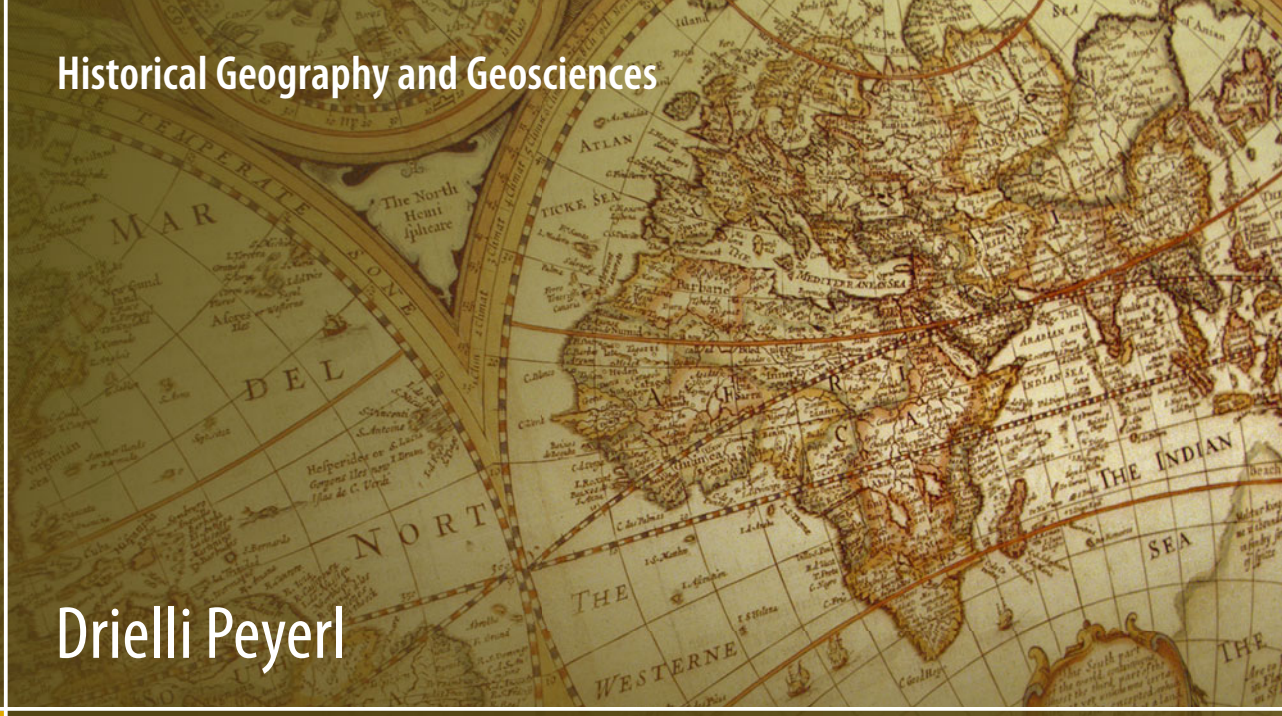
Historical Geography and Geosciences



Drielli Peyerl

The Oil of Brazil

Exploration, Technical Capacity, and Geosciences Teaching (1864–1968)

Springer

Historical Geography and Geosciences

This book series serves as a broad platform for contributions in the field of Historical Geography and related Geoscience areas. The series welcomes proposals on the history and dynamics of place and space and their influence on past, present and future geographies including historical GIS, cartography and mapping, climatology, climate history, meteorology and atmospheric sciences, environmental geography, hydrology, geology, oceanography, water management, instrumentation, geographical traditions, historical geography of urban areas, settlements and landscapes, historical regional studies, history of geography and historic geographers and geoscientists among other topically related areas and other interdisciplinary approaches. Contributions on past (extreme) weather events or natural disasters including regional and global reanalysis studies also fit into the series.

Publishing a broad portfolio of peer-reviewed scientific books Historical Geography and Geosciences contains research monographs, edited volumes, advanced and undergraduate level textbooks, as well as conference proceedings. This series appeals to scientists, practitioners and students in the fields of geography and history as well as related disciplines, with exceptional titles that are attractive to a popular science audience.

If you are interested in contributing to this book series, please contact the Publisher.

More information about this series at http://www.springer.com/series/15611

Drielli Peyerl

The Oil of Brazil

Exploration, Technical Capacity, and Geosciences Teaching (1864–1968)

Springer

Drielli Peyerl
Institute of Energy and Environment
University of São Paulo
São Paulo, Brazil

ISSN 2520-1379 ISSN 2520-1387 (electronic)
Historical Geography and Geosciences
ISBN 978-3-030-13883-7 ISBN 978-3-030-13884-4 (eBook)
https://doi.org/10.1007/978-3-030-13884-4

Library of Congress Control Number: 2019932674

Translation from the Portuguese language edition: O Petróleo no Brasil by Drielli Peyerl,

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

To Jeferson Peyerl

To Frederico Waldemar Lange (1911–1988) for everything he afforded, without even knowing, to my life.

Foreword

The period from 1854 to 1968 was particularly emblematic for the oil exploitation in Brazil. The word petroleum, mentioned for the first time in the decree published on November 1864, started to have an essential role in the country economy in the following decades, when exploratory activities to the search of the "black gold" had begun. In the following decades, decrees had been published, private foreign companies had been established, drilling had been made, and multiple activities for the technical qualification had been developed, which have led to a nationalist politics that culminated in the creation of the National Petroleum Council (Conselho Nacional do Petróleo) and the discovery of the first oil well in the district of Lobato, Salvador City, Bahia State, in 1939. From that moment onwards, a new phase started in the economic politics related to the exploration and petroleum industry, progressing in stride with the creation of Petrobras, in 1953, and its Petroleum Improvement and Research Center and, approximately 13 years later, in 1966, the beginning of the Research and Development Center Leopoldo Américo Miguez de Mello (CENPES), the first one destined to the improvement and specialization of manpower, and the second center, created after the first one was extinguished, as a center in excellency on scientific and technological research for the petroleum industry in Brazil. I was a long path that for over a century, relied on many comings and goings, from the politic and economic point of view. This trajectory of oil in Brazil needed a synthetic approach to the events and main characters related to the history of oil research in Brazil, and it is precisely with a concise and objective approach that the text of the historian Drielli Peyerl rises, written with unmatched mastery.

Holding a Bachelor's degree in History, with Geography Degree, Master's Degree in Geography from the State University of Ponta Grossa, in Paraná, and Doctor in Sciences from the University of Campinas, in São Paulo, Drielli focuses on the study of the formation of the petroleum industry in its more intriguing period, in addition to approaching its relation and importance to the education of geosciences in the country.

Drielli started her work a starting point the private documentation of one of the great icons of the petroleum research in the country, the paleontologist Frederico Waldemar Lange, which, added to a wide documentary research in the Petrobras archives and other institutions, including abroad, allowed the elaboration of an instigating text about the several paths followed by the Brazilian petroleum industry.

Aiming at the good understanding of the reader, Drielli starts her piece with an introductory text, in which she lists concisely the main historical aspects that are to be observed by the reader and talks about the same in the three following chapters: in the first, the author approaches the aspects of the initiatives and research, both private and governmental, that had led to the discovery of oil and the creation of the National Petroleum Council, involving all the events between 1938 and 1961; in the second, she talks about the participation and the role of Brazilian and foreign technicians in the formation of the petroleum industry; in the third and last, she focuses on the formation of the improvement and research centers, as well as weaving considerations about the importance of professionalizing courses for the technician staff of Petrobras.

Using unpublished documents, a great bibliography and instigating information, Drielli manages to trace the efforts and initiatives that had led to the enrichment and the improvement of the Brazilian petroleum industry in a work that, without a doubt, will become reference in the historical research in the petroleum and its influence in the education of the geosciences in Brazil.

Rio de Janeiro, Brazil
July 2016

Antonio Carlos S. Fernandes

Acknowledgements

To Prof. Dr. Silvia Fernanda de Mendonça Figueirôa, advisor, friend, and one of the most brilliant and intelligent people that I have had the privilege to meet, who also gave me the opportunity to fulfill my goals and dreams.

To Prof. Dr. Elvio Pinto Bosetti, advisor, friend, and the one who believed in my work, who also taught me to work as a team and showed me that this is actually possible in the academy.

To Prof. Dr. Brian Frehner, friend and the person responsible for introducing me to the theme History of Energy and History of Environment in my academic life.

To São Paulo Research Foundation (Fundação de Amparo à Pesquisa do Estado de São Paulo—FAPESP) for the grant awarded during Ph.D. (Process No. 2010/14857-2), Post-Doctorate (Process No. 2014/06843-2 and 2015/03244-3) and Young Investigator (Process No. 2017/18208-8 and No. 2018/26388-9).

To my parents, Irvando Luis Peyerl and Neusa do Carmo Hacke, and to my brother, Jefferson Peyerl, for the unconditional support in all moments.

In special, to Amy Randolph, Carlos Roberto dos Anjos Candeiro, Cristina de Campos, Dominique Mouette, Edmilson Moutinho dos Santos, Elisamara Aoki Gonçalves (Translator), Evandro Mateus Moretto, Julio R. Meneghini, Karen Louise Mascarenhas, Matthew R. Silverman, Nathália Weber Neiva Masulino, Rafael Alfena Zago, Robert H. Dott Jr. (1929–2018), Raquel Rocha Borges, Tyler Priest, Walter Oscar Serrate Cuellar, and William Brice.

To the member of my Ph.D.'s work, Profs. Dr. André Tosi Furtado, Dr. Antônio Carlos S. Fernandes, Dr. Jefferson de Lima Picanço, and Dr. Maria Amelia Mascarenhas Dantes.

To institutions, Linda Hall Library (staff), Oklahoma State University, Research Centre for Gas Innovation, University of Missouri-Kansas City, State University of Ponta Grossa, University of Campinas, and University of São Paulo (Institute of Energy and Environment), who contributed in many ways to my formation and for the development of my research.

To the Geosciences Institute (University of Campinas), to the professors and servers, to the Post-Graduation Program in Teaching History of Earth Sciences (PEHCT/University of Campinas), to the State University of Campinas, to the Library of the Institute of Philosophy and Human Sciences (IFCH/University of Campinas), to the Archive Frederico Waldemar Lange (1911–1988) (State University of Ponta Grossa), and to the section of the rare works collection from the Library CENPES/Petrobras.

To the Palaios Group (State University of Ponta Grossa/National Council for Scientific and Technological Development).

My sincere thanks to Dr. Michael Leuchner for the opportunity to publish this book.

My thanks to UFABC publisher for the Portuguese version of this book published in 2017.

At last, although there is a lot to be said, I thank my friends and colleagues who contributed to this process and whose wise advices and support are acknowledged and very much appreciated.

Contents

Abbreviations

CAGE	Campaign for Geologists Formation (Campanha de Formação de Geólogos)
CAPES	Coordination of the University Education Improvement Personnel (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior)
CENAP	Center for Improvement and Petroleum Research (Centro de Aperfeiçoamento e Pesquisas de Petróleo)
CENPES	Research and Development Center Leopoldo Américo Miguez de Mello (Centro de Pesquisas e Desenvolvimento Leopoldo Américo Miguez de Mello)
CGB	Brazilian Geological Commission (Comissão Geológica do Brasil)
CGG	Geographical and Geological Commission of São Paulo (Comissão Geográfica e Geológica de São Paulo)
CNP	National Petroleum Council (Conselho Nacional do Petróleo)
CPDOC	Center of Research and Brazilian Contemporary Historical Documentation (Centro de Pesquisas e Documentação de História Contemporânea do Brasil)
DEPEX	Exploration Department from Petrobras (Departamento de Exploração da Petrobras)
DEXPRO	Department of Exploration and Production from Petrobras (Departamento e Exploração e Produção da Petrobras)
DIVEX	Exploration Division Surface Sector (Setor de Superfície da Divisão de Exploração)
DNPM	National Department of Mineral Production (Departamento Nacional de Produção Mineral)
EMOP	School of Mines of Ouro Preto (Escola de Minas de Ouro Preto)
FNFI	National Faculty of Philosophy (Faculdade Nacional de Filosofia)
FRONAPE	National Tanker Fleet (Frota Nacional de Petroleiros)
IPT	Technological Research Institute (Instituto de Pesquisas Tecnológicas)

ITA	Technological Aeronautics Institute (Instituto Tecnológico da Aeronáutica)
PED	Strategic Development Program (Programa Estratégico de Desenvolvimento)
Petrobras	Petróleo Brasileiro S.A.
PIPMOI	Intensive Industrial Labor Preparation Program (Programa Intensivo de Preparação de Mão de Obra Industrial)
SBP	Brazilian Society of Paleontology (Sociedade Brasileira de Paleontologia)
SENAI	National Industrial Learning Service (Serviço Nacional de Aprendizagem Industrial)
SFPM	Mineral Production Promotion Survey (Serviço de Fomento da Produção Mineral)
SGMB	Geological and Mineralogical Survey of Brazil (Serviço Geológico e Mineralógico do Brasil)
SSAT	Technical Improvement Supervision Sector (Setor de Supervisão do Aperfeiçoamento Técnico)
UB	University of Brazil
UCLA	University of California
UEPG	State University of Ponta Grossa
UFBA	Federal University of Bahia
UFRGS	Federal University of Rio Grande do Sul
UFRJ	Federal University of Rio de Janeiro
UNICAMP	University of Campinas
URGS	University of Rio Grande do Sul
USP	University of São Paulo

List of Figures