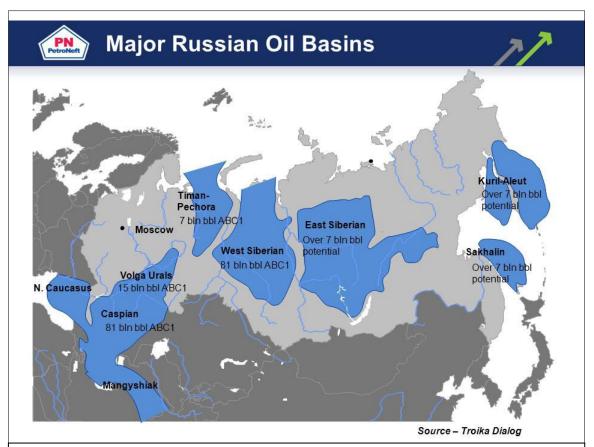


Figure 7. Major Eurasian oil basins.

Source: http://priceofoil.org/2013/04/02/as-russia-fracks-poland-outlaws-anti-fracking-protest/major-russian-oil-basins/

The primacy of the Volga-Urals region, the Soviet Union's "second phase" of oil production, did not last past 1975, for a third major oil region had emerged (Figure 7). The West Siberian Oil Basin, covering roughly 850,000 square miles, was and remains a largely uninhabited area just east of the Ural Mountains. Unlike the fairly easily accessible Volga-Urals Basin, the West Siberian Oil Basin was distant and undeveloped. Thousands of miles of rough terrain, much of it swampland, separated the main oil sites from major existing transportation routes and population centers. The Soviets had plenty of experience overcoming such obstacles, having constructed no small number of challenging railway and water route projects over the decades, but authorities had to be

fairly certain that the results would warrant the necessary investment of resources and manpower. Speculation about the quantity of oil in West Siberia had remained largely unsubstantiated until the late 1950s and early 1960s. 546 The shift in emphasis toward West Siberia in the mid-1960s was in part political. Party and state elites were split between those who believed that it was an unnecessary use of resources, and those who believed that it was vital to maintaining the Soviet Union's powerful place in the world. The division was based less on true commitment to the fate of West Siberia, and more on existing political connections. In the political shifts that came with the ouster of Nikita Khrushchev as General Secretary in 1964, those who had an interest in oil development in the east managed to position themselves advantageously. 547 In 1965, the West Siberian Oil Basin had barely begun to produce oil, but was by 1975 producing 30% of all Soviet oil, and was rising rapidly to overtake the Volga-Urals region. 548

However, the move into West Siberia was also necessitated by an unexpected drop in production from older oil sites as well as from newer fields in Central Asia that had proved unsuccessful.<sup>549</sup> The need for West Siberian oil became more acute when in 1977 the CIA produced a widely-circulated memorandum titled "The Impending Soviet Oil Crisis"; the report predicted that the Soviet oil industry was on the brink of a sharp decline and would soon be unable to compete with OPEC and western states.<sup>550</sup> It is

<sup>546</sup> M.V. Slavkina, *Baibakov* (Moscow: Molodaia Gvardiia, 2010), https://biography.wikireading.ru/242141.

<sup>547</sup> Swietochowski, "Baku," 114.

<sup>&</sup>lt;sup>548</sup> Campbell, 31; Slavkina, *Triumf*, 68-69.

<sup>&</sup>lt;sup>549</sup> Campbell, 31.

<sup>550 &</sup>quot;The Impending Soviet Oil Crisis," CIA Intelligence Memorandum (1977), unpaginated.

difficult to assess the accuracy of the report; the USSR had definitively surpassed the US in oil production in 1975, so Cold War bluster and fear may have prompted the CIA to create such an appraisal. Nevertheless, being self-conscious of the Soviet bloc's standing in the world, Soviet planners drastically upped production quotas for the West Siberian fields and directed additional resources and personnel accordingly. By 1986, West Siberia produced nearly two-thirds of Soviet oil, and remained on top for the rest of the Soviet era.

The Baku oil industry, which in 1901 had produced just over half of world oil and had been one of Hitler's primary objectives in invading the Soviet Union during World War II, produced by 1960 an amount of oil that was insignificant on the national and global scales. In 1971, the Baku oil industry limped past a major milestone—it had, according to official records, produced 1 billion tons of oil for the Soviet state. 554

However, it was then producing just 5% of Soviet oil and 0.008% of world oil per vear. 555

<sup>&</sup>lt;sup>551</sup> The report estimated that in the late 1970s, the Soviet Union would hit "peak oil," the maximum extraction rate, and then begin a rapid decline in production. Estimations of peak oil, whether nationally or globally, have been notoriously unreliable, as new methods and technologies for extraction have emerged regularly.

<sup>&</sup>lt;sup>552</sup> Campbell, 31; Thane Gustafson, *Crisis amid Plenty: The Politics of Soviet Energy under Brezhnev and Gorbachev* (Princeton: Princeton University Press, 1989), 63-64.

<sup>553</sup> Gustafson, 66; Slavkina, Triumf, 68-69.

<sup>554</sup> Nassibli, 104.

<sup>&</sup>lt;sup>555</sup> Campbell, 32-33; "World Oil Production, 1950-2009," http://www.earth-policy.org/books/wote/wote data.

### A New Vocation in Oil

The precipitous drop in Baku's share of oil production for the Soviet Union did not eliminate, however, the close connection of the urban-industrial site with oil. Not only did Baku continue to educate oil engineers who went on to work in all parts of the country, it also remained the primary producer of equipment and machinery for the oil industry, and it became the primary site for testing new oil-related technology.

In the first place, Baku remained one of the Soviet Union's top three centers, along with Moscow and Leningrad, for education and training in the oil industry. Baku's Polytechnical Institute, which had opened in 1920, continued to expand, adding more departments and personnel. In 1959 it was renamed the Azerbaijan Oil and Chemistry Institute in order to reflect better its function. Other educational institutions included the Azerbaijan Scientific Research Institute on Oil Processing and the Azerbaijan Scientific Research and Project Institute of Oil Machine Building, both of which had been established in the late 1920s or early 1930s, as discussed in chapter five. These and other oil-related educational and research institutions continued to draw thousands of engineering students every year in the postwar era, even as Baku itself declined in status as an oil-producing center. The majority of graduates from these institutes were assigned jobs in Azerbaijan, but the most prestigious might move on to further education or careers in other parts of the Soviet Union.

<sup>&</sup>lt;sup>556</sup> Slavkina, *Baibakov*.

<sup>557</sup> Altstadt, *The Politics of Culture*, 145; Ebel, 37; Sayfutdinova, 319-320.

<sup>&</sup>lt;sup>558</sup> One former Azerbaijani oil engineer interviewed by Sayfutdinova reported feeling pride that the Azerbaijanis sent to crucial new fields, such as Tyumen, seemed to be by far the most skilled of all the nationalities represented at the site. Sayfutdinova, 322.

Due to more extensive educational and training opportunities, Azerbaijanis were more heavily represented in the leadership of the Azerbaijan oil industry than ever before, although the national industry leadership consisted almost entirely of European Soviets. This situation gradually began to change over the following three decades, during which time several Bakuvians rose to prominent positions nationally. Valentin Dmitrievich Shashin was the USSR Minister of the Oil Industry from 1965 to 1977, Sabit Ataevich Orudzhev was Minister of Gas from 1972 to 1981, Farman Kurbanovich Salmanov headed the Tyumen region's geology unit during that region's period of highest productivity in the 1970s and 1980s, and Valerii Isaakovich Graifer led Glavtyumenneftegaz, the oil and gas production unit for Tyumen, between 1985 and

In addition, Baku continued to contribute materially and technologically to the Soviet oil industry, but in new ways, specifically in terms of equipment and in new methods of oil extraction. Baku industrial enterprises in the postwar era produced the majority of machinery needed for the Soviet oil industry, including equipment for extraction, refining, and transportation of oil and gas products. This included pumpjacks ("nodding donkeys"), hydraulic and air compressors, pipes, land and sea platforms, and the various measuring instruments required by oil and gas enterprises

<sup>&</sup>lt;sup>559</sup> In 1960, I. M. Musayev was the Chief Engineer of the Azerbaijan Oil Administration. Several other leading oil men, all ethnic Azerbaijanis, led an American delegation of oil experts through the Qaradagh district, an oil production site about 25 miles south of Baku. However, all of the members of Gosplan concerned with oil and gas and of Soyuznefteeksport were ethnically Russian. Ebel, *The Petroleum Industry*, 85, 163-164.

<sup>560</sup> Slavkina, Baibakov.

<sup>&</sup>lt;sup>561</sup> Nassibli, 103-104; Swietochowski, 114.

around the country. <sup>562</sup> Before the 1930s, the Soviet Union had imported nearly all of its oil equipment from abroad, lacking the technology and resources to manufacture it domestically. During the course of the early Five-Year Plans, in order to reduce dependence on foreign powers, Soviet authorities began devoting part of Baku industry to equipment manufacturing under the Central Administration for Oil Engineering (Glavneftemash). During the war, Baku manufacturing capacity had largely been turned over to weapons production. This was reversed in the immediate postwar era. <sup>563</sup> By the 1950s, the oil equipment manufacturing sector in Baku was growing quickly, employing tens of thousands of workers. <sup>564</sup>

Finally, Baku remained a key location for testing oil technology and methods new to the Soviet Union. After the Second World War, Soviet oil authorities recognized that oil production in Baku was flagging, in large part due to exhaustion of wells and damage done during the war. Around 1960, the average oil well in the Baku region was producing just 3,000 tons of oil per year, below the national average of 5,650 tons per year, and well below the average of 17,000 tons per well per year in the Volga-Urals region. Several thousand wells in Azerbaijan produced less than 100 metric tons per year, the greatest concentration of "low-productivity" wells in the country in 1959. Authorities

<sup>&</sup>lt;sup>562</sup> Eve Blau, *Baku: Oil and Urbanism* (Zurich: Park Books, 2018), 169.

<sup>&</sup>lt;sup>563</sup> "International Position," in *Oil Resources, Volume* 5, 196-197.

<sup>&</sup>lt;sup>564</sup> Gustafson, 189-190; ARDA, f. 1610, op. 26c, d. 122.

<sup>&</sup>lt;sup>565</sup> Ebel, *The Petroleum Industry*, 1, 41-42. Robert Ebel was an American oil expert and representative of the US Office of Oil and Gas, and was one member of a US delegation that toured the main sites of the Soviet oil industry in 1960, taking note of the Soviet oil industry's advancements and failings since the end of World War II.

<sup>&</sup>lt;sup>566</sup> Ibid., 75.

addressed this sluggish growth in three primary ways that boosted production and continued Baku's role as a site of industrial experimentation: deep drilling, hydraulic fracturing ("fracking"), and offshore drilling and extraction. Soviet geologists recognized that plentiful oil reservoirs still existed in the Baku region, but that new methods, applicable also to other oil regions, were needed to reach them. "Deep drilling" in the Soviet context meant wells that delved deeper than the traditional average of 1000-2000 meters. Wells at that depth in the Baku region were not producing enough to satisfy demand, so experts began to attempt more ambitious drilling efforts, using enhancements of existing technology. In 1960, Baku drillers completed a well nearly 5,000 meters deep. Soviet planners aimed to sink 120 more wells of similar depth in Azerbaijan by 1965, and proposed to begin work on wells of 6,000 to 10,000 meters in the longer term. <sup>567</sup> In 1960, hydraulic fracturing worldwide was still in its infancy, subject to some skepticism among oil experts regarding its ability to improve significantly the production of gas and oil. However, some experimentation with the process, which involves fracturing rock with highly pressurized liquid in order to release trapped gas and oil, took place in Azerbaijan beginning in 1954. Over the course of the 1950s, several thousand hydraulic fracturing operations were carried out in Azerbaijan, resulting in nearly 500,000 tons of crude oil. Further operations were planned for the coming years. 568

However, far greater production was expected from offshore oil production. Baku became and mostly remained the center of Soviet offshore oil production, under the

<sup>567</sup> Ibid., 55-56.

<sup>568</sup> Ibid... 104.

Caspian Sea Oil and Gas Industry (Kaspmorneftegazprom). <sup>569</sup> It had long been known that oil and gas reservoirs existed beneath the waters of the Caspian Sea—travelers had for centuries marveled at the oil and natural gas that floated on the sea's surface, making it possible for one to set the sea on fire near Baku. <sup>570</sup> However, it was not until the midtwentieth century that Soviet technology developed the means to extract oil from reservoirs lying under even very shallow water without flooding the well. The construction of offshore platforms also involved an immense investment of resources, which was not worthwhile as long as sufficient oil was available from other sites.

Out of a desire to keep up Azerbaijan's oil production numbers after World War II, authorities began to pursue oil resources in waters up to 150 meters in depth, where infill was simply not practical. In November 1948, development commenced on an oil platform along the Absheron sill, led by Azerbaijan Oil Exploration (Aznefterazvedka) head Sabit Ataevich Orudzhev; by the next year, offshore oil development had progressed sufficiently that AzSSR Communist Party head Mir Jafar Baghirov explicitly commended all involved. <sup>571</sup> In 1951, a large group of offshore oil specialists was awarded the Stalin Prize in the first degree. <sup>572</sup> The project received extra support from the Soviet center beginning in 1955, when N. K. Baibakov, who had overseen Baku's partial wartime evacuation, became the first Azerbaijani head of Gosplan, the Soviet economic

<sup>569</sup> Sayfutdinova, 321.

<sup>&</sup>lt;sup>570</sup> Osmaston, 249.

<sup>&</sup>lt;sup>571</sup> Slavkina, *Baibakov*.

<sup>&</sup>lt;sup>572</sup> Ibid.

planning committee.<sup>573</sup> By 1967, about half of Azerbaijan's oil production came from offshore oil enterprises, roughly 10 million of 20 million tons per year through the 1970s.<sup>574</sup> Several "offshore" sites were merely extensions of wells along the Absheron coast, such as the Artyom (now Pirallahi) field just north of the Absheron Peninsula's tip, but authorities did begin exploitation of fields far out to sea.<sup>575</sup>

The most promising spot for Caspian oil extraction, and the most productive Caspian site for decades, was Neft Dashlari or Neftianye Kamni ("Oil Rocks" or "Oily Rocks"), located several miles off the coast of Baku. <sup>576</sup> The site lay along the Absheron Sill, an oil- and gas-rich geological structure that ran east-west underneath the Caspian Sea and was recognized by Soviet geologists to be part of the same structure that supplied Baku oil fields on land. <sup>577</sup> In 1949, construction began on a ramshackle platform that would house extraction equipment and workers, building from the sunken wrecks of seven decrepit tanker ships (including the world's first proper oil tanker, the *Zoroaster*, so the story goes). <sup>578</sup> As time went on, steel and then concrete pilings were sunk into the seabed to provide stability for an expanding makeshift settlement that eventually came to include barracks and apartments, gardens, shops, cafeterias, a hospital, and a variety of recreational spaces for workers. Among the various buildings and other structures ran

<sup>&</sup>lt;sup>573</sup> Gustafson, 215.

<sup>&</sup>lt;sup>574</sup> Campbell, *Trends*, 32-33.

<sup>&</sup>lt;sup>575</sup> Ebel, *The Petroleum Industry*, 90.

<sup>&</sup>lt;sup>576</sup> In 1955, Neft Dashlari produced roughly 60 percent of all Azerbaijan oil. Ibid., 97.

<sup>577</sup> Stephen Lewarne, Soviet Oil: The Move Offshore (Boulder: Westview Press, 1988), 38.

<sup>&</sup>lt;sup>578</sup> Robert Corzine, "Waterworld in the Caspian (Oil Rocks Complex in Caspian Sea off Azerbaijan)," *The Financial Times*, September 20, 1995, 18.

extensive networks of raised roads and walkways, giving the settlement the appearance from the air of a clumpy spiderweb.<sup>579</sup> The entire complex covered over 300 square kilometers.<sup>580</sup> It was to be a "modern socialist city on the high seas," fully planned and rationalized.<sup>581</sup> Although Neft Dashlari was not quite an independent city, remaining heavily reliant on nearby Baku to send supplies, to process and transport its oil, and to house the families of its several thousand workers, it did constitute (per architectural historian Eve Blau) a "new form of urbanism," yet another variety of oil-generated settlement in the region.<sup>582</sup> Encouraged by the success of this experiment, Azerbaijan's oil authorities pursued similar structures along the Caspian coast, including the complex of the A.P. Serebrovskii Oil Directorate about twelve miles south of Baku, which by 1975 employed some 1500 workers.<sup>583</sup> For its part, Neft Dashlari began to feel the effects of the Caspian Sea's harsh weather and salinity not long after its completion, but it remained in operation through the end of the Soviet era and still produces oil today.<sup>584</sup>

<sup>&</sup>lt;sup>579</sup> T. Sharinskyi, "Housing Complex 'Oily Rocks' on the Open Sea," *Arkhitektura SSSR* 8 (1961). Excerpt included in Blau, *Baku: Oil and Urbanism*, 165.

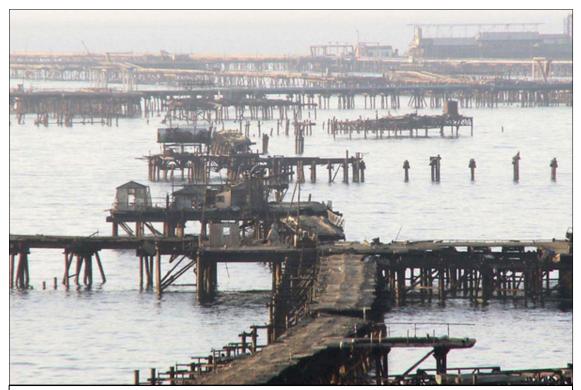
<sup>580</sup> Blau, Baku: Oil and Urbanism, 168.

<sup>&</sup>lt;sup>581</sup> Slavkina, *Baibakov*.

<sup>&</sup>lt;sup>582</sup> Neft Dashlari employed 3000 oil workers in 1975, working in shifts of ten days on, ten days off the settlement. "Travel Report: Caucasus," in *Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978, Volume 8, 1967-1978* (Cambridge: Cambridge University Press, 2012), 561; Blau, *Baku: Oil and Urbanism*, 162; Maya Przybylski, "Re-Rigging Transborder Logics across the Bounded Site," in *The Petropolis of Tomorrow*, edited by Neeraj Bhatia and Mary Casper, 258-271 (New York: Actar D, 2013), 260-263.

<sup>&</sup>lt;sup>583</sup> "Travel Report: Caucasus," 561.

<sup>&</sup>lt;sup>584</sup> In a 1960 visit to Neft Dashlari, Khrushchev commented on the severe corrosion of the steel pilings on which much of Neft Dashlari rested. Many subsequent reviews of the complex have noted its dilapidation. Ebel, *The Petroleum Industry*, 98; Arno Frank, "Rise and Fall of Stalin's Atlantis of Oil," *Der Spiegel* (November 15, 2012), https://www.spiegel.de/international/world/exploring-the-crumbling-soviet-oil-platform-city-of-neft-dashlari-a-867055.html.



**Figure 8**. Neft Dashlari. Source: https://architectureau.com/calendar/film/dado-film-oil-rocks-city-above-the-sea/

Azerbaijani oilmen's experience in offshore extraction was beneficial in some ways as the Soviet Union considered expanding into the Arctic, Barents, Baltic, Black, and Okhotsk Seas. In September 1973, an all-Union conference on offshore oil exploration and development was held in Baku, drawing scientists and other experts from all parts of the Soviet Union that had the potential for offshore extraction. Per a glowing article in *Bakinskii Rabochii* of the time, "It is hard to overestimate the contribution made by the Azerbaijani oil workers to the business of harnessing off-shore oil and gas deposits....[Neft Dashlari] epitomises...the inventive spirit and working valour of the Caspian conquerors." Following this collaboration, Soviet oilmen began further

investigating the country's offshore oil resources, including the possibility of ice-resistant platforms for the Sakhalin region.<sup>585</sup>

However, the Caspian Sea for decades remained the Soviet Union's only notably foray into offshore oil extraction, despite Soviet authorities' wish to expand. In 1976, economist Robert W. Campbell noted that the Soviets still lacked the proper drilling equipment for most of its accessible bodies of water. Neft Dashlari was a useful initial venture into offshore oil extraction, but experts recognized that, fragile and rambling as it was, it would be neither practical nor desirable to replicate the structure in other bodies of water (the settlement has generally been regarded as an oddity among offshore oil platforms). The Soviets for a time continued with fixed offshore oil platforms, but these were worth construction only when experts felt sure that sufficient quantities of oil existed in a particular location. 586 By the mid-1970s, the USSR was in the process of experimenting with mobile offshore oil rigs in the eastern Caspian Sea, but the going was relatively slow due to the increasing technological lag between the USSR and the West. By 1974, the USSR had just two working prototypes, the "Absheron" and the "Azerbaijan," neither of which could operate in water deeper than 15 meters, and which could drill just 1,800 meters, far shallower than the depths at which Caspian oil was expected.587

Thus, the Baku oil industry retained some importance in the Soviet Union, providing education and training, oil industry equipment, and a site for experimentation

<sup>&</sup>lt;sup>585</sup> "Lines of Attack on Off-Shore Oil," *Bakinskii Rabochii* (September 28, 1973), in *Oil Resources, Volume* 8, 410-411.

<sup>&</sup>lt;sup>586</sup> Campbell, 24; "Travel Report: Caucasus," 562.

<sup>&</sup>lt;sup>587</sup> Campbell, 24.

with offshore oil extraction. It retained its traditional close association with oil. On June 17, 1978, the opening ceremony for the first International Oil and Gas Exhibition took place on the grounds of the Exhibition of National Economic Achievements in Baku. Heydar Aliyev, who had been First Secretary of the Azerbaijan Communist Party since 1969, read aloud a greeting from USSR General Secretary Leonid Brezhnev that endorsed the exhibition as a means of uniting the international scientific community. The exhibition was truly an international affair, drawing delegations from the United States and several European countries, a moment of apparent harmony during the temporary easing of Cold War relations. It was also a celebration of the Soviet Union's immense success as an oil producer on the global scale. With the expansion of oil extraction in the Volga-Ural region and West Siberia, the USSR had surpassed US levels of oil production in 1975. S88 Although by 1978 Baku was producing just a small fraction of all Soviet oil and was insignificant as a producer on the international scale, the city's long history as an oil center made it the natural choice to play host to such an exhibition.

### Baku's Changing Character

Alongside Baku's changing status in the Soviet oil scene came a transformation in the character of the city itself. The balance of the ethnic makeup of the city's population and local oil industry personnel tipped gradually away from nonnatives such as Russians and Armenians, and toward local ethnicities, primarily Azerbaijanis. The "nativization"

<sup>&</sup>lt;sup>588</sup> Alekperov, Oil of Russia: Past, Present, & Future, 304-308.

<sup>&</sup>lt;sup>589</sup> Paul E. Lydolph and Theodore Shabad, "The Oil and Gas Industries in the U.S.S.R.," *Annals of the Association of American Geographers* 50, no. 4 (1960): 468; Nassibli, 103.

of Baku, which was not just demographic but also political and aesthetic, was not entirely connected to its oil industry, however, but represented a broader change in center-periphery relations in the post-Stalin era.

There was a clear demographic shift in Azerbaijan and Baku in the postwar era toward a predominantly Azerbaijani urban population, another phase of population change associated directly with the oil industry. Beginning in the mid-nineteenth century, the Russian and Armenian populations of Baku had begun to grow substantially, reaching 35.5% and 19.4% of Baku's population by 1913, respectively, while Azerbaijanis made up just 21.4%.<sup>590</sup> The trend continued through the end of World War II, as long as Baku remained an important oil producer for the country. However, in the postwar years the number of jobs associated with the oil industry in Baku began to decline. This was due in part to greater automation and increased use of labor-saving technology in the oil industry. Increasingly, processes related to pumping oil and gas from wells, including flood control, the frequency of pumps' strokes, and measurement of production, could be automated.<sup>591</sup>

As jobs in the oil industry began to dry up, Russians and other ethnically European Soviets either began to return to find work in their places of origin or transferred (voluntarily or involuntarily) to the newer oil sites. In 1959, Russians still made up 32.9% of Baku's population. By 1989, that number had dropped to just 16.5%

<sup>590</sup> Altstadt, *The Azerbaijani Turks*, 32.

<sup>&</sup>lt;sup>591</sup> Ebel, *The Petroleum Industry*, 105; ARDA, f. 1610, op. 26c, del. 118, 20-22.

of the population (Table 9).<sup>592</sup> For some ethnic Azerbaijanis as well, especially those interested in making a career in the national oil industry, Baku's reputation was losing its shine. Increasingly, postings in the oil and gas industries in Baku came to seem less desirable than those in the more exciting new oil regions. Baibakov recalled receiving a telegram in 1954 from a young Bakuvian named Farman Salmanov, who had recently graduated from the Azerbaijan Oil Institute. Salmanov lamented having received a post in Baku, and asked for Baikabov's help in obtaining a job offer in West Siberia, which had better prospects as an oil-producing region. Baibakov arranged for Salmanov to be transferred to the Western Siberia Oil Geology unit (Zapsibneftegeologiia). 593

<b>Table 9.</b> Baku Population by Nationality (%), 1939-1989 <sup>594</sup>						
Nationality	1939	1959	1970	1979	1989	
Azerbaijani	27.3	32.9	46.3	55.7	66.0	
Russian	43.5	34.7	27.7	22.0	16.5	
Armenian	15.0	21.3	16.3	14.0	10.0	
Other	14.2	11.1	9.7	8.3	7.5	

Associated with the demographic de-Russification of Baku was a gradual and subtle "nativization" of the city's government and culture. The beginning of Azerbaijan's very gradual course back to national self-consciousness was associated with the "Thaw"

<sup>592</sup> Vsesoiuznaia perepis naseleniia 1959 goda. Gorodskoe i selskoe naseleniie oblastei respublik SSSR (krome RSFSR) po polu i natsionalnosti, http://www.demoscope.ru/weekly/ssp/resp\_nac\_59.php?reg=65; Vsesoiuznaia perepis naseleniia 1989 goda. Raspredelenie gorodskogo i selskogo naseleniia oblastei respublik SSSR po polu i natsionalnosti, http://www.demoscope.ru/weekly/ssp/resp\_nac\_89.php?reg=68.

<sup>&</sup>lt;sup>593</sup> Slavkina, *Baibakov*.

<sup>&</sup>lt;sup>594</sup> Vsesoiuznaia perepis naseleniia 1939 goda. Natsionalnyi sostav naseleniia raionov, gorodov i krupnykh sel soiuznykh respublik SSSR. http://www.demoscope.ru/weekly/ssp/ussr nac 39 ra.php?reg=679; Vsesoiuznaia perepis naseleniia 1959; Vsesoiuznaia perepis naseleniia 1970 goda. Gorodskoe i selskoe naseleniia oblastei respublik SSSR (krome RSFSR) po polu i natsionalnosti. http://www.demoscope.ru/weekly/ssp/resp\_nac\_70.php?reg=71; Vsesoiuznaia perepis naseleniia 1979 goda. Gorodskoe i selskoe naseleniia oblastei respublik SSSR (krome RSFSR) po polu i natsionalnosti. http://www.demoscope.ru/weekly/ssp/resp\_nac\_79.php?reg=74; Vsesoiuznaia perepis naseleniia 1989.

that set in throughout the Soviet Union upon Khrushchev's accession to power in the mid-1950s. This ushered in a reinvigoration of political, academic, and cultural life in the country due to the relaxation of the repressive policies of the Stalin era. 595 The departure of Russians and other non-Azerbaijani residents of Baku only increased the cultural and political effects of the Thaw. Further, under Khrushchev, who was in power from roughly 1955 until his ouster in 1964, reform extended to a decentralization process that gave more decision-making power to the leaders of the various republics. The position of First Secretary of the Azerbaijan Communist Party had been occupied by ethnic Azerbaijanis since the beginning of the Soviet era, so the accession of Heydar Aliyev in 1969 was not initially notable. However, Aliyev managed to tread a careful path toward subdued cultural nationalism and connection with ethnic Azerbaijanis' possessiveness for Baku and the republic of Azerbaijan. 596 The Soviet nationalities policy, which had been introduced under Stalin to promote "nations in form, but not in content," now found new life as non-Russian cultural elements found more room to expand. <sup>597</sup> During the Brezhnev era (1964-1982), there was some reversal of republics' autonomy, but in general the republican leaders had far more local control than they had had under Stalin.

<sup>&</sup>lt;sup>595</sup> For instance, in 1956 Azerbaijani was designated the state language of the republic. The transition in power nationally was mirrored in Azerbaijan as Stalin's crony Mir Jafar Baghirov, the head of the Azerbaijan Communist Party, was removed, arrested, charged with "anti-Soviet activity" along the same lines as Lavrentii Beria, and eventually executed. Jamil Hasanli, *Khrushchev's Thaw and National Identity in Soviet Azerbaijan*, 1954-1959 (Lanham, MD: Rowman & Littlefield Publishers, Inc., 2015), 9, 73.

<sup>&</sup>lt;sup>596</sup> In Azerbaijan, the effect continued until the end of the Soviet era, as Aliyev filled the most important governmental posts with his own loyal supporters (common practice in the late Soviet era). Aliyev remained in positions of power until the height of corruption purges in the Gorbachev era, and returned as the authoritarian president of independent Azerbaijan in 1993, a position he held until his death in 2003. Altstadt, *The Azerbaijani Turks*, 178-181.

<sup>&</sup>lt;sup>597</sup> Martin, 18. From the 1960s onward, most government letterhead circulated in the Azerbaijan SSR was written in both Russian, in Cyrillic, and Azerbaijani, in the Latin-Cyrillic hybrid from the early twentieth century (from my own experience working in the Azerbaijan state archives).

It was implicitly understood that such an arrangement would last only as long as the republics and their leaders remained explicitly loyal to the center and did not take steps to promote true political nationalism. In Azerbaijan, the effect continued until the end of the Soviet era, as Aliyev filled the most important governmental posts with his own loyal supporters (a common practice in the late Soviet era). 598

The nativization of Baku in the postwar Soviet period should not be overstated, however. Due in large part to the exceptionally strong influence of non-Azerbaijanis for many decades, Azerbaijan lagged behind a number of other Soviet republics in developing a politicized nationalism of any consequence until the 1980s.<sup>599</sup> The Russian language had been the lingua franca in all parts of the Soviet Union since the country's inception, and remained so. Russian was especially heavily used in scientific and technical fields, including the oil industry, because it had been adapted to such purposes for far longer and more actively than languages such as Azerbaijani.<sup>600</sup> Furthermore, complete fluency in Russian and familiarity with Russified elements of the Soviet system remained important to anyone who aspired to rise above the lowest stratum of society.<sup>601</sup> With an increasing number of bureaucratic positions being vacated by European Soviets, more Azerbaijanis had a chance to rise to higher posts with the right training. The number of Russian schools only increased in the postwar period, and the Azerbaijani language

50

<sup>&</sup>lt;sup>598</sup> Altstadt, *The Azerbaijan Turks*, 178-181.

<sup>&</sup>lt;sup>599</sup> Svante E. Cornell, *Small Nations and Great Powers: A Study of Ethnopolitical Conflict in the Caucasus* (Richmond, Surrey: Curzon Press, 2001), 78.

<sup>600</sup> Swietochowski, "Baku," 119.

<sup>601</sup> Hasanli, Khrushchev's Thaw, 87.

was taught poorly despite being the state language. Baku was becoming Azerbaijani in character and demography in some ways, but the Azerbaijani intelligentsia and anyone else hoping to achieve respectable status in Soviet society were compelled to attend and send their children to Russian educational institutions. 603

Despite the gradual exodus of non-Azerbaijanis, Baku's population continued to grow steadily after the war (Table 10). While for most of its modern history fluctuations in Baku's population had been directly associated with the health of its oil industry (and vice versa), in the postwar era the two gradually became more detached. There was no longer a strong correlation between urbanization and the growth of the oil industry. Oil extraction required fewer hands due to technological advances, Baku was not a particularly important source of oil, and the extraction that continued in the region was increasingly distant from the city itself. Baku continued to grow as a city for the same reasons that urbanization was increasing throughout the world in the second half of the twentieth century, namely, increasing numbers of industrial jobs and decreasing numbers of agricultural jobs. Although its oil industry had shrunk in status, the republic of Azerbaijan possessed a number of other industries that were remarkably successful in the late Soviet era, particularly in the late 1970s, including agriculture and textiles.<sup>604</sup>

<sup>&</sup>lt;sup>602</sup> Ibid., 91.

<sup>&</sup>lt;sup>603</sup> Khrushchev himself, ever volatile, in 1959 railed against the notion that non-Azerbaijanis should have to learn the Azerbaijani language, or that Azerbaijanis did not have sufficient cultural representation in their own capital city, indicating that this might step too close to nationalism. Hasanli, *Khrushchev's Thaw*, 342-343; Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (New York: Simon & Schuster, 1991), 774; Swietochowski, "Baku," 117.

<sup>&</sup>lt;sup>604</sup> Svante E. Cornell, Azerbaijan since Independence (New York: M.E. Sharpe, 2011), 43.

<b>Table 10.</b> Total Baku Population by Census, 1939-1989 <sup>605</sup>				
787,623				
642,507				
1,265,515				
, ,				
1,533,235 1,794,874				

The growing population of Baku necessitated continued construction, regardless of the city's success or failure as an oil center. In the 1950s, a 1937 city plan devised by Lev Aleksandrovich Ilyin, an architect of Leningrad, and put on hold for the duration of the war was finally executed. Its primary aim was to increase drastically the amount of working and living space in the central part of Baku in an orderly way. The new plan involved both upward and outward construction. A number of late-nineteenth-century buildings near central Baku received between one and three additional stories, usually but not always executed in a seamless and faithful style. Furthermore, the "buffer zone" of wastes and slums that had long separated central Baku from the Black Town a few miles to the east was given new life as administrative and residential structures arose within it.606

During the first two decades or so of the postwar era, between the late 1940s and the late 1960s, there was generally a balance in Baku between the monumental buildings of the Stalin era and the mass housing projects that were a priority of the Khrushchev administration. Several of Baku's largest projects from this period had been conceived of during Baku's second boom in the 1930s, but only in the postwar period were the

605 Vsesoiuznaia perepis naseleniia 1939; Vsesoiuznaia perepis naseleniia 1959; Vsesoiuznaia perepis naseleniia 1970; Vsesoiuznaia perepis naseleniia 1979; Vsesoiuznaia perepis naseleniia 1989.

<sup>606</sup> Blau, Baku: Oil and Urbanism, 150.

resources and manpower available to realize these projects. The Azerbaijan Palace of the Soviets (now simply called the Government House [Hökumət Evi]), which was started in 1936 and put on hold during the war, was completed in 1952.<sup>607</sup> In 1967, the Baku metro opened for service, thirty-five years after initial plans for it had been laid. Were it not for repeated construction delays, it would have been the third metro system in the Soviet Union, after Moscow and Leningrad (ultimately it was the fifth, following Kiev and Tbilisi). As it was, after construction commenced in the late 1940s, the project halted repeatedly due to unexpected geological, hydrological, and administrative disruptions (including upset over Stalin's death in 1953). In the years following the maiden run between Baki Soveti (now Icheri Sheher) station and Narimanov station in 1967, new stations were gradually brought online through the end of the Soviet era.<sup>608</sup>

It was during the postwar era also that the major public leisure sites in Baku began to receive full attention from municipal authorities, part of a general trend in the late Soviet era. Beaches along the northern coast of the Absheron Peninsula, most of them well away from offshore extraction sites, became popular recreational spots as transportation routes to them improved. Tsypylma Darieva's history of the renovation of the Baku promenade in this period offers a remarkable example of socialist "organized"

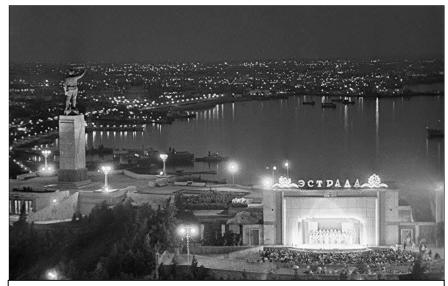
 $^{607}$  Ibid., 150, 152; Nikolaos Drosos, "Modernism with a Human Face: Synthesis of Art and Architecture in Eastern

Europe, 1954-1958," PhD diss. (City University of New York, 2016), 24. A few sources (including current tour guides at the Government House) state that the building was completed using the labor of German prisoners of war.

608 "Oten illerin khronikasi," Baki Metropoliteni, https://web.archive.org/web/20130818082921/http://metro.gov.az/uploaded/xronologiya.pdf; Tom Marsden, "The Baku Metro at 50," *Visions of Azerbaijan* (Winter 2018), http://www.visions.az/en/news/1009/a1559b58/.

<sup>609 &</sup>quot;Travel Report: Caucasus," 561.

leisure" intended to "demonstrate state power, socialist achievements, and new technologies." The promenade had been popular among Europeans during the imperial



**Figure 9.** Statue of Sergei Kirov overlooking Baku Bay and the Bulvar, mid-twentieth century.

era, an example of
their preference for
open spaces and
chic waterfront
strolls, but its
upkeep had not
been a concern for
early Soviet
municipal leaders

after the 1920s. During the relative ease of the postwar period, improvements to the promenade were intended to make it more available for egalitarian public leisure: extension and repaving, with the addition of a puppet theater, a parachute tower (closed in the 1960s after several fatal accidents), a complex of miniature Venetian canals, shade trees, and many teahouses and snack bars. The message was that the regime valued its citizens' leisure. The Soviet context remained alive here, however, as nearly all state celebrations took place on the promenade, and the entire complex was supervised from a nearby hill by a massive statue of Sergei Kirov.<sup>610</sup>

. .

<sup>&</sup>lt;sup>610</sup> Tsypylma Darieva, "Reconfiguring a Public Place. Baku Promenade between Europe and Asia," in *Orient on Orient: Images of Asia in Eurasian Countries*, eds. Koshino Go and Tetsuo Mochizuki (Sapporo: Hokkaido University Press, 2013), 124-125.

Finally, beginning in the late 1950s, Baku's residential areas were renovated and expanded according to the Khrushchev-era *mikroraion* ("microregion") approach. The mikroraion was essentially a planned, autonomous neighborhood, including apartment buildings and all of the facilities and services that one might find in a moderately-sized town: schools, medical clinics, shops, and so on. The apartment buildings themselves were often the type eventually known as *khrushchevka* or *khrushchoba*—a low-cost, prefabricated concrete structure, sometimes very shoddy, associated with Khrushchev's mass housing initiative. According to Blau, "the urban spatial logic underlying the organization and size of the urban conurbation was that each microregion would be equipped to meet the daily and weekly needs of its inhabitants," reducing the need for



**Figure 10.** Soviet-era apartment complex with Azerbaijani motifs in the concrete cladding. Photo by author, 2017.

urbanites to travel long
distances except for work. 612
Neft Dashlari was one
example of a mikroraion;
others began to fill Baku's
outskirts. These housing
blocks were often an eyesore
and did not improve in
appearance with time. In
Baku, however, some local
architects in the 1960s and

<sup>611</sup> Blau, Baku: Oil and Urbanism, 170.

<sup>&</sup>lt;sup>612</sup> Ibid., 170.

1970s made attempts to enhance the buildings' facades by integrating Azerbaijani decorative motifs into the outer concrete slabs (Figure 10). Per Blau, "the result was a techno-aesthetic hybrid in which traditional local ornamental motifs were assimilated to Soviet standardized building typologies and prefabricated construction technologies." This manner of expanding Baku's residential capacity continued as long as the city's population increased, that is, until the end of the Soviet era, when tastes changed considerably.

The perception of decline in late Soviet-era Baku stems largely from the physical deterioration of the city and industry in the last decade or so of Soviet rule. Until the 1980s, Baku retained an air of prosperity and contentment, as reflected in its population and spatial growth. However, hasty construction and the corrupt, corner-cutting tendencies of those embedded in the Soviet economic system started to become evident as time wore on. The cheaply-built khrushchevki that housed likely a majority of the city's residents were visibly decaying by the year; in Baku and elsewhere, they have become a symbol of the Soviet regime's shortcomings in its facilities and products. The failures of the oil industry were becoming more apparent as well, the result of chronic underfunding during the later Brezhnev era. Glavneftemash, the oil equipment-making association that employed a large share of Baku oil workers, came under scrutiny during the 1980s for weaknesses in production. Political scientist Thane Gustafson communicated the findings of the Soviet press: "it painted a sorry picture of inefficiency and disarray. Glavneftemash's plants were primitive and dirty, its machinery out of date, its operations poorly mechanized, and its research and development facilities, such as

<sup>613</sup> Ibid., 179.

they were, taken over for current production. Glavneftemash was working at 99 percent capacity, but its output was antiquated and substandard." Despite increased inspections, Glavneftemash's failures were not corrected; the systemic shortcomings that had led it to that state could not be overcome in a matter of a few years.<sup>614</sup>

Finally, it was in the 1980s that experts, the press, and local residents finally began to come to grips with the extent of the environmental damage wrought by over a century of intensive urbanization and industrialization around the Absheron Peninsula. Awareness of the problem seems to have set in gradually. Concern for environmental impact until the late Soviet era had been minimal; imperial-era industrialists and Soviet authorities generally had a utilitarian understanding of nature that valued maximum extraction and production regardless of the effects. Nature protection groups remained fringe movements and generally ineffective until the end of the Brezhnev era, when relatively clear-eyed environmental study became permissible, and therefore professionalized.

The proliferation of offshore oil activities in the postwar period over time resulted in a level of contamination of the Caspian Sea that became impossible to deny. The pollution that had long been regarded as an unpleasant but ultimately not worrisome side effect of "business as usual" was increasingly recognized as a sign of hazardous ecological damage that threatened the health and wellbeing of all living things in the area. The occasional oil slicks that had once arisen naturally in the Bay of Baku by the 1970s

. .

<sup>&</sup>lt;sup>614</sup> Gustafson, Crisis amid Plenty, 190-192.

<sup>&</sup>lt;sup>615</sup> See Douglas R. Weiner, A Little Corner of Freedom: Russian Nature Protection from Stalin to Gorbachev, (Berkeley: University of California Press, 1999).

covered its surface constantly, coating the shore and suffocating marine life. Sturgeon catches declined consistently, depressing production of the sea's prized black caviar.<sup>616</sup>

A far more alarming development was the unexpected rise in the level of the Caspian Sea of about ten feet between 1978 and 1995, which resulted in a variety of messes that local authorities could not contend with, and which added to a sense of physical decline in and around Baku. It is not entirely clear why the sea level rose during this period, but it was likely some combination of normal long-term cycles of rising and falling, climate change, and precipitation patterns elsewhere (the sea is fed by five major Eurasian rivers). 617 Between the 1930s and the late 1970s, the Caspian sea level had continuously dropped, about ten feet total, in part due to increased agricultural irrigation; in less than two decades, it rebounded to its 1930 level. <sup>618</sup> The relatively sudden rise resulted in additional water pollution as the water table rose to meet toxic waste sites that had accumulated along the shore in the previous fifty years. 619 Ecologist Henri Dumont presents the example of Sumgait as one of the worst scenarios—during the 1950s and 1960s, when the Caspian Sea was at its low point, additional industrial facilities were added to Sumgait's coastline, most of them related to the chemical and metallurgical industries, all of them producing toxic waste. When the sea began to rise in 1978,

<sup>&</sup>lt;sup>616</sup> Paul Josephson, Nicolai Dronin, Ruben Mnatsakanian, Aleh Cherp, Dmitry Efremenko, and Vladislav Larin, *An Environmental History of Russia* (Cambridge: Cambridge University Press, 2013).

<sup>617</sup> Henri Dumont, "Ecocide in the Caspian Sea," Nature 377 (1995): 674.

<sup>&</sup>lt;sup>618</sup> J. L. Chen, T. Pekker, C. R. Wilson, B. D. Tapley, A. G. Kostianoy, J.-F. Cretaux, and E. S. Safarov, "Long-term Caspian Sea level change," *Geophysical Research Letters* 44, no. 13 (2017), https://doi.org/10.1002/2017GL073958.

<sup>&</sup>lt;sup>619</sup> Nasar Jafari, "Review of pollution sources and controls in Caspian Sea region," *Journal of Ecology and the Natural Environment* 2, no. 2 (2010): 26.

authorities failed to clean up the site, and thus the facilities flooded, sending the toxic waste out to sea. 620 Furthermore, the rising sea levels flooded low-lying settlements and damaged large portions of Baku's famous promenade. 621

Ultimately, the environmental issues afflicting the Baku region, most especially the pollution of the Caspian Sea by the oil industry, could no longer be ignored. In this regard, the late Soviet era was a time of growing awareness and study of the problems, but not yet corrective action. One of the earliest studies of environmental issues in the Baku region came in a 1982 monograph, *Economic and Social Development in Baku (1981-1985)* (Ekonomicheskoe i sotsialnoe razvitie Baku) by Soviet scientists Z.A. Samed-zade, B.E. Akhundov, and E.N. Khanlarov. It included assessments of atmospheric pollution levels in the Baku area as compared to international standards of permissible concentrations of various pollutants. human assessing the state of the environment around Baku, especially the health of the Caspian Sea, emerged during this period, the result of Brezhnev's general engagement with the sciences and the increasing transparency of the *glasnost* years. Devising, implementing, and paying for solutions became the task of the independent state of Azerbaijan.

<sup>&</sup>lt;sup>620</sup> Dumont, 673.

<sup>&</sup>lt;sup>621</sup> Tsypylma, 126.

<sup>&</sup>lt;sup>622</sup> Z.A. Samed-zade, V.E. Akhundov, E.N. Khanlarov, et al., *Ekonomicheskoe i sotsialnoe razvitie Baku* (1981-1985) (Baku: Kommunist, 1982); Shahla Kahramanova and Musaddin Namazov, "Ecological condition of Baku atmosphere and its improvement way," 45<sup>th</sup> ISOCARP Congress (2009): 1, 3.

### Conclusion

Between the 1870s, when the Baku oil industry got its start, and the end of World War II, oil production had overwhelmed the urban-industrial center. The exploration, drilling, extraction, and processing of crude oil had caused the city to expand as hundreds of thousands of workers traveled there from all parts of Eurasia, and as private investors and the state poured resources into construction to accommodate the industry and its workers. Baku had been a treasure for modernizing and warring states including the Russian Empire, the Soviet Union, and Nazi Germany.

The waning of Baku's relative share of national and global oil production after World War II ate away at its fame and led to the gradual departure of most nonnative workers. When considered on the national scale, in a country that valued quotasurpassing and the spread of central Soviet influence, Baku seemed to be taking a turn for the worse. However, the industrial side of Baku continued to contribute to the Soviet oil sector material, methods, and technology, therefore retaining its traditional identity as an oil center. Furthermore, the city persistently expanded as its industrial base diversified, coming to include textiles, air conditioners, and other consumer goods, industries that drew workers from the surrounding regions more than from the distant Soviet center. From the end of World War II to the end of the Soviet period, Baku continued to mature in ways similar to the Soviet Union's other major cities, with the addition of large-scale public works that flaunted the superiority of the Soviet system, and the construction of cheap mass-housing projects meant to accommodate the country's growing urban population and send the message that its leadership cared about attending to the public's comfort. However, there were signs that the city was better able to embrace its

Azerbaijani nature, from the makeup of its population and local leadership to the appearance of its buildings. The urban center's development was no longer so directly dominated by oil production.

#### **CHAPTER VIII**

#### BAKU AND OIL IN THE POST-SOVIET ERA

Oil is the main national wealth of Azerbaijan and its people. Azerbaijan [has been] the land of oil since ancient times. That is why Azerbaijan is called the land of fire.

—Heydar Aliyev, "Contract of the Century" signing (1994)<sup>623</sup>

On August 30, 1991, following the August coup in Moscow, the Supreme Council of the Republic of Azerbaijan declared independence from the Soviet Union. The formal breakup of the Soviet Union four months later made Azerbaijan's independence official in all eyes. It was a proud moment for the country, one lavishly celebrated in the years since, but in many other respects Azerbaijan had fallen to one of its lowest points.

Nationalist rumblings had disturbed the country for at least three years before independence, stemming from dissatisfaction with Soviet rule and a territorial conflict with neighboring Armenia. The most visible unrest took place in Baku, which hosted a series of crises in the final few years of the Soviet era. Mikhail Gorbachev's efforts to correct the Soviet economy's plateau destabilized the local economy, in particular Baku's oil equipment industry. There is a marked correlation between these economic reforms and the decline in both the quality and quantity of the equipment manufactured in Baku. 624 The city's economy, and the associated quality of life there, fell into a slump

<sup>623 &</sup>quot;Speech of Azerbaijan President Heydar Aliyev at the Contract Signing Ceremony on the Joint Development of the Deposits in the Caspian Shelf between the State Oil Company of Azerbaijan Republic and the Consortium of the Foreign Oil Companies – September 20, 1994," Heydar Aliyev Heritage International Online Library, http://lib.aliyevheritage.org/en/8223457.html.

<sup>&</sup>lt;sup>624</sup> Blau, *Baku: Oil and Urbanism*, 190; Bülent Gökay, "The History of Oil Development in the Caspian Basin," in *Oil and Geopolitics in the Caspian Sea Region*, eds. Michael P. Croissant and Bülent Aras (Westport, CT: Praeger, 1999), 15.

that was not remedied until the mid- to late 1990s. Increasing alienation between Azerbaijani and Armenian residents of Baku, not unconnected to the stagnation of the oil industry, built into outbreaks of violence starting in the late 1980s. 625 When the two sides entered into open war over the Nagorno-Karabakh territory (a conflict that continues today), and subsequently declared their independence from the Soviet Union, the longstanding transportation routes and supply chains that had embedded Azerbaijan in the Soviet system were ruptured. Not long thereafter, the Soviet Union broke up along the borders of its republics, and Azerbaijan was effectively left to its own devices.

However, the independent Republic of Azerbaijan still possesses vast reserves of oil and natural gas, resources that the country's leaders have been able to exploit quite successfully in their endeavor to enrich Azerbaijan. In the first few years following the Soviet breakup, political and industry leaders pursued development deals with foreign companies; as in the Russian Imperial era, foreign money has poured into oil exploitation, but primary decision-making power now lies in Baku. Azerbaijan rose out of its depression in the late 1990s, and although it is not and will likely never be as widely familiar in the west as it was in the early twentieth century, it has found the means to make its citizens comfortable, and to make itself important in its own region of the world. Its oil and gas are limited resources, and will someday run out, but in terms of affluence, Azerbaijan is thus far a post-Soviet success story.

Although oil and gas extraction has largely moved offshore, Baku remains the oil center of Azerbaijan. Much as in the Soviet era, the industry is headquartered there, and

<sup>625</sup> Thomas De Waal, *Black Garden: Armenia and Azerbaijan through Peace and War* (New York: New York University Press, 2003), 290; Cornell, *Small Nations and Great Powers*, 82, 85-89.

the city's character remains heavily influenced by its oil legacy, as reflected in its architecture and events—oil is its "brand," so to speak. More than ever before, however, Baku directly benefits from oil revenues. The return to capitalism and the infusion of Azerbaijani nationalism are expressed in an ongoing revamp of the nation's capital, a statement of wealth, pride, and self-importance, boasting of success while attempting to attract further investment. In the era of independence and nationalist self-absorption, oil has a place deeper in the Azerbaijani identity than ever before.

## Years of Crisis: Interethnic Strife and Economic Depression in Baku

As in the rest of the Soviet Union, conflict and uncertainty consumed Baku in the late 1980s and early 1990s; its specific crises had to do with aggression between Azerbaijanis and Armenians, an unstable political scene, and a major downturn in its oil industry. The end of apparent stability and prosperity in Baku came years before the dissolution of the Soviet Union. The faltering of the oil industry due to Gorbachevian tinkering played a relatively small direct part in fomenting the turmoil, which was the consequence of larger, longer-developing political and ethnic circumstances. The diversity of Baku's population rapidly weakened as nationalist, exclusionary forces took hold in the city, targeting particularly the Armenian population, which was ultimately expelled from the urban-industrial center altogether. Consumed by war and cut off from the Soviet system, Azerbaijan's main industry flailed, dropping to its lowest point since 1920 and plunging the entire country into an economic depression as it entered independent statehood. Azerbaijan's new leadership remained fragile for the first few years after the Soviet breakup, uncertain and effectively directionless, and unable to bring

security to the oil industry. Until 1994, when the new president, Heydar Aliyev, began securing major international oil production agreements, and along with them an authoritarian regime and personality cult, Azerbaijan's future remained unpromising.

The conflict that erupted between Azerbaijanis and Armenians in Baku and then across Transcaucasia in the late 1980s was only indirectly related to the Baku oil industry, but ultimately changed the character of the city and industry regardless. As described in previous chapters, ethnic Armenians had migrated to Baku to work in oil and related industries since at least the 1850s. In Baku, never much of a "melting pot," Armenians were a constant and significant separate presence, usually living in communities insulated from the Azerbaijani and Russian majorities. A combination of strict policing and the assurance of Azerbaijanis' ascendancy in their own republic kept a lid on open ethnic conflict during the Soviet era; acceptance and fellowship between the two groups developed to some degree. <sup>626</sup> Disruptions in the local oil economy, greater laxity in policing nationalist sentiments, and the breakdown of authority in the Soviet center all contributed to the resumption of ethnic hostilities in the late 1980s. As in the conflicts of 1905 and 1918, the violence began in Baku, a packed urban center where Armenians and Azerbaijanis had long lived side by side. It became clear that Armenians, regardless of how many generations they had lived in the city, were still considered visitors, and increasingly unwelcome.

The surface stability that had endured in Baku throughout the Soviet period was first troubled in the late 1980s by the rise of the Popular Front of Azerbaijan (PFA), a nationalist and separatist organization that opposed both Soviet control and the strong

<sup>626</sup> De Waal, 100.

presence of Armenians in Azerbaijan. The organization was one manifestation of broader trends in the Soviet Union during that period, as nationalist groups felt emboldened by perceived weakness at the center of the system. The issue that most effectively roused support for the PFA's anti-Soviet, anti-Armenian position was control of the Nagorno-Karabakh Autonomous Oblast, a 1700-square-mile region lying within the borders of Azerbaijan, but populated mostly by Armenians. 627 In 1987, some prominent Armenians began to demand that Nagorno-Karabakh be brought under the control of the Armenian Soviet Socialist Republic; in turn, some prominent Azerbaijanis began to assert that the territory in fact belonged to Azerbaijan, and that Soviet territorial divisions were interfering with Azerbaijan's potential prosperity. Formed by a group of academicians at the republic's top institutions, the PFA delved into Azerbaijani and Armenian history for evidence to support their claims that Azerbaijan should rightly be an independent country and that Armenia's attempt to annex the Nagorno-Karabakh territory was yet another manifestation of that people's long history of unjust territorial claims (so the narrative goes).628

The tension between the two groups in Baku was decisively broken in 1988 with the Sumgait pogrom. In February 1988, in the city of Sumgait, effectively a workers' suburb some 20 miles northwest of Baku, daily demonstrations related to the Nagorno-Karabakh dispute were stirred to violence by Azerbaijani speakers who broadcast rumors

<sup>&</sup>lt;sup>627</sup> As a result of the Soviet nationalities policy (to oversimplify greatly), the region, which had had an Armenian ethnic majority for many centuries, was defined as an autonomous oblast within the Azerbaijan Soviet Socialist Republic. It is now simply Nagorno-Karabakh (Dagliq Qarabag in Azerbaijani, Artsakh in Armenian).

<sup>&</sup>lt;sup>628</sup> Audrey L. Altstadt, *Frustrated Democracy in Post-Soviet Azerbaijan* (Washington, D.C.: Woodrow Wilson Center Press, 2017), 10-11.

(only partially true) of Armenian atrocities in the western territory. The demonstration of February 28 became a mob procession through Sumgait. Azerbaijani assailants killed between 30 and 200 Armenians, raped Armenian women, and destroyed Armenian property. Other Azerbaijani residents of Sumgait did what they could to protect their Armenian neighbors, some of whom engaged in the fighting, resulting in the deaths of several Azerbaijani attackers. Sumgait was soon forcibly pacified by Soviet troops sent in by Gorbachev, but this was only the first of several bloody incidents between Armenians and Azerbaijanis in the Baku area.<sup>629</sup>

The situation in Baku continued to deteriorate in the following two years. In December 1988, tens of thousands of Armenian refugees arrived in Baku, fleeing the shattering destruction of the 1988 Armenian earthquake, increasing Azerbaijani nationalists' resentment of both Armenians and the Soviet system. <sup>630</sup> In December 1989, the Armenian Church of Gregory the Illuminator, an icon of Armenian faith that has survived Baku's many imbroglios since 1869, was targeted by arsonists, one of several sporadic attacks by Popular Front extremists that year. <sup>631</sup> Also in December, unclear messaging from Moscow regarding control of Nagorno-Karabakh gave Armenia another opening to claim the territory as its own, outraging Azerbaijani nationalist partisans. Organized attacks on Armenians living in Baku proper began in January 1990;

<sup>&</sup>lt;sup>629</sup> The interpretation of this clash that emphasizes Azerbaijani aggression and Armenian victimhood was reinforced at the time by Soviet media, and in years since by Western reporting. Altstadt, *The Azerbaijani Turks*, 196; De Waal, 32-37.

<sup>&</sup>lt;sup>630</sup> Altstadt, *The Azerbaijani Turks*, 203.

<sup>631</sup> De Waal, 103; Altstadt, Frustrated Democracy, 12.

Armenians defended themselves and launched their own attacks. Between January 13 and January 15, 1990, dozens of Armenians and Azerbaijanis died in Baku. 632

Shortly after the mid-January clash between Armenians and Azerbaijanis, Soviet authorities finally took action to reassert control in Baku, which had become consumed by Popular Front enthusiasm. Mass demonstrations were taking place daily in the city's open spaces, most visibly in Lenin Square (now Freedom Square, or Azadliq Meydani), along the main waterfront boulevard. On the night of January 19-January 20, 1990, Soviet troops cut primary communications to the city and moved on groups of demonstrators, shooting and killing perhaps 100 Bakuvians in the turmoil that followed. In Azerbaijan, the event is remembered as Black January, and is central to the country's independence mythology. 633 The Azerbaijanis who died that day are interred in Martyrs' Lane, a long walkway lined with glossy black headstones along the city's western ridge, overlooking the Caspian Sea.



**Figure 11.** Soviet tanks in Baku, January 1990. Source: https://www.facebook.com/oldazerbaijan

<sup>632</sup> The accuracy of reports of the number of dead and wounded is difficult to assess.

246

<sup>&</sup>lt;sup>633</sup> Altstadt, Frustrated Democracy, 13-14.

The period after Black January was Azerbaijan's final stretch toward independence, and the beginning of Armenians' last major exodus from Baku. Originally drawn to the city in large numbers to work in the oil industry, ethnic Armenians had made up a significant minority of the Baku populace since the mid-nineteenth century, enduring two major clashes with their Azerbaijani neighbors in the early twentieth century and multiple changes in government. Intermixing between the two groups was always limited, but Armenians had long been part of the city's life, appearance, and distinctiveness from the rest of Azerbaijan. In 1990, masses of Armenians left Baku and the rest of Azerbaijan in haste, returning to their own country. Evidence of the Armenians' presence in Baku was gradually erased, deemphasized, or recontextualized. De Waal reported in the early 2000s that some twenty thousand Armenians still lived in Baku, most of them the wives of Azerbaijani men; they attempted to bury their Armenian identity. 634 The 2009 census showed just 104 Armenians living Baku (existing prejudices likely resulted in underreporting). 635 Tens of thousands of Russians also departed, as did other ethnic minorities who felt alienated by the city's changing course. In turn, Azerbaijanis who had lived in Armenia, Nagorno-Karabakh, and other parts of the Soviet

<sup>634</sup> In the early 2000s, journalist Thomas de Waal visited the Armenian section of one of Baku's cemeteries so that he might report back to an Armenian contact about her relatives' resting places. After being menaced by Azerbaijani cemetery wardens, de Waal ventured on and found many of the headstones vandalized (in this book, de Waal understatedly sides with Armenia and Armenians). De Waal, 103-104. This report accords with other reported vandalism of Armenian sites in Azerbaijan. The medieval Armenian cemetery in Julfa (Jugha in Armenian), a town located in the Azerbaijani exclave of Nakhchivan, was known to exist intact in 1990. By 2009, the 2,000 medieval headstones had been destroyed, and the cemetery completely leveled. "Azerbaijan: Famous Medieval Cemetery Vanishes," IWPR staff, *Institute for War & Peace Reporting*, April 27, 2006, https://iwpr.net/global-voices/azerbaijan-famous-medieval-cemetery-vanishes; "High-Resolution Satellite Imagery and the Destruction of Cultural Artifacts in Nakhchivan, Azerbaijan," *American Association for the Advancement of Science*, https://www.aaas.org/resources/high-resolution-satellite-imagery-and-destruction-cultural-artifacts-nakhchivan-azerbaijan.

<sup>635 2009</sup> Azerbaijan Census, http://pop-stat.mashke.org/azerbaijan-ethnic2009.htm.

Union returned to Azerbaijan (sometimes violently expelled, mirroring Armenians' departure from Azerbaijan), many of them to Baku. 636 In its ethnic makeup, Baku became more Azerbaijani than it had been in at least two centuries.

Into the early 1990s, Azerbaijan and Armenia remained openly at war with one another, and the conflict has continued to shape the two countries over their three decades of independence. The Nagorno-Karabakh War (1988-1994) and related spates of violence in the years since are less political disputes than expressions of deep and long-held ethnic and religious prejudice. Heydar Aliyev, who was elected president of Azerbaijan in 1993, is credited with having stabilized relations with Armenia. In 1994, the two countries declared a formal ceasefire, but the conflict is far from resolved. Azerbaijan continues to commit a not-insignificant share of funds to defense spending related to the conflict with Armenia, occasional skirmishes still take place in the disputed regions, and Azerbaijani citizens are constantly encouraged to develop animosity toward Armenians. As recently as 2017, large illuminated posters sponsored by the Baku Metro appeared in the metro station entrances around the city, declaring "Karabakh is ours, and ours it will remain!" ("Qarabağ bizimdirç bizim olacaq!"). Many young schoolchildren are shown images of mass graves and decomposing corpses, the

<sup>&</sup>lt;sup>636</sup> De Waal, 105.

<sup>637</sup> Alexander Zotin, "Azerbaijan: A Thirty-Year Fairy Tale," in *In Managing the Resource Curse*:

Strategies of Oil-Dependent Economies in the Modern Era, eds. Vladimir Grigoryev, Andrey Movchan, and Alexander Zotin (Carnegie Endowment for International Peace, 2017), 36.

<sup>&</sup>lt;sup>638</sup> Azerbaijan's defense spending in 2018 was 3.8% of GDP (following a peak of 5.5% of GDP in 2015); Armenia's defense spending in 2018 was 4.8% of GDP; for the purposes of comparison, the US's defense spending was 3.2% of GDP in 2018. "Military expenditure by country as a percentage of gross domestic product, 1988-2018," SIPRI databases, https://www.sipri.org/databases/milex.

Azerbaijani victims of clashes with Armenians, as part of their history education. Particularly compelling for Azerbaijanis have been gruesome images and other propaganda surrounding the 1992 Khojali massacre, in which Armenian fighters killed between 100 and 700 Azerbaijani civilians, including children, in the Nagorno-Karabakh village of Khojali. Government-run news sites daily report Armenian ceasefire violations. He Armenian counternarrative of the conflict hits similar notes. Despite multiple attempts at mediation by neutral parties, the two countries continue to pour resources into the standoff and to stake their pride on ultimately prevailing.

The active war with Armenia, combined with Azerbaijan's fairly rapid departure from the Soviet system, left Azerbaijan disordered and financially drained for several years. The country also lacked secure leadership. Between Azerbaijan's declaration of independence on August 30, 1991, and Heydar Aliyev's election in October 1993, the country had multiple turnovers in power. Ayaz Mutalibov held power for six months before being forced out by the APF. His successor, Yagub Mammadov, lasted just two months before the APF overthrew him. Mutabilov then took over for less than a week before being ousted, again by the APF. Isa Gambar acted as interim president from May 1992 until Azerbaijanis elected Abulfaz Elchibey to the presidency in June 1992. Another coup, this time led by Heydar Aliyev and the New Azerbaijan Party (Yeni Azərbaycan Partiyası, or YAP), took place in late 1993. Aliyev solidified his hold on power by various means, enfeebling opposition parties, using reported assassination and coup

<sup>&</sup>lt;sup>639</sup> This is another instance in which the death toll is difficult to assess. Those on the scene had ample reason to inflate or deflate the number of casualties, and the region has been officially closed to outsiders ever since. De Waal, 312-313, n25.

<sup>&</sup>lt;sup>640</sup> For instance, azernews.az and news.az.

attempts as justifications to increase his executive powers, and portraying himself as personally responsible for the oil industry's eventual renewal.<sup>641</sup>

War and unstable leadership acted as sharp deterrents to foreign involvement in the Azerbaijan oil industry in the early 1990s. Without foreign money, Azerbaijan was incapable of effectively profiting from its oil industry, having in the past relied on larger systems of finance, supply, and transportation. In participating in the reinvigoration of the Azerbaijan oil industry, foreign investors would already have been engaging in a certain amount of uncertainty, given that the Caspian oil and natural gas reserves were mostly unproven, oil and gas transportation from Baku to the west was still quite limited, and upfront investment requirements were substantial and would not result in profits for several years. The added risk of failure and financial loss posed by war and changing leadership were intolerable for foreign oil interests in the early 1990s.

For most, life in Baku in the early to mid-1990s was a trial. Industries that had most relied on the Soviet supply chain, particularly equipment and chemical manufacturing, declined, their factories abandoned. Azerbaijani refugees from Armenia and Nagorno-Karabakh strained the city's resources. The Khrushchev-era apartment blocks, which continued to deteriorate, were forced to accommodate ever more residents. Organized and everyday crime flourished, consuming some neighborhoods, such as the Sovetskii district to the west of central Baku. 642 As in many of the other former Soviet

<sup>&</sup>lt;sup>641</sup> Cynthia Croissant, *Azerbaijan, Oil and Geopolitics* (Commack, NY: Nova Science Publishers, Inc., 1998), 41-43.

<sup>&</sup>lt;sup>642</sup> Nataliya Gumenyuk and Bohdan Kutiepov, "Baku: City of Millionaires and Slums," *Hromadske International*, January 7, 2020, https://en.hromadske.ua/posts/baku-city-of-millionaires-and-slums-special-report.

states, everyday goods were in short supply or appeared at random.<sup>643</sup> Many middle-aged and older Bakuvians remember this period as taxing and stressful, but in the sense that they were making necessary sacrifices when any new country would be inherently vulnerable.<sup>644</sup> As the country has won itself pride and prosperity over the past two decades, the few years of suffering in the 1990s have fallen into a new narrative, one that emphasizes Azerbaijan's purportedly inevitable upward trajectory.

## The Resurgence of the Azerbaijan Oil Industry

Since the mid- to late 1990s, Azerbaijan's hydrocarbon industries have seen remarkable success, making it the richest of the three Transcaucasian states. Azerbaijan's ability to make the most of its oil and gas resources was in part lucky timing: between 1991 and 2010, when the country was increasing its production, global hydrocarbon prices also happened to be on the rise. Better than chance, however, were the determined efforts of the Republic of Azerbaijan's leaders to attract new partners in oil and gas extraction. The success of the Azerbaijan oil industry has relied on heavy foreign investment, a return to the sort of extranational involvement common in the Imperial Russian era. Now as then, Azerbaijan lacks the funds, equipment, and expertise to push

<sup>&</sup>lt;sup>643</sup> Thomas Goltz, *Azerbaijan Diary: A Rogue Reporter's Adventures in an Oil-rich, War-torn, Post-Soviet Republic* (Armonk, N.Y.: M.E. Sharpe, 1998), 91-92.

<sup>&</sup>lt;sup>644</sup> Based on my own extemporaneous conversations.

<sup>&</sup>lt;sup>645</sup> Per Zotin, "the combination of a low starting base from the 1990s, the growth of production, and high hydrocarbon prices led to spectacular GDP growth rates. While in the 1990s, average annual GDP growth was negative, by the 2000s the annual average was 14.6 percent, exceeding 20 percent in some years." Oil and gas accounted for the overwhelming majority of its annual exports. Zotin, 39.

its own oil industry to its greatest potential, and so relies on the investments and partnership of better-established oil concerns.

The greatest moment for the post-Soviet Azerbaijan oil industry came in 1994, when President Heydar Aliyev concluded the "Contract of the Century" (formally the Agreement on the Joint Development and Production Sharing for the Azeri and Chirag Fields and the Deep Water Portion of the Gunashli Field in the Azerbaijan Sector of the Caspian Sea), a production-sharing agreement signed by members of the newly created consortium Azerbaijani International Operating Company (AIOC) to develop three major oil and gas fields in the Caspian Sea: Azeri, Chirag, and Gunashli (collectively, ACG). Heydar Aliyev is credited with personally having leveraged to Azerbaijan's greatest advantage this oilfield complex, roughly 75 miles off Azerbaijan's coast, the country's most valuable asset in the post-Soviet period. The original contract was valid through 2024, but in September 2017, the members agreed to extend the contract through 2050. The main shareholder in AIOC remains British Petroleum (BP); the remaining members have changed over time, but in 2020 included the State Oil Company of the Azerbaijan Republic (SOCAR), ExxonMobil, Chevron, and Statoil (of Norway).

The Contract of the Century was one indication of international excitement about the potential of the Caspian oilfields in the mid- to late 1990s. In May 1997, the US State

<sup>&</sup>lt;sup>646</sup> Oksan Bayulgen, "Foreign Investment, Oil Curse, and Democratization: A Comparison of Azerbaijan and Russia," *Business and Politics* 7, no. 1 (2005): 15.

<sup>&</sup>lt;sup>647</sup> Bayulgen notes that production-sharing agreements have helped Azerbaijan to overcome some of the instability and unpredictability associated with the region, because such agreements bind all parties to the stated contractual obligations, rather than giving the host state (Azerbaijan, in this case) any discretion to change terms, which reassures investors. Bayulgen, 8; Abdul Kerimkhanov, "Nation's Oil Production Sees Slight Decline in 2019," January 13, 2020, *Azernews* https://www.azernews.az/oil\_and\_gas/160585.html; Zotin, 36.

Department's Energy Information Administration (EIA) estimated that the Caspian region could contain up to 200 billion barrels of oil and 8 trillion cubic meters of natural gas (in the same year, the Middle East's oil reserves were estimated at 676 billion barrels, and its natural gas reserves at 45 trillion cubic meters). The newness of the region to the world market and to international oil expertise after decades of Soviet exclusion, and knowledge that Soviet authorities had nearly abandoned Caspian oil after the 1950s, built an optimistic "mythology" about the region. Expectations have since been tempered by more extensive and accurate estimates of the region's oil reserves, which have varied widely, but nearly all of which fall well below the US State Department's 1997 estimate. In 2013, the EIA estimated that there remained in Caspian reserves 48 billion barrels of oil.

Regardless of reserves estimates, Azerbaijan's production of both oil and natural gas has risen drastically in the new millennium. The country experienced a production slump in the 1990s, falling to 9-10 million tons of crude oil per year and 5 billion cubic meters of natural gas per year in the mid- to late 1990s. Various international production-sharing agreements, including the Contract of the Century, have since shown positive results. Since 2008, Azerbaijan has produced roughly 40-50 million tons of crude oil per

<sup>&</sup>lt;sup>648</sup> Maureen S. Crandall, Energy, Economics, and Politics in the Caspian Region: Dreams and

Realities (Westport, CT: Praeger Security International, 2006), 10-11; "World Oil Reserves 1948-2001: Annual Statistics and Analysis," *Energy Exploration and Exploitation* 19, no. 2-3 (2001): 262, 267.

<sup>&</sup>lt;sup>649</sup> Crandall, 10-11.

<sup>650</sup> Estimates of natural gas reserves have remained quite consistent at roughly 8 trillion cubic meters. "Overview of oil and natural gas in the Caspian Sea region," *Energy Information Agency*, August 26, 2013, https://www.eia.gov/international/analysis/regions-of-interest/Caspian\_Sea.

year, and 15 billion cubic meters of natural gas per year.<sup>651</sup> By about 2007, Azerbaijan reached its third major peak in production (the first two being the initial oil boom of the late nineteenth century and the production surge of the early Soviet decades).

Concurrent with Azerbaijan's oil success was its relentless campaign to ensure that it was allocated an advantageous portion of the Caspian Sea's resources. Until the second half of the twentieth century, the division of the Caspian Sea's subterranean hydrocarbon resources was not a pressing issue; before offshore oil exploration, drilling, and extraction became common in the later decades of the Soviet era, the geographical demarcation of the sea was relevant only to matters of shipping and fishing, which could be regulated by the registration of vessels and the exercise of free navigation beyond ten miles from shore. Until the end of the Soviet era, there were only two states in competition for the sea's resources at any given time: the Soviet Union (preceded of course by the Russian Empire) and Iran. In 1970, the Soviet Union made an essentially unilateral determination that the Soviet-Iran split of the Caspian seabed would lie along the line between Astara, Azerbaijan, on the western coast, and Hosseingoli, Turkmenistan (now Esenguly), on the eastern coast, giving Iran control of roughly 11% of the seabed. 652 Still uninterested in offshore oil extraction, Iran did not contest the designation.

<sup>&</sup>lt;sup>651</sup> For comparison, in 2018 the US produced over 750 million tons of oil and 830 billion cubic meters of natural gas. "Statistical Review of World Energy," BP Statistical Review, June 2019, https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html.

<sup>652</sup> Ziyad Ziyadzade, "Drilling for Black Gold: The Demarcation of Hydrocarbon Resources in the Caspian Sea," *Chicago Journal of International Law* 16, no. 1 (Summer 2015): 317-318; Bahman Aghai Diba, *The Law and Politics of the Caspian Sea in the Twenty-First Century: The Positions and Views of Russia, Kazakhstan, Azerbaijan, Turkmenistan, with Special Reference to Iran* (Bethesda, MD: Ibex Publishers, 2003), 72-73.

Following the breakup of the Soviet Union, all littoral states, now five rather than two, threw themselves into negotiations regarding the legal status of the sea and their access to its resources. 653 Each state's desire for oil and gas fields underlay the complex, shifting debates that took place between 1991, when the Soviet Union began to break up, and 2018, when the five littoral states (Azerbaijan, Iran, Kazakhstan, Russia, and Turkmenistan) came to an agreement on the legal status of the Caspian Sea. Azerbaijan, Kazakhstan, and Turkmenistan are situated near the richest fields along the sea's

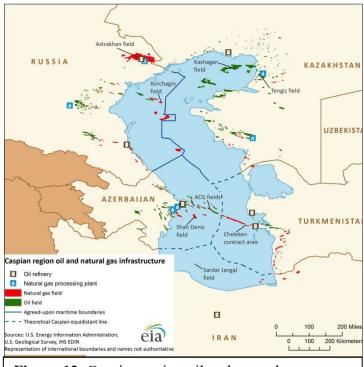


Figure 12. Caspian region oil and natural gas infrastructure.

Source:

https://commons.wikimedia.org/wiki/File:Caspian r egion oil and natural gas infrastructure.png

latitudinal midsection; these states have argued for a sectoral partition of the seabed. Russia and Iran, at the sea's northern and southern edges, respectively, are quite distant from those fields; they pursued a shared-ownership agreement. 654 In the summer of 2018, the five states came to a preliminary agreement that roughly accords with the sectoral partitioning avenue, but

<sup>653</sup> Ziyadzade, 319-320.

<sup>&</sup>lt;sup>654</sup> Ibid., 325-326. Please note that I am vastly oversimplifying the countries' respective stances.

the details of the deal remain vague.<sup>655</sup> All through these debates, Azerbaijani oil authorities have continued to operate under the assumption that Azerbaijan has sole ownership of the profitable resources in its sector of the sea.

Ensuring continued investment from foreign parties has relied on a careful counterbalancing of Azerbaijan's drawbacks with a dedicated drive to make Azerbaijan as attractive an investment environment as possible. Three matters have at one point or another posed a potential threat to foreign direct investment: the ongoing conflict with Armenia (most worrying to investors only in the 1990s, when sustained fighting made the region markedly unstable), Azerbaijan's tendency toward corrupt authoritarianism, and the region's never-ending struggle to transport oil and gas to markets. Azerbaijan has taken steps to overcome all three.

Corruption issues have deterred investment only from parties that care deeply about moral and ethical reputation, and in fact the country's authoritarian turn has only smoothed the path for many investors. <sup>656</sup> Political scientist Oksan Bayulgen in 2005

<sup>655</sup> Olzhas Auyezov, "Russia, Iran, and three others agree on Caspian status, but not borders," *Reuters*, August 12, 2018, https://www.reuters.com/article/us-kazakhstan-caspian-borders/russia-iran-and-three-others-agree-caspian-status-but-not-borders-idUSKBN1KX0CI.

<sup>656</sup> During his ten years in power (1993-2003), Heydar Aliyev made great strides toward eliminating opposition, political or otherwise, and cultivating a cult of personality. In 2003, recognizing that his health was failing, Heydar Aliyev appointed his son Ilham as his successor. In successive manipulated elections and referenda, Ilham Aliyev has been elected and reelected as president, had term limits removed, and had the presidential term extended from five to seven years. He appointed his wife, Mehriban, to one of two vice presidential spots in 2017; the other is thought to be reserved for one of his sons. Independent Azerbaijan has been recognized by organizations such as the Organized Crime and Corruption Reporting Project, Freedom House, and the Human Rights Watch as corrupt, unfree, and nontransparent, with a dismal human rights record. "Azerbaijan President appoints wife as First Vice President," Deutsche Welle, February 2, 2017, https://p.dw.com/p/2Y0w9; Nailia Bagirova, "Azeri ruling party calls for early parliamentary election: official," Reuters, November 28, 2019, https://www.reuters.com/article/usazerbaijan-politics-parliament/azeri-ruling-party-calls-for-early-parliamentary-election-officialidUSKBN1Y20ZG; Zotin, 40-41; "Azerbaijan - Corruptistan," Organized Crime and Corruption Reporting Project (OCCRP), https://www.occrp.org/en/corruptistan/azerbaijan/; "Azerbaijan," Freedom House, https://freedomhouse.org/country/azerbaijan/freedom-world/2020; "Azerbaijan," Human Rights Watch (HRW), https://www.hrw.org/europe/central-asia/Azerbaijan.

wrote, in reference to Russia and Azerbaijan, "The flow of foreign investment into countries with significant natural resources should not be taken as a given. Foreign investors prefer that such countries also have stable and predictable investment environments that provide general standards of treatment and have predictable legislative and regulatory frameworks in which channels of negotiation are clear." The governmental apparatus of Azerbaijan has done its utmost to create an attractive investment environment in those terms. Authoritarianism in oil-rich countries is far from uncommon, and in fact can increase a state's attractiveness to investors, as the absence of multiple centers of power creates a "one-stop shopping" situation, in which an investor must negotiate directly with only one party: effectively, the president of Azerbaijan.

Success in attracting investment further reinforces the authoritarian regime's hold on power, both in terms of financial resources and external legitimation. 658

Azerbaijan's continued record of corruption and civil rights violations has in only one sense stood in the way of full entrance into the global oil and gas market. In 2003, the Extractive Industries Transparency Initiative (EITI) formed, seeking to establish "a global standard to promote the open and accountable management of oil, gas and mineral resources." At that time, Azerbaijan announced that it would commit itself to upholding EITI's standards of transparency and fair governance in its oil industry. It achieved "candidate" status in 2007 and "compliant" status in 2009. However, after several successive annual reports indicating that Azerbaijan had failed to remedy reported

\_\_

<sup>657</sup> Bayulgen, 4.

<sup>&</sup>lt;sup>658</sup> As in most authoritarian governments, the legislative and judicial bodies of Azerbaijan exist to support the executive. Bayulgen, 15-16, 29. See also Audrey L. Altstadt, "Azerbaijan: The Rich Get Richer and the Poor Get Nothing," *Emerging Europe*, July 25, 2017, https://emerging-europe.com/voices/azerbaijan-the-rich-get-richer-and-the-poor-get-nothing/.

problems with "civil society representatives' ability to operate freely," Azerbaijan was downgraded to "candidate" status in 2015, and was finally suspended from EITI in 2017. Shortly thereafter, the government of Azerbaijan decided to withdraw from the body, losing the international credibility that came along with its EITI membership. However, loss of its EITI status does not seem to have affected the Azerbaijan oil sector one way or the other. On balance, neither the Nagorno-Karabakh War nor ongoing corruption in the Azerbaijan government has acted as a truly significant deterrent to investment in the past two decades.

The most important obstacle for the Azerbaijan oil industry, one that it has come up against repeatedly in its long history, is connecting the Baku oil hub to the outside world. As far back as the 1870s, foreign investors complained about the difficulty of transporting oil from source to market, the "midstream" component of the oil and gas industry. The railways, tanker shipments, and oil pipelines that had come into service between the nineteenth century and the end of the Soviet era had been largely directed toward Russia and subsequently the USSR, and in any case lacked sufficient capacity for the industry's new era. The old ties are gone; the most appealing markets lie farther west. Oil and gas pipelines are the most profitable means of transporting those resources to market.

The two largest pipeline projects in the post-Soviet era are the Baku-Tbilisi-Ceyhan (BTC) pipeline, which transports oil from Baku to Ceyhan, near Turkey's Mediterranean coast (thus bypassing the tricky Bosphorus), and the Baku-Tbilisi-Erzurum (BTE) pipeline, which transports natural gas from the massive Shah-Deniz field

659 "Status of Azerbaijan," EITI, 20 December 2018, https://eiti.org/Azerbaijan; Zotin, 38.

off Baku's coast to a terminus in Turkey, from which point it moves on to Europe via other means. 660 Both projects were financed, constructed, and managed by international consortia in which BP is the primary stakeholder, followed by SOCAR. 661 The BTC pipeline, which was completed in 2006, has the capacity to deliver 50 million tons of oil per year. The BTE pipeline (also referred to as the South Caucasus Pipeline, or SCP), was completed in 2007, and can carry 16 billion cubic meters per year. The two pipelines, which run parallel to one another for much of their length, were daunting construction projects, as they must pass through the Caucasus Mountains and several active seismic zones. Further, the pipelines require constant security monitoring to deter terrorist attacks, adding to maintenance costs. 662 Regardless, the payoff for the completion of the pipelines has been enormous for Azerbaijan and its oligarchs. 663

<sup>&</sup>lt;sup>660</sup> Both run through Tbilisi so as to avoid Armenian territory, a diversion of thousands of miles that added immensely to the cost of both projects. Emre Iseri, "Geopolitics of Oil and Pipelines in the (Eurasian) Heartland," in *The Politics of Oil*, ed. Bulent Gokay (London: Routledge, 2006), 43.

<sup>661</sup> The United States also offered support for the pipeline project, in part to undermine Iran's control over energy resources in the region, and to reduce the West's reliance on Russia and Iran for such resources. Pipelines thus enter into the system of formal and informal alliances and enmities that exist between the United States and the West, on the one hand, and adversaries such as Russia and Iran, on the other. They also act as a sort of declaration of Russian or Western affiliation on the part of the small ex-Soviet countries. The amount of oil that the United States or its European allies might obtain from Azerbaijan is utterly negligible compared to the oil resources available in North America, the Middle East, and Russia. Few countries in the West would see any true material benefit from diversifying the oil resources of the Caspian region by opening up new pipelines. The only real attraction of Caspian oil for the West is that, except for Iran, the Caspian oil states are not members of OPEC, and therefore not subject to its controls. This is an advantage for states that find themselves at odds with OPEC. However, the combined production of non-Russian, non-OPEC Caspian oil states is not significant, equaling roughly one-quarter of the United States' yearly production alone. The game is therefore a political one, a matter of establishing spheres of influence. Iseri, 36-37, 43; "Country Comparison. Crude Oil – Production," *The World Factbook 2020*.

<sup>662</sup> Sections in both the Turkish and Georgian sections of the BTC came under attack in 2008 in separate incidents: the first related to the Kurdish separatist movement, the second during the Russo-Georgian war over South Ossetia. "Baku-Tbilisi-Ceyhan (BTC) Caspian Pipeline," *Hydrocarbon Technologies*, https://www.hydrocarbons-technology.com/projects/bp/; "South Caucasus Pipeline (SCP), Georgia, Turkey, Azerbaijan," *Hydrocarbons Technologies*, https://www.hydrocarbons-technology.com/projects/south-caucasus-pipeline-scp-georgia-turkey-azerbaijan/.

<sup>663</sup> Altstadt, "The Rich Get Richer."

It is noteworthy that, as in the late nineteenth and early twentieth centuries, Azerbaijan's most valuable partner in oil development is again Britain, specifically BP and its fellows. Since falling into business with Azerbaijan, BP has emphasized its deep connection to the country, consistently linking itself to Azerbaijan's success. In addition to extending its commitment to AIOC in 2017, BP has involved itself in various programs and events in Azerbaijan, usually in the role of sponsor. 664 In May 2017, for instance, BP backed Baku's hosting of the Islamic Solidarity Games. For months in advance of the games, BP ran a colorful animated advertisement on television and video billboards around Baku that highlighted BP's partnership with Azerbaijan. Over images of BP-branded oil platforms sprouting from the Caspian Sea and the Flame Towers taking shape above Baku, BP credits itself with "unlocking the energy under the Caspian Sea [and] helping the country grow," and promises "to be committed to Azerbaijan's future for many years to come." The commercial ends with a BP-sponsored athlete making his way to the Baku Olympic Stadium. 665

One result of BP involvement in the Azerbaijan oil industry has been the development of a degree of ethnic stratification reminiscent of the oil industry's early years. Decades after Britons were driven from Baku by the revolutions of 1917, their company buildings destroyed or ransacked, English and Scottish engineers have returned in force to the city. As in the past, Europeans occupy the more agreeable, higher-paying positions in the industry, while locals endure the less rewarding and more physically

<sup>&</sup>lt;sup>664</sup> See the Azerbaijan page on BP's website for examples. "BP in Azerbaijan," BP, https://www.bp.com/en\_az/azerbaijan/home.html.

<sup>665 &</sup>quot;BP supporting Baku 2017 – English," YouTube, https://www.youtube.com/watch?v=epHHg6NNeT0.

intensive manual and service jobs. The European and North American expatriate community—mostly young to middle-aged, a bit hedonistic, tied closely to the oil industry—tends to remain quite insular and is largely shielded from the less comfortable elements of living in Azerbaijan, as BP and its associated enterprises have constructed self-contained apartment complexes and office buildings for employees, all supplemented by hotels and restaurants familiar to Europeans. The parallels to Baku's early boom years are far from exact—the proportion of Azerbaijani employees in the oil industry is far smaller than in previous eras, largely the result of industrial automation, and more Azerbaijani industry employees have better opportunities for advancement and education than in the past. Of SOCAR's 60,000 Azerbaijani employees, more than half work in overseas offices. 666 The government of independent Azerbaijan is more committed to promoting its own citizens' success, in part for appearance's sake, but also because it contributes to the country's enrichment and influence.

# Baku, Oil Capital

In a few important senses, Baku now better expresses its Azerbaijani character than at any other point since the early nineteenth century. The 2009 census showed that Azerbaijan and Baku have the highest percentage of ethnic Azerbaijani inhabitants in perhaps two hundred years, at 91.6% and 90.3%, respectively. 667 The resurgence of the oil industry and Azerbaijan's right to capture more of its profits has resulted in a building boom, largely centered in Baku. A fourth "layer" is being added to Baku's visage,

<sup>666</sup> Zotin, 43.

667 2009 Azerbaijan Census.

buildings patently of the new millennium interspersed among the city's ancient Turco-Persian base, colonial inner core, and Soviet sprawl. In the late nineteenth century, British traveler Henry Morton Stanley termed the city "the Paris of the Caspian," remarking on its "refined society" and well-developed core and waterfront. The new additions to the cityscape are reminiscent of large contemporary statement structures in other world capitals: the "Gherkin" and the Shard in London, the One World Trade Center in New York City, and the Burj Khalifa in Dubai. However, much of Baku's most prominent post-Soviet architecture has remained distinctly Azerbaijani, a "visual index" of the country's new age. 669

The country's largest and showiest construction projects have arisen in Baku, many of them aimed at increasing Azerbaijan's international visibility and connections, and at exhibiting the country's wealth to the world and its own citizens. Some of these projects are relatively characterless. For instance, the Heydar Aliyev International Airport, newly rebuilt with a modern design in 2014, is quite opulent, characterized by sweeping lines, clean white and beige surfaces, and smooth indirect lighting, but it might belong to any city in the Asian continent that wishes to impress its wealth upon visitors. The infamous Trump International Hotel and Tower, which in 2008 began life as an apartment building project until it was taken over by Donald Trump in 2012 (and remains

<sup>&</sup>lt;sup>668</sup> Stanley, 243.

<sup>&</sup>lt;sup>669</sup> Bruce Grant, "The Edifice Complex: Architecture and the Political Life of Surplus in the New Baku," *Political Culture* 26, no. 3 (2014): 501.

unfinished), vaguely resembles a ship's sails or a lemon wedge.<sup>670</sup> Many of the office buildings that have sprung up near the waterfront are basic metal and glass cuboids.



Figure 13. Baku's architectural layers. Photo by author, 2017

More notable are the structures and other projects that make a clear attempt to place Azerbaijan's history and culture in the modern world. Around 2010, city authorities

<sup>&</sup>lt;sup>670</sup> Adam Davidson, "Donald Trump's Worst Deal," *The New Yorker*, March 6, 2017, https://www.newyorker.com/magazine/2017/03/13/donald-trumps-worst-deal.

completed a renovation of the famous Fountains Square and the surrounding pedestrian areas. In addition to laying miles of stylish new paving stones and hanging strings of lights and elaborate chandeliers above walkways, the project's directors paid close attention to the neighborhood's buildings, nearly all of which belong to the Russian colonial era, their distinctive cornices and wrought-iron balconies spruced up and artfully lit from below at night. The Flame Towers, perched atop the hills to the west of the city core, have dominated Baku's skyline since 2012. The three towers are in the shape of flames, a direct reference to Azerbaijan's ancient moniker, "the land of fire." At night, the LED panels that cover the surfaces of the three towers display animations of fire and the Azerbaijan national flag. Not far away, directly along Baku's famous waterfront boulevard, is the Azerbaijan National Carpet Museum. Azerbaijan's long history of carpet-making, recognized by UNESCO in 2010, was originally exhibited in one of the city's mosques. In 2014, the museum moved into the new building, which resembles a partially-rolled carpet lying on its side, covered with a design characteristic of Azerbaijan. <sup>671</sup> Finally, the Heydar Aliyev Center, which was completed in 2013, may well be the architectural pride of modern Azerbaijan. Designed by Iraqi-British architect Zaha Hadid, the structure brings to mind the clean folded cloth of a head covering, the dunes of the Absheron Peninsula, or the whitecaps of the Caspian Sea. On permanent display are an exhibition of the country's oil history and a series of miniatures depicting the famous sites and structures of Azerbaijan. <sup>672</sup> Much of Azerbaijan's oil money has

67

<sup>&</sup>lt;sup>671</sup> "Carpet Museum in Azerbaijan," aasarchitecture, https://aasarchitecture.com/2014/10/carpet-museum-azerbaijan.html/.

<sup>&</sup>lt;sup>672</sup> Joseph Giovannini, "Heydar Aliyev Cultural Center, Designed by Zaha Hadid Architects," *Architect Magazine*, September 17, 2013, https://www.architectmagazine.com/design/buildings/heydar-aliyev-cultural-center-designed-by-zaha-hadid-architects o.

gone toward making its capital city an expression of the country's history, its culture, and the future its leaders want.

These projects have come at great expense, and have been paid for, directly and indirectly, by the profits of the oil and gas industries. The government of Azerbaijan has spent perhaps billions of dollars on the construction of the Crystal Hall for its hosting of the 2012 Eurovision Song Contest; multiple sports venues for the 2015 European Games, the 2017 Islamic Solidarity Games, and Azerbaijan's failed bid to host the 2020 Summer Olympic Games; grand architectural statement buildings such as the Flame Towers, the Heydar Aliyev Center, and the Heydar Aliyev International Airport; and, since 2016, a temporary motor racing street circuit through downtown Baku, the Baku City Circuit, to host annual Formula One races. Hosting these events, which involves lavish opening and closing ceremonies and performances by relatively well-known acts such as the Black-Eyed Peas and Lady Gaga, comes at additional cost. Construction, three-quarters of which was financed by the government, and tourism have helped to increase non-oil GDP, but the payoff for much of this spending otherwise remains to be seen.

The beautification of the city has been spotty, limited mainly to the most highly visible areas along the waterfront and the major transportation routes. For the first time in many decades, urban development in Baku follows no general plan. Municipal authorities to some degree held to the urban plan drawn up in 1989 even after the break from the

<sup>&</sup>lt;sup>673</sup> Zotin, 44; Alan Taylor, "Baku 2017: The Islamic Solidarity Games," *The Atlantic*, May 23, 2017, https://www.theatlantic.com/photo/2017/05/baku-2017-the-islamic-solidarity-games/527826/; "Baku Olimpiya Stadionu," *The Stadium Guide*, https://www.stadiumguide.com/baku-olympic-stadium/; "Heydar Aliyev Center," *ArchDaily*, https://www.archdaily.com/448774/heydar-aliyev-center-zaha-hadid-architects; "History," Heydar Aliyev International Airport, http://www.airport.az/en/about-us/history/; "News," Baku City Circuit, https://www.bakucitycircuit.com/news.

<sup>&</sup>lt;sup>674</sup> Kotin, 44.

Soviet Union, but when it expired in 2005, no new plan took its place. Perhaps in an attempt by the country's leaders to remove associations with the Soviet past, the city for the time being develops beyond the logic of comprehensive urban planning. <sup>675</sup> Oil wealth pours into the construction of modern high-rise apartment buildings, giant architectural statements, and massive parks; transportation, utilities, service industries, communications, and low-cost housing in some cases adjust to the building boom, in other cases prove inadequate. For instance, although the state has invested in the construction of large new highways around Baku, city authorities have made little headway in modernizing the inner urban surface transportation network; medieval, colonial, and Soviet-era street systems must now accommodate hundreds of thousands of cars every day. <sup>676</sup>

A few steps north of the renovated Fountains Square neighborhood lie several blocks of colonial Russian buildings of the same generation, but not subject to the same attention. Rather, municipal authorities have left the management of the buildings largely to the inhabitants of their many small apartments. The result is a more lived-in appearance, one that in some ways more honestly depicts the history of the city's residents: the colonial-era ornamentation, down to the inscribed year of construction, is still apparent; midcentury balcony additions hang over narrow streets lined with Ladas; satellite dishes and wires straggle across roofs. A similar sort of improvisation is evident

-6

<sup>675</sup> Grant, 503.

<sup>&</sup>lt;sup>676</sup> A.T. Khanlarov, "General Plan as Strategy of Sustainable Development, or 'Pluralism of Town Planning Potentialities," *UNECE*, 2006,

https://www.unece.org/fileadmin/DAM/hlm/prgm/urbanenvperf/conference/tenth\_bratislava/documents/4.a zerbaijan.pdf.

in neighborhoods dominated by massive Soviet-era apartment buildings and in the slums that were once widespread in the city's middle districts.

These less-attractive neighborhoods, often a mixture of structures with real historical value and unsafe makeshift dwellings, always densely inhabited, have been subject to demolition rather than renovation when they stand in the way of the city's grand construction projects. The Institute for Peace and Democracy in Baku, the headquarters of which were aggressively bulldozed in August 2011, estimated that by 2008, 60,000-80,0000 Bakuvians had been relocated, their neighborhoods destroyed to make way for new structures.<sup>677</sup> Just north of the Inner City, the ancient nucleus of Baku that will forever remain safe from alteration due to its historical value, two dozen blocks of Sovetskii district homes inhabited since the nineteenth century were bulldozed to make way for several large boulevards and a sprawling park, which opened in 2019 (Figure 14). Its residents were compensated and moved to new high-rise apartments on the city's outskirts. <sup>678</sup> Anthropologist Bruce Grant compares the eviction of longtime Baku residents from the city core to the relocation or dislocation of Parisians during Baron Haussmann's renovation of that city. 679 A more apt comparison might be the demolition of large neighborhoods in Sochi, Russia, in preparation for the 2014 Winter Olympic Games, another case in which urban development and the desire for international regard

<sup>677</sup> Grant, 513.

<sup>&</sup>lt;sup>678</sup> "Sovetskide kutlevi sokuntuler bashladi," *Qafqaz Info*, https://qafqazinfo.az/news/detail/sovetskide-kutlevi-sokuntuler-basladi-84209.

<sup>&</sup>lt;sup>679</sup> Grant, 507.

displaced thousands of residents.<sup>680</sup> This constitutes a form of gentrification, one that leaves some Azerbaijanis feeling alienated from the city, while others see the process as a proud rejuvenation of their capital.<sup>681</sup>



**Figure 14.** Older neighborhoods bulldozed to make way for new parks and boulevards. Photo by author, 2017.

Part of the state's project to make Baku an attractive capital once more is its effort to address one of the ugliest legacies of the Soviet era: extreme environmental damage.

Negligence in the operation of the oil industry is likely the greatest culprit here, but a number of other factors have contributed to the pollution of the Baku environs as well. 682

Beginning in the 1930s, industry in the Baku region began to include the manufacture of

<sup>&</sup>lt;sup>680</sup> Yulia Gorbunova, "An Olympic Demolition," *The Wall Street Journal*, October 1, 2013, https://www.wsj.com/articles/SB10000872396390444712904578024320180061596.

<sup>&</sup>lt;sup>681</sup> Melanie Krebs, "The right to live in the city," *International Journal of Sociology and Social Policy* 35, no 7/8 (2015): 550-564.

<sup>&</sup>lt;sup>682</sup> Roughly 65% of Azerbaijan's industrial activity takes place in Baku. Kahramanova, 1.

equipment for various non-oil heavy industries as well as non-petrochemicals such as chlorine and caustic sodas. That is, there has existed for many decades a fair-sized nonoil industrial sector in the Baku region that similarly produces large amounts of toxic waste that have not always been responsibly disposed of. The replacement of outdated, inefficient equipment in these industries has been gradual. In addition, industry is one among many human activities in and around the Caspian Sea that has contributed to the region's status as one of the most polluted in the world. Now as in the past, there is an exceptional concentration of Azerbaijan's residents in the capital. Between one-fifth and one-third of all Azerbaijanis live in the greater Baku area. The number of cars per one thousand residents has risen exponentially in the past few decades, from 34 cars per thousand residents in 1980, to 165 per thousand in 2006, to 250 per thousand in 2013.<sup>683</sup> While this is significantly below car ownership rates in US cities, low emissions standards multiply the environmental impact. Furthermore, much as in the case of the Aral Sea, the use of chemical fertilizers in intensive agriculture all around the Caspian Sea since the mid-twentieth century has contributed to toxic runoff that enters the water and negatively affects marine life and human health.<sup>684</sup> Laxity in city planning has produced extensive shortcomings in proper garbage and recycling disposal, leading residents of Baku and surrounding villages to dump huge volumes of trash in the otherwise empty oilfields and other unoccupied spaces around the peninsula.

<sup>&</sup>lt;sup>683</sup> Kahramanova, 7; Nigar Orujova, "Number of cars expected to nearly double in Greater Baku area by 2030," *Azernews*, July 19, 2013, https://www.azernews.az/nation/57064.html.

<sup>&</sup>lt;sup>684</sup> Ze'ev Wolfson, *The Geography of Survival: Ecology in the Post-Soviet Era* (London: Routledge, 2015), 67-68.

Cleanup ventures have been implemented unevenly, concentrated mostly around highly visible parts of the Caspian coast. There have been multiple pressing incentives for the state to address the contamination of the Caspian around the Absheron Peninsula specifically: pollution has a negative effect on tourism, reduces the amount and quality of food harvested from the sea, negatively affects recreation such snorkeling and fishing, wastes resources, threatens cultural and historical sites, and, not least, negatively affects the health of humans and marine life.<sup>685</sup>

However, some of the worst pollution, that in the villages and former oilfields surrounding Baku, remains overlooked. Most of the former satellite oilfield settlements, including Surakhani, Sabunchi, and Ramani, have not seen the kind of urban and environmental renewal that central Baku has. At least half of residents live below the national poverty line, about half live on state welfare, and the government struggles even to provide residents of these villages with drinking water and natural gas. Several of these villages, which once housed the oil industry's many workers, accommodated breakup-era refugees who never left, and who now make up one-fifth to one-quarter of those villages' residents. These refugees or internally displaced persons are mostly ethnically Azerbaijani, but a fair number are of the Tat people, an ethnic group living

<sup>&</sup>lt;sup>685</sup> A. Mottaghi, "Environmental geopolitics of the Caspian basin energy interactions," *Caspian Journal of Environmental Sciences* 14, no. 1 (2016), 87.

<sup>&</sup>lt;sup>686</sup> Azer Amiraslanov, "A Survey of the Socioeconomic Indicators of the Villages and Living Standards of the Local Population (before 2004)," in *The Baku Oil and Local Communities: A History*, ed. Leila Alieva (Baku: Qanun, 2009), 162-164; Gubad Ibadoglu, "A Survey of the Socioeconomic Indicators of the Villages and the Living Standards of the Local Population (2004-2008)," in *The Baku Oil and Local Communities: A History*, ed. Leila Alieva (Baku: Qanun, 2009), 178, 183.

<sup>&</sup>lt;sup>687</sup> Amiraslanov, 162.

widely in Transcaucasia. 688 According to the relatively recent surveys conducted by authors of *The Baku Oil and Local Communities*, after decades of living side by side with the settlements' original inhabitants, these refugee families are still not well integrated into those communities. 689 One author writes that these refugees "disrespect the environment because they regard themselves as temporary residents," but it must be noted that group insularity has been a common theme in Baku's history for centuries. 690

These are also the settlements that have seen the worst of the inland environmental damage from industrial activity. Sabunchi, Balakhani, and Ramani are all situated on the shores of Boyukshor Lake, a salty inland lake lined with industrial enterprises. The lake has experienced a degree of pollution that surpasses even that of the Caspian Sea, contaminated by a combination of oil products, sewage, and heavy metals well in excess of maximum permissible concentrations. <sup>691</sup> Boyukshor Lake and other inland bodies of water near these population centers have been shown to have a direct effect on the health of residents, as water evaporation and soil and water contamination have led to a marked increase in chronic diseases in these areas. <sup>692</sup> Roughly a quarter of

<sup>&</sup>lt;sup>688</sup> Aydin Balayev, "Oil Producing Villages: Ethnography, History and Sociology," in *The Baku Oil and Local Communities: A History*, ed. Leila Alieva (Baku: Qanun, 2009), 201-202.

<sup>&</sup>lt;sup>689</sup> Amiraslanov, 162-163; Balayev, 186; Leila Alieva, "Conclusions," in *The Baku Oil and Local Communities: A History*, ed. Leila Alieva (Baku: Qanun, 2009), 268.

<sup>&</sup>lt;sup>690</sup> Balayev, 204.

<sup>&</sup>lt;sup>691</sup> Fikret Jafarov, "Environment of the Absheron Peninsula: The Communities' Survival in the Oldest Oil Fields," in *The Baku Oil and Local Communities: A History*, ed. Leila Alieva (Baku: Qanun, 2009), 232-233. Although not cleanly translated, Jafarov's study is the most thorough English-language study of Baku's current environmental issues that I have come across.

<sup>&</sup>lt;sup>692</sup> Ibid., 238.

the soil in these villages has shown high contamination by oil, and they are all surrounded by old oilfields that are entirely permeated by industrial wastes.<sup>693</sup>

Beginning in about 2006, the Azerbaijan government began developing and implementing plans to revive some of these villages, but they appear to have been sidelined by the worldwide financial crisis that hit shortly thereafter.<sup>694</sup> Fikret Jafarov, in his thorough study of the land environments of the Absheron Peninsula, proposed that the state obtain funds from the World Bank, accurately inventory sources of pollution, and draw up a comprehensive cleanup program, steps that the state had apparently made little or no progress toward by 2009.<sup>695</sup> In another survey of living conditions in these villages, Azer Amiraslanov argues that "every citizen should be able to feel the effect of Azerbaijan's socioeconomic achievements in his or her everyday life," but that has patently not been the case.<sup>696</sup> With few exceptions, the other population centers of the country have not experienced the same kind of dramatic makeovers as Baku.

The fuller picture of Baku and its environs points up the reality that the center's oil wealth has not been evenly distributed by any standard, a state of affairs that applies to the rest of the country as well.<sup>697</sup> This is not to say, however, that Azerbaijan's leaders have abandoned the remainder of the country to poverty. In fact, after the desperation of the mid-1990s, when the country had yet to fully capitalize on its oil industry and was

<sup>693</sup> Ibid., 241, 247.

<sup>&</sup>lt;sup>694</sup> Ibadoglu, 176-180.

<sup>&</sup>lt;sup>695</sup> Jafarov, 262-263.

<sup>&</sup>lt;sup>696</sup> Amiraslanov, 162.

<sup>&</sup>lt;sup>697</sup> Grant, 504.

still suffering the worst aftereffects of war and the breakup, Azerbaijanis in the western parts of the country have increasingly benefited from government projects such as electrification and the spread of Internet access. International aid, including assistance from the Asian Development Bank and the Peace Corps, has helped with smaller infrastructural projects and healthcare services. Less regular have been the government's improvements to transportation infrastructure. New highway openings are celebrated with some fanfare, attended frequently by the president or vice president and lauded by government-owned news services as moments of national pride. Meanwhile, non-highway roads are rarely attended to unless they pose an imminent danger. Other means of transportation also tend to see improvement depending on their "closeness" to international commerce and the oil industry; air services are frequently updated and expanded, while passenger rail is decades out of date.

A sufficient number of Azerbaijanis and Bakuvians seem content to ride out the train of progress, or feel acute pride in these representations of the country's economic successes, that widespread public objections are not obvious. The destruction of older neighborhoods, while a historical loss, has removed tens of thousands of poorer Bakuvians from dangerous and unhygienic housing, it is reasoned. Those in the middling classes have a better chance of leaving the deteriorating Soviet apartment blocks for newer residences, perhaps even a house in the sprawling housing developments that are continually added to Baku's surroundings. Recent costly improvements to the Baku metro, including new carriages and escalators, benefit all of the city's occupants. Greater comfort and beautification at the heart of the country, while certainly laden with misery

<sup>698</sup> Ibid., 504, 508, 516.

and inequality, generates genuine pride. A favorite among locals is Baku's waterfront boulevard complex, which around 2010 underwent its (at least) fourth major renovation, replete with new attractions such as a mall and a Ferris wheel. A glance at the city skyline reassures residents that their country is wealthy and growing. The building boom is an assertion of confidence that Baku and its leadership lacked between the end of World War II and the mid-1990s, and an aspirational symbol for Azerbaijanis.

#### Conclusion

The renovation of the city of Baku is part of the country's attempt to distance itself from the Soviet past. Azerbaijanis repulsed the presence of nonnative residents as part of the transition to nationhood; there was evidently little fusion among the city's



**Figure 15**. Soviet-era mural near Fountains Square. Photo by author, 2017.

various ethnic groups over the course of seventy years of imposed ethnic tolerance, as demonstrated during the years surrounding the Soviet breakup when each group returned to its respective homeland. Independent Baku has also gradually erased Soviet aesthetic remnants. Socialist-themed murals still hide in corners, and many residents remain housed in Khrushchev-era apartment blocks, but

the most visible parts of the city are undeniably an expression of new wealth and nationhood.

The independent state of Azerbaijan has in a variety of ways sought to leave behind the Soviet era, as have most former Soviet states. This path has been complicated in large part by the legacies of the role that it was forced to assume in the structures of the Russian Empire and the Soviet Union. In those contexts, Azerbaijan did not function as a self-supporting unit, but as a supplier of raw materials to a system greater than itself, a habit of devotion to oil that has proven difficult to break. The country's non-oil sectors have not seen the same sort of growth, indicating Azerbaijan's utter commitment to and dependence on hydrocarbons.<sup>699</sup>

-

<sup>&</sup>lt;sup>699</sup> Political scientist Alexander Zotin reports that in 2013, oil and gas revenues made up 72% of the state budget, comparable to many oil states in the Middle East. Transfers from the State Oil Fund to the state budget rose from 10% of GDP between 2003 and 2007 to nearly 60% of GDP in 2014. The economic health of the country has remained almost directly tied to world oil prices, and in the future will depend immensely on the remaining productive capacity of Azeri-Chirag-Gunashli. Since at least 2004, the International Monetary Fund has recognized that Azerbaijan's failure to diversify and set aside funds for future use is likely to bring the country to a crisis once ACG begins to decline. As of 2019, Azerbaijan has made little meaningful progress in that regard. Zotin, 39-43; "Regional Economic Outlook," International Monetary Fund, https://www.imf.org/en/Publications/REO/MECA/Issues/2019/04/17/reo-menap-cca-0419.

#### CHAPTER IX

### **CONCLUSION**

As an oil center, Baku today remains as embedded in the convergence of international systems of commerce and infrastructure as it was at the turn of the twentieth century. Due to an inability to diversify economically, Azerbaijan's economic status is acutely attuned to the health of the global oil industry. Lowered oil prices in the wake of the 2007-2008 global financial crisis resulted in stalled construction projects around the city of Baku. The full results of the current global crisis, which has already created significant upset in the oil world, remain to be seen. Regardless of Azerbaijan's significance or insignificance on the global oil scale, oil matters deeply to the state and its capital.

The long history of Baku as an oil center reveals a number of limited and cyclical themes relevant to the history of this location in particular and the history of the oil industry in general. Recurrent is the importance of large economic systems in sustaining and advancing the oil industry. In the imperial and post-Soviet eras, mass foreign investment has been nearly a requirement. The Soviet regime was in most periods able to operate its oil industry independent of foreign aid, but in the 1920s relied heavily on foreign equipment and expertise to pull the Baku oil industry out of its slump. This reflects an ongoing reality for all oil states, which must either be so large and wealthy as to possess great amounts of capital and manpower, or rely on foreign intervention. This accounts for Baku's necessarily strong international connections today, and its rough exit from the Soviet system.

Relevant to the international nature of oil business in Baku are issues of ethnicity that have consistently appeared in this history. In some respects, the ethnic makeup of the city and industry have been specific to this locale, where Azerbaijanis, Armenians, and Russians (among others) meet, but in any case mirror ethnic stratification and tensions evident in other oil centers as well—ethnic stratification of labor must be a central consideration of the "energy humanities." In the case of Baku, the ethnic makeup of the city and industry have affected everything from labor relations to the health of the oil industry itself. Because Azerbaijan in the modern era has not had the capacity or freedom to run its oil industry independently, and because outside investment has tended to come from wealthy but oil-deficient entities based in Europe, leadership and control of the industry has frequently lain in the hands of ethnic Europeans. Due to the ethnic makeup of the Transcaucasian region, the manpower drawn by the industry was almost necessarily quite diverse. Preexisting ethnic differences and some degree of racism built into industrial employment were stoked into violence repeatedly, setting off a chain of confrontations primarily between Azerbaijanis and Armenians, and between Russians and Azerbaijanis more minorly. The growth and evolution of the Baku oil industry has played no small part in the development of Azerbaijani national sentiment over the past century and a half, as the former "Tatars" drew into closer contact with other national groups; developed national grievances as a result of mistreatment by the tsarist regime, conflicts with Armenians, conquest by the Soviets, and the mixed results of the Soviet nationalities policy; and learned to link their own national identity with oil and fire in the post-Soviet era. Ethnic stratification in the oil business is not unique to Baku, but its particular contours and results have been.

Some of the patterns of migration and demography as connected to the health of the industry over the decades have been relatively straightforward. As the capacity of the industry grew, in the late nineteenth century, the early Soviet decades, and the mid-1990s to the present, more men and women made their way to Baku for work. When the oil industry faltered in production, as in 1901-1905, 1917-1920, and the end of the Soviet period, workers left, either to shelter from disorder in the city or to seek new work. However, the declining relative importance of the Baku oil industry on the global scale over the decades has resulted in greater ethnic homogeneity among industry employees and city inhabitants. That is, nonnative parties became less interested in what Baku had to offer, both in terms of resources and of employment opportunities, and moved to greener pastures. Baku is larger than ever, now populated overwhelmingly by native

The ecological dimension of Baku's history follows a trajectory that has been quite common in heavily industrialized locales. Until the post-Soviet era, no checks existed on the discharge of the oil industry's toxic messes, except that industry leaders wanted to preserve the profitability of the industry by avoiding waste and disruptive disasters. Pollution was rarely equated with environmental damage in the current sense. The quality of the soil, air, and water in the area steadily worsened for more than a century due to oil extraction first on land, then at sea; increasing population density without adequate urban planning; and the myriad other industrial activities taking place nearby. Attitudes began to change only after the problem was recognized as a problem in light of evolving prevalent understandings of environmental studies. The current regime has made attempts to clean up the most blighted areas, especially the Caspian Sea around

the Absheron Peninsula, in no small part because pollutive activities waste valuable resources and discourage lucrative tourism. Perceptions of pollution and environmental damage have shifted in the past few decades, but some of the basic motivations for avoiding it remain similar to those in previous eras.

The extended chronological scope of this dissertation therefore shows that, despite several extraordinary changes in power over the past century and a half, the imperatives of the oil industry and its unique geopolitical situation have produced patterns and cycles of behavior broadly common to each era. However, I do not discount the outcomes that have remained limited to specific administrative regimes, each of which has operated according to different ideologies and responded to different circumstances. Without delving too deeply into the political ramifications of these shifts in industry administration for energy history more broadly, it can nevertheless be said that the quite different political, economic, and social priorities of each regime materialized in their approaches to the oil industry. In each era, new principles shaped labor relations, urban planning, management hierarchies, marketing, and the wellbeing of Baku's inhabitants, to name just a few of the major elements of the Baku urban-industrial complex that shifted according to administrative regime.

For its part, the physical environment of the city has reliably reflected each change in administration, in that each new regime has sought to distinguish itself from the previous by embracing architectural styles and urban planning approaches indicative of its ideals. Even as leaders in each era were challenged by unmanageable population increases and unsightly industrial outgrowths, they have imposed their own visions on Baku without fully erasing those of previous eras. The Turco-Persian Inner City became

surrounded by Russian and Western European attempts to replicate their ideas of civilization; Soviet planners and architects envisioned a workers' paradise with generous public works projects and nonconformist styling; leaders of Azerbaijan in the current era want to demonstrate the country's wealth and modernity, connections between Baku and other world capitals, and the leadership's embrace of Azerbaijan's national history. A great part of Baku's current tourist appeal is the careful presentation of the city's visible record of successive regimes, the vividly differing styles giving Baku its exceptional "layered" look.

Perhaps the most consequential "regime-limited" theme has been the shifting degree of state control in each phase of Baku's oil history. Tsarist-era administration of the Baku oil industry was characterized by light state regulation and strong control by private oil companies, many of them foreign. The accumulated wealth was in some cases reinvested in irregular improvements to the Baku area, and but mostly left the region for good. The combination of unchecked capitalist exploitation, unregulated migration, and weak policing by the state caused Baku to become a city of crime, potent labor organization, and interethnic strife. The Soviet regime's deep-cutting nationalization of the industry ensured that all of the wealth and commodities that it yielded in some way served the Soviet system, a degree of control made possible only by the USSR's selfsufficient economy. The use and threat of violent law enforcement tamped down organized labor activity and open, large-scale interethnic conflict in the city. The Soviet approach initially further tied together city and industry under the common goal of producing oil, at least until other Soviet oil centers emerged. The independent state of Azerbaijan now directly administers the oil industry, reining in the domestic power of

foreign oil companies while profiting immensely from their partnership. The state's alienation of Armenians has moved that conflict away from Baku to the country's western borderlands. A new brand of oil-dependent authoritarianism continues to evolve in Azerbaijan, one committed to ensuring the appearance of peace and wealth in Baku.

It has been my goal in this dissertation to develop some conclusions about the history of the oil industry and its local effects through a long-term study of Baku, one of the two oldest oil centers in the world (along with Pennsylvania) and a uniquely concentrated oil-based urban-industrial complex. This study has focused on the sometimes clashing, sometimes melding influences of Baku's place in the international oil trade and its local ethnic, geological, and geographical circumstances. Over one hundred and fifty years of industrialized oil production, and across at least three major regime changes, Baku's character has remained tied to its peculiar role as a producer of a commodity increasingly critical to the modern world. This outward-facing quality has set Baku apart from the other urban centers of Azerbaijan and the rest of Transcaucasia, but local influences have nevertheless been inescapable.

While broad surveys of oil history more effectively speak to the upper reaches of international politics and commerce, regional studies better grasp the extent to which human communities tied to the "upstream" elements of oil are shaped by this connection. This study of Baku should indicate to scholars in energy humanities that the effect of oil in the modern world is equally as profound in producing societies as it is in consuming societies, and that the coming expiration of sustainable oil and natural gas production may spell the end not only of certain modern modes of life in the developed world, but also of entire national economies upstream. In addition, this history indicates, as does

Alison Flieg Frank's study of Austrian Galicia, that oil dependence is a created state, not an inevitability. Finally, by focusing on one site from the beginning of the industrial extraction of oil to the present, rather than examining an oil industry in a single era or attempting to pull together the many strands of global oil history, I hope to have shown that while some expressions of particular controlling regimes' approaches to oil production are important to the producing societies, there is a fundamental sameness to oil production regardless of time or place: a basic motivation to obtain as much energy as cheaply as possible, challenges of geology and geography in getting oil from the ground to the consumer, and deeply unequal power structures. As Timothy Mitchell and the contributors to *Petrocultures* have emphasized, as an energy resource and as a commodified natural resource, oil makes its own worlds, quite different from other extractive industries, even other hydrocarbons, due to the particular processes related to its location, extraction, refining, transportation, and consumption. 700 It is possible that such understandings of oil-producing sites may help guide the world's transition away from heavy oil dependence in the coming decades.

In this dissertation, I have argued that the development of Baku as an urban-industrial site has been an embodiment of the convergence of international and local imperatives around the production of oil. Oil and natural gas are finite resources; it is predicted that Azerbaijan will be able to rely on the economic sustenance of oil incomes for perhaps another thirty years, with the natural gas industry likely to last a bit longer.<sup>701</sup>

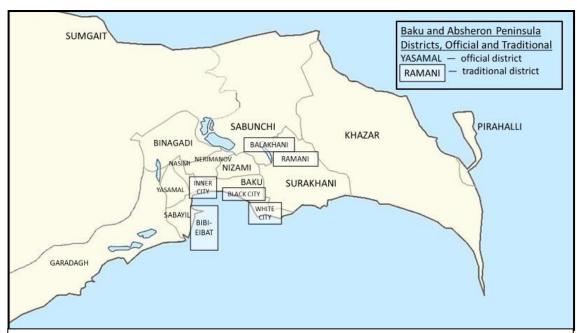
\_

<sup>700</sup> Mitchell, 1-2; Wilson, Carlson, and Szeman, eds., 3-11.

<sup>&</sup>lt;sup>701</sup> Wade Shephard, "What Azerbaijan Plans to do When the Oil Runs Out," *Forbes*, December 3, 2016, https://www.forbes.com/sites/wadeshepard/2016/12/03/what-azerbaijan-plans-to-do-when-the-oil-runs-out/#7dc028e83780.

Azerbaijan's massive construction projects (including the planned \$100 billion Khazar Islands development), enhancement of Eurasian transportation networks, and bids to host international sports and cultural competitions have all been part of the current regime's endeavor to raise the country's profile and attract new sources of revenue, following the successes of capitals such as Dubai. But the short-term benefits of continued oil reliance, as well as the legacies of Azerbaijan's role as an oil supplier to larger states, have made economic diversification a worryingly slow and limited process. Every economic downturn that affects oil prices portends future dangers.

For the time being, however, Baku remains a thriving city, the beneficiary of Azerbaijan's remarkable accumulation of wealth from oil and natural gas. Even as new high-rises further embellish the skyline, the city's past international and local interactions are evident today, a physical record of Baku's oil history: the colonial-era Russian and European buildings, the erasure of the Armenian presence, the monuments to the philanthropy of oil magnate Taghiyev, the towering oil rigs that float just offshore in the Caspian Sea, and the pumpjacks on the city's outskirts that relentlessly attempt to extract the last traces of oil from the fields where the industry started a century and a half ago.



**Figure 16.** Map of Baku and Absheron Peninsula districts, official and traditional. Source: Blank map from

https://www.wikiwand.com/az/Şablon:Yer\_xəritəsi\_Bakı\_Rayonları. Names inserted by author.

#### REFERENCES CITED

## **Primary Sources**

# Archival

- Azərbaycanın Respublikası Dövlət Arxivi (State Archive of the Republic of Azerbaijan) (ARDA)
  - f. 1032 Azerbaijan SSR Council of Ministers Oil Supply Supervision
  - f. 1610 USSR Ministry of Oil Industry "Azneft"
  - f. 2914 Committee of Oil Industry Workers Trade Union of Azerbaijan
- Azərbaycanın Respublikası Dövlət Tarix Arxivi (State Historical Archive of the Republic of Azerbaijan) (ARDTA)
  - f. 22 Department of Agriculture and State Property of Baku province and Daghestan region (Baku)
  - f. 44 Baku provincial administration

### Hoover Institution Archives

Andrei Naidenov Papers, Box 1, Folder 20 "Management of the Azerbaijan Industry."

#### **Published**

- Abbott, Rev. Justin E. "Indian Inscriptions on the Fire Temple at Baku." *Journal of the American Oriental Society* 29 (1908): 299-303.
- Amter, I. "Russia Still Needs Our Help." Soviet Russia Pictorial. July 1923.
- Arnold, Arthur. Through Persia by Caravan, Vol. 1. London: Tinsley Brothers, 1877.
- Baibakov, Nikolai. The Cause of My Life. Moscow: Progress Publishers, 1986.
- Baker, Valentine. Clouds in the East: Travels and Adventures of the Perso-Turkoman Frontier. London: Chatto and Windus, Piccadilly, 1876.

# Bakinskii Rabochii

- Baku po perepisi 22 oktiabria 1903 goda. Baku: Tovarishchestvo Kavkazkogo Pechati, 1905.
- Bobrovskaya, Cecilia. *Twenty Years in Underground Russia: Memoirs of a Rank-and-File Bolshevik*. Chicago: Proletarian Publishers, 1976. https://www.marxists.org/archive/bobrovskaya/twenty-years/ch07.htm.
- Boulangier, Edgar. Voyage à Merv: Les Russes dans l'Asie Centrale et le Chemin de Fer Transcaspien. Paris: Libraire Hachette et Cie, 1888.
- Bryce, James. Transcaucasia and Ararat. New York: The MacMillan Co., 1896.

Burdett, A.L.P., ed. Caucasian Boundaries: Documents and Maps, 1802-1946. England: Archive Editions, 1996. ———. Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978. Volume 1, 1885-1919. Cambridge: Cambridge Archive Editions, 2012. ———. Oil Resources in Eastern Europe and the Caucasus: British Documents, 1885-1978, Volume 3, 1922-1938. Cambridge: Cambridge University Press, 2012. Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978, Volume 4, 1939-1945. Cambridge: Cambridge University Press, 2012. -. Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978, Volume 5, 1946-1950. Cambridge: Cambridge University Press, 2012. ———. Oil Resources in Eastern Europe and the Caucasus, British Documents 1885-1978, Volume 8, 1967-1978. Cambridge: Cambridge University Press, 2012. Curzon, George N. Persia and the Persian Question, Vol. 1. London: Longmans, Green, and Co., 1892. Dumas, Alexandre. "Les Feux de Bakou." In Le Voyage en Russie: Français aux XVIIIe et XIX<sup>e</sup> Siècles, edited by Claude de Grève, 797-800. Paris: Robert Laffont, 1990. Gallenga, Antonio. A Summer Tour in Russia. London: Chapman and Hall, 1882. Gamba, Jacques-François. "Baku." In Le Voyage en Russie: Français aux XVIIIe et XIXe Siècles, edited by Claude de Grève, 730-741. Paris: Robert Laffont, 1990. Halder, Franz. The Halder Diaries: The Private War Journals of Colonel General Franz Halder. Boulder, CO: Westview Press, 1976. Henry, J. D. *Baku: An Eventful History*. London: A. Constable, 1905. "The Impending Soviet Oil Crisis." CIA Intelligence Memorandum, 1977. Keppel, George. Personal Narrative of a Journey from India to England. Philadelphia: Carey, Lea & Carey, 1827. Landor, A. Henry Savage. Across Coveted Lands, or a Journey from Flushing (Holland) to Calcutta, Overland. New York: Charles Scribners Sons, 1903. Lenin, V. I. Lenin Collected Works, Vol. 33. Moscow: Progress Publishers, 1965.

—. Lenin Collected Works, Vol. 35. Moscow: Progress Publishers, 1976.

- ——. Lenin Collected Works, Vol. 44. Moscow: Progress Publishers, 1975.
- Markov, Evgenii. *Rossia v srednei azii: ocherki puteshestviia*. St. Petersburg, M. M. Stasiulevich, 1901.
- Marsh, Hippisley Cunliffe. A Ride through Islam: Being a Journey through Persia and Afghanistan to India, via Meshed, Herat and Kanahar. London: Tinsley Brothers, 1877.
- Marvin, Charles. The Region of Eternal Fire: An Account of a Journey to the Petroleum Region of the Caspian in 1883. London: W.H. Allen & Co., 1891.
- Mikhailov, A., and M. Dmitriev. "Increases Planned in Oil Production during the Next Five Years." *Embassy of the Union of Soviet Socialist Republics Information Bulletin* 6, no. 49 (May 25, 1946): 42-43.
- Mounsey, Augustus Henry. *A Journey through the Caucasus and the Interior of Persia*. London: Smith, Elder & Co., 1872.
- Norman, Henry. All the Russias: Travels and Studies in Contemporary European Russia, Finland, Siberia, the Caucasus, and Central Asia. London: Charles Scribner's Sons, 1902.
- O'Donovan, Edmond. *The Merv Oasis: Travels and Adventures East of the Caspian during the Years 1879-80-81, Vol. I.* London: Smith, Elder & Co., 1882.
- Osmaston, John. Old Ali; Or, Travels Long Ago. London: Hatchards, Piccadilly, 1881.
- Priscus of Panium. *The Fragmentary History of Priscus: Attila, the Huns, and the Roman Empire, AD 430-476*. Translated by John Given. Merchantville, NJ: Evolution Publishing, 2014.
- Prokopovich, Sergius. "The Crisis of the Five-Year Plan." *The Slavonic and East European Review* 10, No. 29 (Dec. 1931): 321-322.
- Radek, Karl. "The Russian Famine and the Capitalist World." *The Toiler*. November 5, 1921.
- Smith, F. Willoughby. "Russia. Batum." *Supplement to Commerce Reports* 13d (October 1915): 1-5.
- Stack, Edward. Six Months in Persia, Vol. II. London: Sampson Low, Marston, Searle, & Rivington, 1882.

- Stalin, J. V. Problems of Leninism. Peking: Foreign Languages Press, 1976.
- ——. *Works: From Marx to Mao*. Moscow: Foreign Languages Publishing House, 1954.
- ——. Works, Vol. 2, 1907-1913. Moscow: Foreign Languages Publishing House, 1953.
- Stanley, Henry Morton. *My Early Travels and Adventures in America and Asia*. New York: C. Scribner's Sons, 1895.
- Stewart, Charles E. "Account of the Hindu Fire-Temple at Baku, in the Trans-Caucasus Province of Russia." *The Journal of the Royal Asiatic Society of Great Britain and Ireland* (April 1897): 311-318.
- ——. Through Persia in Disguise: With Reminiscences of the Indian Mutiny. London: George Routledge & Sons, Ltd., 1911.
- Strong, Anna Louise. The First Time in History. New York: Boni & Liveright, 1925.
- Svod statisticheskikh dannykh o naselenii zakavkazskago kraia, izvlechennykh iz posemeinykh spiskov 1886 g. Tiflis: Zakavkazskim statisticheskim komitetom, 1903.
- Thompson, A. Beeby. *The Oil Fields of Russia and the Russian Petroleum Industry: A Practical Handbook on the Exploration, Exploitation, and Management of Russian Oil Industries*. New York: D. Van Nostrand Company, 1904.
- U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, Commerce Reports Nos. 152-203, Volume 3 (July and August 1921).

### Online

- 2009 Azerbaijan Census. http://pop-stat.mashke.org/azerbaijan-ethnic2009.htm
- "Baku v period Velikoi Otechestvennoi voiny (1941-1945 gg.) fotoalbom" Nash Baku: Istoriia Baku i bakintsev.
  https://www.ourbaku.com/index.php/Баку\_в\_период\_Великой\_Отечественной \_\_войны\_(1941\_-\_1945г.г)\_-\_фотоальбом
- "Bibi Eibat fotoalbom." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/ Биби\_Эйбат\_-\_фотоальбом
- "Chernyi gorod fotoalbom". Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/ Черный\_город\_-\_фотоальбом

- Dunsterville, Lionel. "The Diaries of General Lionel Dunsterville, 1911-1922: 1918." *The World War I Document Archive*. http://www.gwpda.org/Dunsterville/Dunsterville\_1914.html
- Gimelfarb, Natan. *Zapiski opalnogo direktora*. Buffalo, 1999. http://natan.gimelfarb.com/PART1.pdf
- Halder, Franz. War Diary: Daily Notes by the Chief of the General Staff of the Ground Forces, 1939-1942. http://militera.lib.ru/db/halder/index.html
- Harvard Project on the Soviet Social System. http://hcl.harvard.edu/collections/hpsss/index.html
- Khazin, Evgenii. *Neft*. Moscow: Molodaia Gvardiia, 1931. http://pudl.princeton.edu/viewer.php?obj=gf06g540q#page/1/mode/2up
- Krivenko, V. S. "Ocherki Kavkaza," (1893). Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/Визит\_Его\_Величества\_Александра\_III\_в Баку (1888г.)
- Mikoyan, Anastas. *Tak bylo*. Moscow: Vagrius, 1999. http://militera.lib.ru/memo/russian/mikoyan/index.html
- Mirzoev, Tofig. "Deviatoe leto zhizni," Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/
  Тофик\_Мирзоев.\_"Девятое\_лето\_жизни..."
- "Nalichnoe naselenie v guberniiakh, uezdakh, gorodakh Rossiiskoi Imperii (bez Finliandii)," Pervaia vseobshchaia perepis naseleniia Rossiiskoi Imperii, 1897 g., http://www.demoscope.ru/weekly/ssp/rus\_gub\_97.php?reg=61
- Pervaia vseobshchaia perepis naseleniia Rosiiskoi Imperii 1897 g. http://www.demoscope.ru/weekly/ssp/rus\_mar\_gub\_97.php
- Polo, Marco. *The Travels of Marco Polo*. Translated by Henry Yule. Edited by Henri Cordier. London: John Murray, 1920. https://en.wikisource.org/wiki/The\_Travels\_of\_Marco\_Polo
- "Raspredelenie naseleniia po guberniiam, semeinomu sostoianiiu i vozrastnym gruppam," Pervaia vseobshchaia perepis naseleniia Rosiiskoi Imperii 1897 g., http://www.demoscope.ru/weekly/ssp/rus\_mar\_gub\_97.php?reg=241
- "Raspredelenie naseleniia po rodnomu iazyku, guberniiam i oblastiam," Pervaia vseobshchaia perepis naseleniia Rosiiskoi Imperii 1897 g., http://www.demoscope.ru/weekly/ssp/rus\_lan\_97.php?reg=193

- "Speech of Azerbaijan President Heydar Aliyev at the Contract Signing Ceremony on the Joint Development of the Deposits in the Caspian Shelf between the State Oil Company of Azerbaijan Republic and the Consortium of the Foreign Oil Companies September 20, 1994." Heydar Aliyev Heritage International Online Library. http://lib.aliyevheritage.org/en/8223457.html
- "Telegramma bakinskogo gubernatora kn. M. A. Nakashidze ministru vnutrennikh del A. G. Bulyginu. Baku, 7 fevralia 1905 g. No. 2358." In Olga Edelman, "Meznatsionalnye stolknoveniia v Baku 7-10 fevralia 1905 goda," *Regnum*, May 11, 2017. https://regnum.ru/news/polit/2273761.html
- Vsesoiuznaia perepis naseleniia 1926 goda. Naseleniia nemestnykh urozhentsev v respublikakh, raionakh, ASSR i kraiakh SSSR po mestu rozhdeniia. http://demoscope.ru/weekly/ssp/rus nemes 26.php?reg=28
- Vsesoiuznaia perepis naseleniia 1926 goda. Natsionalnyi sostav naseleniia po regionam r respublik SSSR. http://demoscope.ru/weekly/ssp/sng\_nac\_26.php?reg=2278
- Vsesoiuznaia perepis naseleniia 1926 goda. SSSR, Respubliki i ikh osnovnye region. http://demoscope.ru/weekly/ssp/ussr\_26.php?reg=30
- Vsesoiuznaia perepis naseleniia 1939 goda. Natsionalnyi sostav naseleniia po respublikam SSSR. http://demoscope.ru/weekly/ssp/sng nac 39.php?reg=5
- Vsesoiuznaia perepis naseleniia 1939 goda. Natsionalnyi sostav naseleniia raionov, gorodov i krupnykh sel soiuznykh respublik SSSR. http://www.demoscope.ru/weekly/ssp/ussr nac 39 ra.php?reg=679
- Vsesoiuznaia perepis naseleniia 1939 goda. Raspredelenie gorodskogo i selskogo naseleniia SSSR i soiuznykh respublik po natsionalnosti i polu. http://demoscope.ru/weekly/ssp/sng nac 39 gs.php?reg=4&gor=1&Submit=OK
- Vsesoiuznaia perepis naseleniia 1959 goda. Gorodskoe i selskoe naseleniie oblastei respublik SSSR (krome RSFSR) po polu i natsionalnosti. http://www.demoscope.ru/weekly/ssp/resp\_nac\_59.php?reg=65
- Vsesoiuznaia perepis naseleniia 1970 goda. Gorodskoe i selskoe naseleniia oblastei respublik SSSR (krome RSFSR) po polu i natsionalnosti. http://www.demoscope.ru/weekly/ssp/resp\_nac\_70.php?reg=71
- Vsesoiuznaia perepis naseleniia 1979 goda. Gorodskoe i selskoe naseleniia oblastei respublik SSSR (krome RSFSR) po polu i natsionalnosti. http://www.demoscope.ru/weekly/ssp/resp\_nac\_79.php?reg=74

Vsesoiuznaia perepis naseleniia 1989 goda. Raspredelenie gorodskogo i selskogo naseleniia oblastei respublik SSSR po polu i natsionalnosti. http://www.demoscope.ru/weekly/ssp/resp\_nac\_89.php?reg=68

## **Secondary Sources**

- Abasov, Mazaur. *Bakinskaia Partiinaia Organizatsiia v Gody Velikoi Otechestvennoi Voiny (1941-1945 gg.)*. Baku: Azerbaidzhanskoe Gosudarstvennoe Izdatelstvo, 1990.
- Abrahamson, Sherman R. "Petroleum in the Soviet Union: An Appraisal of a Recent German Study." *Economic Geography* 29, No. 3 (July 1953): 267-276.
- Adelman, M A. *The Genie out of the Bottle: World Oil since 1970.* Cambridge, MA: MIT Press, 1995.
- Agayev, Vagif, Fuad Akhundov, Fikrat T. Aliyev, and Mikhail Agarunov. "World War II and Azerbaijan." *Azerbaijan International* (Summer 1995): 50-55.
- Alekperov, Vagit. Oil of Russia: Past, Present, & Future. Minneapolis: East View Press, 2011.
- Alieva, Leila. "The Reforms and Oil Revenues Consequences and Implications for the Communities in the Historical Perspective." In *The Baku Oil and Local Communities: A History*, edited by Leila Alieva, translated by Emil Gazi, 16-34. Baku: Qanun, 2009.
- Aliyev, Idris, and Orkhan Mamed-Zade. "History of the Baku 'Black Gold': Fate of the Communities and Formation of National Bourgeoisie." In *The Baku Oil and Local Communities: A History*, edited by Leila Alieva, translated by Emil Gazi, 35-144. Baku: Qanun, 2009.
- Altstadt, Audrey L. "Azerbaijan: The Rich Get Richer and the Poor Get Nothing." *Emerging Europe*, July 25, 2017. https://emerging-europe.com/voices/azerbaijan-the-rich-get-richer-and-the-poor-get-nothing/
- ——. The Azerbaijani Turks: Power and Identity under Russian Rule. Stanford: Stanford University Press, 1992.
- ———. Frustrated Democracy in Post-Soviet Azerbaijan. Washington, D.C.: Woodrow Wilson Center Press, 2017.
- ———. *The Politics of Culture in Soviet Azerbaijan, 1920-1940.* London and New York: Routledge, 2016.
- Altstadt-Mirhadi, Audrey. "Baku: Transformation of a Muslim Town." In *The City in Late Imperial Russia*, edited by Michael F. Hamm, 283-318. Bloomington: Indiana University Press, 1986.

- Amrahov, Ziyad. "Russia's Political Steps in the 'Armenian Question' and the Pact on 26 January (8 February) 1914 between Russia and Turkey." *Karadeniz Arashtirmalari* 47 (2015): 53-59.
- Appel, Hannah. *The Licit Life of Capitalism: U.S. Oil in Equatorial Guinea*. Durham: Duke University Press, 2019.
- Appel, Hannah, Arthur Mason, and Michael Watts, eds. *Subterranean Estates: Life Worlds of Oil and Gas.* Ithaca: Cornell University Press, 2015.
- Ascher, Abraham. *The Revolution of 1905: Revolution in Disarray*. Stanford: Stanford University Press, 1988.
- Aslanian, Artin H. "Dunsterville's Adventures: A Reappraisal." *International Journal of Middle East Studies* 12, no. 2 (Sept. 1980): 199-216.
- Atabaki, Touraj. "From 'Amaleh (Labor) to Kargar (Worker): Recruitment, Work Discipline and Making of the Working Class in the Persian/Iranian Oil Industry." International Labor and Working-Class History no. 84 (Fall 2013): 159-175.
- ——. "Disgruntled Guests: Iranian Subaltern on the Margins of the Tsarist Empire," *IRSH* 48 (2003): 401-426.
- Auyezov, Olzhas. "Russia, Iran, and three others agree on Caspian status, but not borders." *Reuters*, August 12, 2018. https://www.reuters.com/article/us-kazakhstan-caspian-borders/russia-iran-and-three-others-agree-caspian-status-but-not-borders-idUSKBN1KX0CI
- "Azerbaijan." Freedom House. https://freedomhouse.org/country/azerbaijan/freedomworld/2020
- "Azerbaijan." Human Rights Watch (HRW). https://www.hrw.org/europe/central-asia/Azerbaijan
- "Azerbaijan." World War II Database. https://ww2db.com/country/Azerbaijan
- "Azerbaijan Corruptistan." Organized Crime and Corruption Reporting Project (OCCRP). https://www.occrp.org/en/corruptistan/azerbaijan/
- "Azerbaijan: Famous Medieval Cemetery Vanishes." IWPR staff. Institute for War & Peace Reporting, April 27, 2006. https://iwpr.net/global-voices/azerbaijan-famous-medieval-cemetery-vanishes

- "Azerbaijan Lost As Much As 25 Percent of Its Population in WWII." Meydan.tv. https://www.meydan.tv/en/article/azerbaijan-lost-as-much-as-25-percent-of-its-population-in-wwii/
- "Azerbaijan President appoints wife as First Vice President." *Deutsche Welle*, February 2, 2017. https://p.dw.com/p/2Y0w9
- "Azerbaijan's Contribution to the Victory in the World War II." Permanent Mission of the Republic of Azerbaijan to the United Nations. http://un.mfa.gov.az/news/4/3086
- Azizov, Eldar. Difai: XX Esrin Evvellerinde Ermeni-Azerbaijanli Munagishasinin Ilkin Tarikhi Shertleri ve Sebebleri Azizov. Baku, 2009.
- Baberowski, Jörg. *Der Feind ist überall. Stalinismus im Kaukasus*. Munich: Deutsche Verlags-Anstalt, 2003.
- . *Vrag est vezde. Stalinizm na Kavkaze*. Moscow: Rossiiskaia politicheskaia entsiklopediia [ROSSPEN], 2010.
- Bagirov, Sabit. "Azerbaijani Oil: Glimpses of a Long History." *Perceptions: Journal of International Affairs* 3, Vol. 1 (1996).
- Bagirova, Nailia. "Azeri ruling party calls for early parliamentary election: official." *Reuters*, November 28, 2019. https://www.reuters.com/article/us-azerbaijan-politics-parliament/azeri-ruling-party-calls-for-early-parliamentary-election-official-idUSKBN1Y20ZG.
- "Baku Olimpiya Stadionu." The Stadium Guide. https://www.stadiumguide.com/bakuolympic-stadium/
- "Baku-Tbilisi-Ceyhan (BTC) Caspian Pipeline." *Hydrocarbon Technologies*. https://www.hydrocarbons-technology.com/projects/bp/
- Bayulgen, Oksan. "Foreign Investment, Oil Curse, and Democratization: A Comparison of Azerbaijan and Russia." *Business and Politics* 7, no. 1 (2005): 1–37.
- Barrett, T. M. At the Edge of Empire: The Terek Cossacks and the North Caucasus Frontier, 1700-1860. Boulder, CO: Westview Press, 1999.
- Beliaeva, V.A. *Trudovoi geroizm rabochikh azerbaidzhana v gody velikoi otechestvennoi voiny (1941-1945 gg.)*. Baku: Aznefteizdat, 1957.
- Black, Brian C. *Crude Reality: Petroleum in World History*. Lanham, MD: Rowman & Littlefield Publishers, 2012.
- Blau, Eve. Baku: Oil and Urbanism. Zurich: Park Books, 2018.

- ——. "Baku: Oil and Urbanism at the Edge of the New Europe." In *In the Life of Cities*, edited by Mohsen Mostafavi, 42-61. Zürich: Lars Müller Publishers, 2012
- "BP in Azerbaijan." BP. https://www.bp.com/en az/azerbaijan/home.html
- "BP supporting Baku 2017 English." YouTube. https://www.youtube.com/watch?v=epHHg6NNeT0
- Brinegar, Sara. "Baku at All Costs: The Politics of Oil in the New Soviet State." PhD diss., University of Wisconsin-Madison, 2014.
- Brower, Daniel R., and Edward J. Lazzerini, eds. *Russia's Orient: Imperial Borderlands and Peoples*, 1700-1917. Bloomington: Indiana University Press, 1997.
- Brown, Cynthia, and Farhad Karim, eds. "Playing the 'Communal Card': Communal Violence and Human Rights." Human Rights Watch. https://www.hrw.org/reports/1995/communal/
- Brubaker, Rogers. *Nationalist Politics and Everyday Ethnicity in a Transylvanian Town*. Princeton: Princeton University Press, 2006.
- Burbank, Jane, Mark von Hagen, and Anatolyi Remnev. *Russian Empire: Space, People, Power, 1700-1930.* Bloomington: Indiana University Press, 2007.
- Campbell, Robert W. *The Economics of Soviet Oil and Gas*. Baltimore: The Johns Hopkins University Press, 1968.
- ——. *Trends in the Soviet Oil and Gas Industry*. Baltimore: The Johns Hopkins University Press, 1976.
- "Carpet Museum in Azerbaijan." aasarchitecture. https://aasarchitecture.com/2014/10/carpet-museum-azerbaijan.html/
- "Caucasus Campaign." World War II Database. https://ww2db.com/battle\_spec.php?battle\_id=284
- Chen, J. L., T. Pekker, C. R. Wilson, B. D. Tapley, A. G. Kostianoy, J.-F. Cretaux, and E. S. Safarov. "Long-term Caspian Sea level change." *Geophysical Research Letters* 44, no. 13 (2017), https://doi.org/10.1002/2017GL073958
- Chistiakova, Natalia. "Naselenie severnoi stolitsy." Demoskop Weekly. http://www.demoscope.ru/weekly/2004/0163/tema01.php
- Chorbajian, Levon, Patrick Donabedian, and Claude Mutafian, eds. *The Caucasian Knot: The History and Geo-Politics of Nagorno-Karabagh*. London: Zed, 1994.

- Conquest, Robert. Stalin: Breaker of Nations. New York: Viking, 1991.
- Cornell, Svante E. Azerbaijan since Independence. New York: M.E. Sharpe, 2011.
- ——. Small Nations and Great Powers: A Study of Ethnopolitical Conflict in the Caucasus. Richmond, Surrey: Curzon Press, 2001.
- Corzine, Robert. "Waterworld in the Caspian (Oil Rocks Complex in Caspian Sea off Azerbaijan)." *The Financial Times*, September 20, 1995.
- "Country Comparison. Crude Oil Production." *The World Factbook 2020*. Washington, DC: Central Intelligence Agency, 2020. https://www.cia.gov/library/publications/the-world-factbook/rankorder/2241rank.html
- "Country Comparison. Natural Gas Production." *The World Factbook 2020*. Washington, DC: Central Intelligence Agency, 2020. https://www.cia.gov/library/publications/resources/the-world-factbook/fields/269rank.html
- Crandall, Maureen S. *Energy, Economics, and Politics in the Caspian Region: Dreams and Realities.* Westport, CT: Praeger Security International, 2006.
- Crawford, Christina E. "Soviet Planning Praxis: From Tractors to Territory." *Centerpiece* 29, no. 2 (2015): 14-20.
- Crisp, Olga. *Studies in the Russian Economy before 1914*. New York: Barnes & Noble Books, 1976.
- Croissant, Cynthia. *Azerbaijan, Oil and Geopolitics*. Commack, NY: Nova Science Publishers, Inc., 1998.
- Darieva, Tsypylma. "Reconfiguring a Public Place. Baku Promenade between Europe and Asia." *Comparative Studies on Regional Powers Series*, no. 13, 117-132. Sapporo: Hokkaido University Press, 2013.
- Davidson, Adam. "Donald Trump's Worst Deal." *The New Yorker*, March 6, 2017. https://www.newyorker.com/magazine/2017/03/13/donald-trumps-worst-deal
- Davies, Sarah, and James Harris. *Stalin's World: Dictating the Soviet Order*. New Haven: Yale University Press, 2014.

- Diba, Bahman Aghai. The Law and Politics of the Caspian Sea in the Twenty-First Century: The Positions and Views of Russia, Kazakhstan, Azerbaijan, Turkmenistan, with Special Reference to Iran. Bethesda, MD: Ibex Publishers, 2003.
- Dinkova, V.A., ed. *Neft SSSR (1917-1987 gg.)*. Moscow: Nedra, 1987.
- Drosos, Nikolaos. "Modernism with a Human Face: Synthesis of Art and Architecture in Eastern Europe, 1954-1958." PhD diss., City University of New York, 2016.
- Dumont, Henri. "Ecocide in the Caspian Sea." Nature 377 (1995): 673-674.
- Dzhafarov, K. I., and F. K. Dzhafarov. "Tovarishchestvo neftianogo proizvodstva bratev Nobel." *Naukovedenie* 1, 2001. https://web.archive.org/web/20131102033145/http://vivovoco.rsl.ru/VV/PAPERS/HISTORY/BRANOBEL.HTM
- Ebel, Robert. Communist Trade in Oil and Gas: An Evaluation of the Future Export Capacity of the Soviet Bloc. New York: Praeger Publishers, 1970.
- ——. *The Petroleum Industry of the Soviet Union*. New York: American Petroleum Industry, 1961.
- Engelstein, Laura. *Moscow, 1905: Working-Class Organization and Political Conflict.* Stanford: Stanford University Press, 1982.
- Eyubov, Anar Kurdoglu. Dashnaksutun 1905 Yili Chatishmalarinda." *Turan-Sam* 11 (Summer 2011): 37-42.
- Falkus, M.E. *The Industrialisation of Russia, 1700-1914*. London: The MacMillan Press Ltd., 1972.
- Fischer, Louis. *Oil Imperialism: The International Struggle for Petroleum.* London: George Allen & Unwin, Ltd., 1926.
- Fitzpatrick, Sheila. "The Great Departure: Rural-Urban Migration in the Soviet Union, 1929-33." In *Social Dimensions of Soviet Industrialization*, ed. William G. Rosenberg and Lewis H. Siegelbaum. Bloomington: Indiana University Press, 1993.
- Frank, Alison Flieg. *Oil Empire: Visions of Prosperity in Austrian Galicia*. Cambridge, MA: Harvard University Press, 2005.
- Frank, Arno. "Rise and Fall of Stalin's Atlantis of Oil." *Der Spiegel*, November 15, 2012. https://www.spiegel.de/international/world/exploring-the-crumbling-soviet-oil-platform-city-of-neft-dashlari-a-867055.html

- Gasimov, Zaur. *Historical Dictionary of Azerbaijan*. London: Rowman & Littlefield, 2018.
- Gerschenkron, Alexander. *Economic Backwardness in Historical Perspective: A Book of Essays*. Cambridge, MA: Belknap Press of Harvard University Press, 1962.
- Giovannini, Joseph. "Heydar Aliyev Cultural Center, Designed by Zaha Hadid Architects." *Architect Magazine*, September 17, 2013. https://www.architectmagazine.com/design/buildings/heydar-aliyev-cultural-center-designed-by-zaha-hadid-architects o
- Gökay, Bülent. "The Background: History and Political Change." In *The Politics of Caspian Oil*, edited by Bülent Gökay, 1-19. New York: Palgrave, 2001.
- ——. "The History of Oil Development in the Caspian Basin." In *Oil and Geopolitics in the Caspian Sea Region*. Edited by Michael P. Croissant and Bülent Aras. Westport, CT: Praeger, 1999.
- Goldman, Marshall I. *The Enigma of Soviet Petroleum: Half-Full or Half-Empty?* London: George Allen & Unwin, 1980.
- Goltz, Thomas. Azerbaijan Diary: A Rogue Reporter's Adventures in an Oil-rich, Wartorn, Post-Soviet Republic. Armonk, N.Y.: M.E. Sharpe, 1998.
- Gorbunova, Yulia. "An Olympic Demolition." *The Wall Street Journal*, October 1, 2013. https://www.wsj.com/articles/SB100008723963904447129045780243201800615
- Grant, Bruce. "The Edifice Complex: Architecture and the Political Life of Surplus in the New Baku." *Political Culture* 26, no. 3 (2014): 501-528.
- Gumenyuk, Nataliya, and Bohdan Kutiepov. "Baku: City of Millionaires and Slums." *Hromadske International*, January 7, 2020. https://en.hromadske.ua/posts/baku-city-of-millionaires-and-slums-special-report
- Gustafson, Thane. Crisis amid Plenty: The Politics of Soviet Energy under Brezhnev and Gorbachev. Princeton: Princeton University Press, 1989.
- Hadja, Lubomyr. "Ethnic Politics and Ethnic Conflict in the USSR and the Post-Soviet States." *Humboldt Journal of Social Relations* 19, No. 2 (1993): 193-278.
- Hakimian. Hassan. "Wage Labor and Migration: Persian Workers in Southern Russia, 1880-1914." *International Journal of Middle East Studies* 17, no. 4 (Nov. 1985): 443-462.

- Hasanli, Jamil. At the Dawn of the Cold War: The Soviet-American Crisis over Iranian Azerbaijan, 1941-1946. Lanham, MD: Rowman & Littlefield Publishers, Inc., 2006.
- ———. *Khrushchev's Thaw and National Identity in Soviet Azerbaijan, 1954-1959.* Lanham, MD: Rowman & Littlefield Publishers, Inc., 2015.
- Hassmann, Heinrich. *Oil in the Soviet Union*. Translated by Alfred Leeston. Princeton: Princeton University Press, 1953.
- Hayward, Joel. "Hitler's Quest for Oil: The Impact of Economic Considerations on Military Strategy, 1941-42." *The Journal of Strategic Studies* 18, no. 4 (December 1995): 94-135.
- Herlihy, Patricia. "Odessa: Staple Trade and Urbanization in New Russia." *Jahrbücher für Geschichte Osteuropas* 21, no. 2 (1973): 184-195.
- "Heydar Aliyev Center." *ArchDaily*. https://www.archdaily.com/448774/heydar-aliyev-center-zaha-hadid-architects
- "High-Resolution Satellite Imagery and the Destruction of Cultural Artifacts in Nakhchivan, Azerbaijan." *American Association for the Advancement of Science*. https://www.aaas.org/resources/high-resolution-satellite-imagery-and-destruction-cultural-artifacts-nakhchivan-azerbaijan
- Hirsch, Francine. *Empire of Nations: Ethnographic Knowledge and the Making of the Soviet Union*. Ithaca: Cornell University Press, 2005.
- "History." Heydar Aliyev International Airport. http://www.airport.az/en/about-us/history/
- Hoffman, David L. "Moving to Moscow: Patterns of Peasant In-Migration during the First Five-Year Plan." *Slavic Review* Vol. 50, No. 4 (Winter 1991): 847-857.
- Hosking, Geoffrey A. *Russia: People and Empire, 1552-1917*. Cambridge: Harvard University Press, 1997.
- Hsu, Chia Yin. "Frontier Urban and Imperial Dreams: The Chinese Eastern Railroad and the Creation of a Russian Global City, 1890-1917." In *Russia in Motion: Cultures of Mobility since 1850*, eds. John Randolph and Eugene M. Avrutin, 43-62. Urbana: University of Illinois Press, 2012.
- Igolkin, A. A. *Neftianaia politika SSSR v 1928-1940-m godakh*. Moscow: Rossiiskaia Akademiia Nauk Institut Rossiiskoi Istorii, 2005.
- . Otechestvennaia neftianaia promyshlennost v 1917-1920 godakh. Moskva: Rossiiskii gosudarstvenyi gumanitarnyi universitet, 1999.

- ———. *Sovetskaia neftianaia promyshlennost' v 1921-1928 godakh*. Moscow: Rossiiskii gosudarstvennyi gumanitarnyi universtitet, 1999.
- Iljine, Nicolas, ed. *Memories of Baku*. Seattle: Marquand Books, 2013.
- Iseri, Emre. "Geopolitics of Oil and Pipelines in the (Eurasian) Heartland." In *The Politics of Oil*, edited by Bulent Gokay, 35-45. London: Routledge, 2006.
- Jabbarov, Farkhad. Bakinskaia neft' v politike sovietskoi Rossii (1917-1922 gg.). Baku, 2009.
- Jackson, Abraham V.W. From Constantinople to the Home of Omar Khayyam. Piscataway, NJ: Gorgias Press, 2002 (1911).
- Jafari, Nasar. "Review of pollution sources and controls in Caspian Sea region." *Journal of Ecology and the Natural Environment* 2, no. 2 (2010): 25-29.
- Jones, Thomas. "British Business in Russia, 1892-1914." PhD diss., University College London, 2017.
- Josephson, Paul, Nicolai Dronin, Ruben Mnatsakanian, Aleh Cherp, Dmitry Efremenko, and Vladislav Larin. *An Environmental History of Russia*. Cambridge University Press, 2013.
- Kahramanova, Shahla, and Musaddin Namazov. "Ecological condition of Baku atmosphere and its improvement way." 45<sup>th</sup> ISOCARP Congress (2009): 1-12.
- Kappeler, Andreas. *The Russian Empire: A Multiethnic History*. New York: Pearson Education, 2001.
- Keenan, E. L. "Remarques sur l'histoire du mouvement révolutionnaire a Bakou (1904-1905)." *Cahiers du Monde Russe et Soviétique* 3, No. 2 (Apr.-Jun., 1962): 225-260.
- Kerimkhanov, Abdul. "Nation's Oil Production Sees Slight Decline in 2019." *Azernews*, January 13, 2020. https://www.azernews.az/oil and gas/160585.html
- Khan-Mahmedov, Selim. "Arkhitektura sovetskogo avangarda." *Arkhitektura Istoriia*. http://www.alyoshin.ru/Files/publika/khan\_archi/khan\_archi\_1\_115.html
- Khanlarov, A.T. "General Plan as Strategy of Sustainable Development, or 'Pluralism of Town Planning Potentialities." UNECE, 2006. https://www.unece.org/fileadmin/DAM/hlm/prgm/urbanenvperf/conference/tenth bratislava/documents/4.azerbaijan.pdf

- Kotkin, Stephen. *Magnetic Mountain: Stalinism as Civilization*. Berkeley: University of California Press, 1995.
- Kozlov, Victor. *The Peoples of the Soviet Union*. Bloomington: Indiana University Press, 1988.
- Krebs, Melanie. "The right to live in the city." *International Journal of Sociology and Social Policy* 35, no 7/8 (2015): 550-564.
- Kuromiya, Hiroaki. *Stalin's Industrial Revolution: Politics and Workers, 1928-1932*. Cambridge: Cambridge University Press, 1988.
- "Kyiv." *Encyclopedia of Ukraine*. http://www.encyclopediaofukraine.com/display.asp?linkpath=pages%5CK%5CY%5CKyiv.htm
- Lewarne, Stephen. Soviet Oil: The Move Offshore. Boulder: Westview Press, 1988.
- Lewis, Robert A. Nationality and Population Change in Russia and the USSR: An Evaluation of Census Data, 1897-1970. New York: Praeger Publishers, 1976.
- Lewis, Robert A., Richard H. Rowland, and Ralph S. Clem. *Nationality and Population Change in Russia and the USSR: An Evaluation of Census Data, 1897-1970.* New York: Praeger Publishers, 1976.
- Liberman, Sherri. *Historical Atlas of Azerbaijan*. New York: The Rosen Publishing Group, 2004.
- Lund, Nicholas. "At the Center of the Periphery: Oil, Land, and Power in Baku, 1905-1917." Dissertation. Stanford University, 2013.
- Lydolph, Paul E., and Theodore Shabad. "The Oil and Gas Industries in the U.S.S.R." *Annals of the Association of American Geographers* 50, no. 4 (1960): 461-486.
- Maass, Peter. Crude World: The Violent Twilight of Oil. New York: Alfred A. Knopf, 2009.
- Marsden, Tom. "The Baku Metro at 50." *Visions of Azerbaijan* (Winter 2018). http://www.visions.az/en/news/1009/a1559b58/
- Marshall, Alex. The Caucasus under Soviet Rule. London: Routledge, 2010.
- Martellaro, Joseph A. "The Acquisition and Leasing of the Baku Oilfields by the Russian Crown." *Middle Eastern Studies* 21, no. 1 (1985): 80-88.

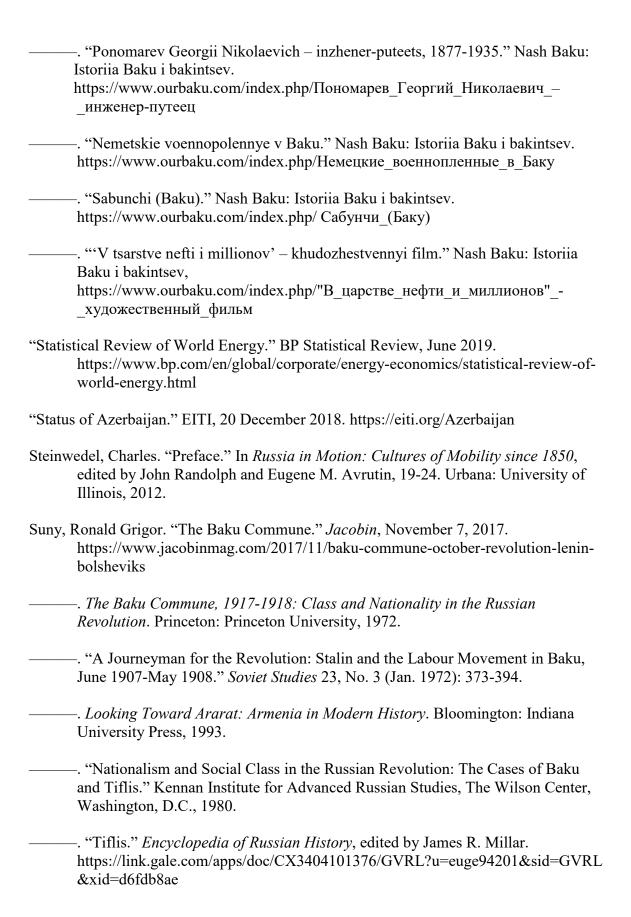
- Martin, Terry. *The Affirmative Action Empire: Nations and Nationalism in the Soviet Union, 1923-1939.* Ithaca: Cornell University Press, 2001.
- Mau, Mark, and Henry Edmundson. *Groundbreakers: The Story of Oilfield Technology* and the People Who Made It Happen. Peterborough, England: Fast-Print Publishing, 2015.
- Maugeri, Leonardo. *The Age of Oil: The Mythology, History, and Future of the World's Most Controversial Resource*. Westport, CT: Praeger Publishers, 2006.
- McKay, John P. "Baku Oil and Transcaucasian Pipelines, 1883-1891: A Study in Tsarist Economic Policy." *Slavic Review* 43, No. 4 (Winter 1984): 604-623.
- McKay, John P. "Foreign Enterprise in Russian and Soviet Industry: A Long Term Perspective," *The Business History Review* Vol. 48, No. 3 (Autumn 1974): 336-356.
- "Military expenditure by country as a percentage of gross domestic product, 1988-2018." SIPRI databases. https://www.sipri.org/databases/milex
- Mir-Babayev, M.F. Kratkaia istoriia azerbaidzhanskoi nefti. Baku: Azerneshr, 2009.
- . Kratkaia khronologiia istorii azerbaidzhanskogo neftianogo dela. Baku: Sabah, 2004.
- Mitchell, Timothy. *Carbon Democracy: Political Power in the Age of Oil*. London: Verso, 2011.
- "Moskva." *Narodnaia entsiklopediia gorodov i regionov Rossii*. http://www.mojgorod.ru/gor\_moskva/moskva/index.html
- Mottaghi, A. "Environmental geopolitics of the Caspian basin energy interactions." *Caspian Journal of Environmental Sciences* 14, no. 1 (2016): 81-90.
- Murray, Robin L., and Joseph K. Heumann. "Ecology and Spectacle in Oil Wells of Baku: Close View: The First Eco-Disaster Film?" In *Ecology and Popular Film: Cinema on the Edge*. Albany: State University of New York, 2009.
- Nassibli, Nasib. "Azerbaijan: Oil and Politics in the Country's Future." In *Oil and Geopolitics in the Caspian Sea Region*. Edited by Michael P. Croissant and Bülent Aras, 101-129. Westport, CT: Praeger, 1999.
- "News." Baku City Circuit. https://www.bakucitycircuit.com/news
- Orujova, Nigar. "Number of cars expected to nearly double in Greater Baku area by 2030." *Azernews*, July 19, 2013. https://www.azernews.az/nation/57064.html

- "Oten illerin khronikasi." Baki Metropoliteni. https://web.archive.org/web/20130818082921/http://metro.gov.az/uploaded/xronologiya.pdf
- "Overview of oil and natural gas in the Caspian Sea region." Energy Information Agency, August 26, 2013. https://www.eia.gov/international/analysis/regions-of-interest/Caspian Sea
- Owen, Edgar Wesley. *Trek of the Oil Finders: A History of Exploration for Petroleum.* Tulsa, OK: The American Association of Petroleum Geologists, 1975.
- Pipes, Richard. "Demographic and Ethnographic Changes in Transcaucasia, 1897-1956." *Middle East Journal* 13, No. 1 (Winter 1959): 41-63.
- Polovtsov, A. A. "Dmitrii Semenovich Staroselskii." *Russkii biograficheskii slovar*. http://www.rulex.ru/xPol/pages/25/353.htm
- Przybylski, Maya. "Re-Rigging Transborder Logics across the Bounded Site." In *The Petropolis of Tomorrow*, edited by Neeraj Bhatia and Mary Casper, 258-271. New York: Actar D, 2013.
- "Regional Economic Outlook." International Monetary Fund.

  https://www.imf.org/en/Publications/REO/MECA/Issues/2019/04/17/reo-menap-cca-0419
- Remnev, Anatolyi. "Russians as Colonists at the Empire's Asian Borders: Optimistic Prognoses and Pessimistic Assessments." In *Russia in Motion: Cultures of Mobility since 1850*, eds. John Randolph and Eugene M. Avrutin, 127-150. Urbana: University of Illinois Press, 2012.
- "Respublika nefti—respublika khimii." *Khimiia i zhizn: nauchno-populiarnyi zhurnal* 1 (Jan. 1967): 30-33.
- Rosenberg, William G., ed., *Bolshevik Visions: First Phase of the Cultural Revolution in Soviet Russia*. Ann Arbor: Ardis Publishers, 1984.
- Rote, Irina. "Bakinskie evakogospitali." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/Бакинские эвакогоспитали
- ——. "Bakinskie neftepromyshlenniki v borbe za vliianie na gorodskuiu politsiiu (1905-1907 gg.)." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/Бакинские\_нефтепромышленники\_в\_бор ьбе\_за\_влияние\_на\_городскую\_полицию\_(1905-1907\_гг.)

- -. "Baku v Velikoi Otechestvennoi voine." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/ Баку в Великой Отечественной войне -. "Bomby na Baku – Voennye plany Frantsii i Anglii protiv SSSR (1939/1940 g.g.)." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/Бомбы на Баку Военные планы Фран ции и Англии против СССР (1939 /1940г.г.) -. "Generalnyi 'Novyi plan g. Baku 1927 g.' arkhitektura A.P. Ivanitskogo." Nash Baku: Baku istorii i bakinets. https://www.ourbaku.com/index.php/ Генеральный "Новый план г. Баку 1927г." архитектора А.П. Иваницког -. "Gubernatorskii dom (Zdanie gradonachalstva, vposledstvii Dom kultury medsantrud, Dom medrabotnikov)." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/ Губернаторский дом -Здание бакинского градоначальства - Дом медработников -. "Pervye rabochie soiuzy neftianikov i 'Mazutnaia Konstitutsiia' (Baku, 1906)." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/ Первые рабочие союзы нефтяников и "Мазутная Конституция" -. "Plan unichtozheniia neftepromyslov Baku (avgust 1942 goda)." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/План уничтожения нефтепромыслов Ба ку (август 1942 года) -. "Sezd bakinskikh neftepromyshlennost i Sovet sezda neftepromyshlennikov." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/ Съезд бакинских нефтепромышленников и Совет съезда нефтепромышле нников
- Rowland, Richard H. "Urbanization and Migration Data in Russian and Soviet Censuses." In *Research Guide to the Russian and Soviet Censuses*, ed. Ralph S. Clem. Ithaca: Cornell University Press, 1986.
- Sabin, Paul. Crude Politics: The California Oil Market, 1900-1940. Berkeley: University of California Press, 2005.
- Sahadeo, Jeff. *Russian Colonial Society in Tashkent, 1865-1923*. Bloomington: Indiana University Press, 2007.
- Samed-zade, Z.A., V.E. Akhundov, E.N. Khanlarov, et al. *Ekonomicheskoe i sotsialnoe razvitie Baku (1981-1985)*. Baku: Kommunist, 1982.
- Santiago, Myrna I. *The Ecology of Oil: Environment, Labor, and the Mexican Revolution,* 1900-1938. New York: Cambridge University Press, 2006.

- Sargent, Leslie. "The 'Armeno-Tatar War' in the South Caucasus, 1905-1906: Multiple Causes, Interpreted Meanings." *Ab Imperio* 4/2010, 143-169.
- Sayfutdinova, Leyla. "Mapping the Mobility of Azerbaijan Soviet Engineers: Linking East and West?" *Labor History* 59, no. 3 (2018): 316-330.
- Shabad, Theodore. "Geographic Developments behind the Iron Curtain." *The Professional Geographer* 7, no. 2 (1955): 13-15.
- Shephard, Wade. "What Azerbaijan Plans to do When the Oil Runs Out." *Forbes*, December 3. 2016, https://www.forbes.com/sites/wadeshepard/2016/12/03/whatazerbaijan-plans-to-do-when-the-oil-runs-out/#7dc028e83780
- Siegelbaum, Lewis H., and Leslie Page Moch. *Broad Is My Native Land: Repertoires and Regimes of Migration in Russia's Twentieth Century*. Ithaca and London: Cornell University Press, 2014.
- Sicotte, Jonathan H. "Baku: Violence, Identity, and Oil, 1905-1927." PhD diss., Georgetown University, 2017.
- Slavkina, M.V. *Baibakov*. Moscow: Molodaia Gvardiia, 2010. https://biography.wikireading.ru/242141
- Slavkina, M.V. *Triumf i tragediia: Razvitie neftegazovogo kompleksa SSSR v 1960-1980-e gody*. Moscow: Nauka, 2002.
- Soboleva, Svetlana. *Migration and Settlement: 8. Soviet Union*. Laxenburg, Austria: International Institute for Applied Systems Analysis, 1980.
- "South Caucasus Pipeline (SCP), Georgia, Turkey, Azerbaijan." *Hydrocarbons Technologies*. https://www.hydrocarbons-technology.com/projects/south-caucasus-pipeline-scp-georgia-turkey-azerbaijan/
- "Sovetskide kutlevi sokuntuler bashladi." *Qafqaz Info*. https://qafqazinfo.az/news/detail/sovetskide-kutlevi-sokuntuler-basladi-84209
- Speranskaia, Tatiana. "Bakinskoe neftianogo obshchestvo." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/Бакинское\_нефтяное\_общество
- ——. "Ivanitskii Aleksandr Platonovich gradostroitel." Nash Baku: Istoriia Baku i bakintsev. https://www.ourbaku.com/index.php/
  Иваницкий\_Александр\_Платонович\_-\_градостроитель



- Surh, Gerald Dennis. 1905 in St. Petersburg: Labor, Society, and Revolution. Stanford: Stanford University Press, 1989.
- Swietochowski, Tadeusz. Russian Azerbaijan, 1905-1920: The Shaping of National Identity in a Muslim Community. Cambridge: Cambridge University Press, 1985.
- Swietochowski, Tadeusz, and Brian C. Collins, eds. *Historical Dictionary of Azerbaijan*. Lanham, MD: Scarecrow Press, 1999.
- Sylla, Richard, and Gianni Toniolo, eds. *Patterns of European Industrialization: The Nineteenth Century.* New York: Routledge, 1991.
- Taylor, Alan. "Baku 2017: The Islamic Solidarity Games." *The Atlantic*, May 23, 2017. https://www.theatlantic.com/photo/2017/05/baku-2017-the-islamic-solidarity-games/527826/
- Tolf, Robert. W. *The Russian Rockefellers: The Saga of the Nobel Family and the Russian Oil Industry.* Stanford: Hoover Institution Press, 1976.
- Tolz, Vera. Russia's Own Orient: The Politics of Identity and Oriental Studies in the Late Imperial and Early Soviet Periods. New York: Oxford University Press, 2011.
- Travin, Dmitry, and Otar Marganiya. "Resource Curse: Rethinking the Soviet Experience." *Resource Curse and Post-Soviet Eurasia: Oil, Gas, and Modernization*, ed. Vladimir Gel'man and Otar Marganiya, 23-47. Lanham: Lexington Books, 2010.
- Tucker, Robert C. Stalin as Revolutionary. New York: W. W. Norton & Company, 1973.
- Van der Leeuw, Charles. *Oil and Gas in the Caucasus: A History*. New York: St. Martin's Press, 2000.
- Villari, Luigi. Fire and Sword in the Caucasus. London: T.F. Unwin, 1906.
- Waal, Thomas De. *Black Garden: Armenia and Azerbaijan through Peace and War*. New York: New York University Press, 2003.
- Wolfson, Ze'ev. *The Geography of Survival: Ecology in the Post-Soviet Era.* London: Routledge, 2015.
- "World Oil Production, 1950-2009." http://www.earth-policy.org/books/wote/wote data
- "World Oil Reserves 1948-2001: Annual Statistics and Analysis." *Energy Exploration and Exploitation* 19, no. 2-3 (2001): 261-292.
- Williams, Andrew J. *Trading with the Bolsheviks: The Politics of East-West Trade, 1920-1939.* New York: Manchester University Press, 1992.

- Wilson, Sheena, Adam Carlson, and Imre Szeman. *Petrocultures: Oil, Politics, Culture*. Montreal: McGill-Queen's University Press, 2017.
- Wiktor-Mach, Dobroslawa. "Measuring Muslims: The Problems of Religiosity and Intra-Religious Diversity." *Annual Review of the Sociology of Religion* 3 (2012): 219-239.
- Yergin, Daniel. *The Quest: Energy, Security, and Remaking of the Modern World.* New York: The Penguin Press, 2011.
- "Zakavkazskaia zheleznaia doroga." *Bolshaia Sovetskaia Entsiklopediia*. http://bse.sci-lib.com/article042354.html
- Zelichowski, Ryszard. "Water Not a Drop to Drink: How Baku Got Its Water The British Link." *Azerbaijan International* 10, no. 2 (Summer 2002). http://www.azer.com/aiweb/categories/magazine/ai102\_folder/102\_articles/102\_s hollar zelichowski.html
- Ziyadzade, Ziyad. "Drilling for Black Gold: The Demarcation of Hydrocarbon Resources in the Caspian Sea." *Chicago Journal of International Law* 16, no. 1 (Summer 2015): 312-339.
- Zonn, Igor S., Aleksey N. Kosarev, Michael Glantz, and Andrey G. Kostianoy. *The Caspian Sea Encyclopedia*. New York: Springer, 2010.
- Zotin, Alexander. "Azerbaijan: A Thirty-Year Fairy Tale." In *Managing the Resource Curse: Strategies of Oil-Dependent Economies in the Modern Era*. Edited by Vladimir Grigoryev, Andrey Movchan, and Alexander Zotin, 36-46. Carnegie Endowment for International Peace, 2017.