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Oil exploration, Diplomacy, and Security in the Early Cold War (Roberto Cantoni, 2017)

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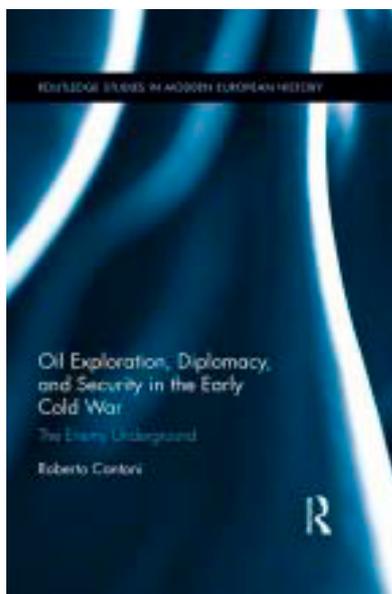
Roberto Cantoni, *Oil exploration, Diplomacy, and Security in the Early Cold War: The Enemy Underground* (New York: Routledge, 2017).

Abstract

Le livre de Roberto Cantoni, *Oil exploration, Diplomacy, and Security in the Early Cold War: The Enemy Underground*, présente une vision alternative du rôle stratégique des techniques d'exploration pétrolière durant la Guerre froide. Elargissant la littérature existante sur l'histoire de l'énergie, il analyse les relations entre technosciences et diplomatie et le rôle de la prospection pétrolière dans la sécurité nationale, contribuant ainsi à replacer la technique au centre de l'analyse géopolitique.

Plan of the article

- Technoscientific development and national security in the early Cold War
- A telescopically structured book: from national to supranational dimension
- A transnational archival research
- Conclusion



1 The main ambition of a history book is to enhance the reader's understanding of the present through the interpretation of past events. This is particularly true for the history of energy if we consider how this emerging discipline is committed to actively participating in the contemporary debate on energy transition. *Oil exploration, Diplomacy, and Security in the Early Cold War: The Enemy Underground* elucidates the strategic role of the technoscientific development of petroleum exploration industry in relation with international diplomacy and energy security, drawing a line of continuity between the early Cold War period and the present time. Roberto Cantoni's work combines a solid archival research, with an acute theorization of the role of technicians, technocrats and technical institutions in the definition of national, supranational and international energy security strategies between 1945 and 1962. Adopting a multidisciplinary approach and a multiscale perspective, the originality of this book lies in the transnational analysis of the technological development of petroleum industry confirming that "technology is not a tool of politics, but a mode of politics."¹ Differently from other scholars, Roberto Cantoni's work contributes to develop energy studies by focusing the

analysis on the role of science and technology in the history of petroleum industry.

TECHNOSCIENTIFIC DEVELOPMENT AND NATIONAL SECURITY IN THE EARLY COLD WAR

2 Roberto Cantoni reconstructs the history of Italy and France's quest for energy self-sufficiency after World War II, presenting the role of oil prospection technology and geoscientific intelligence in the attempt to limit their dependence on Anglo-American oil supplies. The book shows how oil industry technoscientific development promoted by the Italian state-owned *Ente Nazionale Idrocarburi* (ENI), the French *Compagnie Française des Pétroles* (CFP) and the *Bureau de Recherche de Pétrole* (BRP) was a core element of France and Italy's national security strategies during the early Cold War. In particular, it shows how the acquisition of knowledge on geophysics and seismic methods has allowed these companies to find alternative sources of oil outside the producing regions controlled by the oil majors, setting the basis for an independent European energy sector. After tracing the historical evolution of France and Italy's national energy policies in the post-war period, the focus shifts towards a geopolitical perspective presenting the effects of the French and Italian oil commercialization strategies based on Algerian and Soviet oil on Cold War international dynamics. Contextualizing his analysis in the interconnecting framework of transnational history of science and technology and diplomacy of natural resources, Cantoni investigates the correlation between oil prospecting activities and national security, taking into consideration the involvement of technocrats and technical elites in diplomatic relation and policy making.²

3 In this book hydrocarbons do not lie at the center of the analysis because the access to oil resources is considered as the consequence of the possession of knowledge and the mastery

¹ Gabrielle Hecht, *The Radiance of France: Nuclear Power and National Identity after World War II* (Cambridge: MIT Press, 2009 [1998]).

² Roberto Cantoni, *Oil exploration, Diplomacy, and Security in the Early Cold War: the Enemy Underground* (New York: Routledge, 2017), 122.

of oil exploration, production and transportation technologies. As Cantoni explains, despite peak oil having been predicted for many years in various forms, fossil fuels have remained until today the main source of energy all over the world. This has been possible thanks to the development of new industrial processes that have made “the extraction of oil and gas from non-conventional reservoirs economically and technically viable.”³ In this sense, the development of oil prospecting technology and the collection of geophysical information of the underground were strategic tools for France and Italy at the end of World War II, contributing to strengthen their position in the international oil market ensuring their national security. Dispelling the myth of the lack of scientificity of oil exploration summed up by the old saying “oil is where you find it,” the author demonstrates that oil discoveries “are not simply the result of individual exercises in data collection, but years of scientific and technological activities, industrial failures and success, and the high public and financial investment associated with them.”⁴

- 4 Roberto Cantoni’s hybrid theoretical framework is based on the operationalization of the concept of “transnationalism” in multiple dimensions. Considering their physical qualities, oil and gas are border-crossing resources, as oil transportations infrastructures also constitute transnational energy supplies networks. In the same sense, oil companies are transnational actors spreading their activities and structures all over the world. In this sense, the innovative argument proposed by the author rests on the transnational dimension of technoscientific knowledge in the field of geophysics and the crucial role played by technoscientists, and in the development of oil exploration and production in France and Italy. Underground prospecting activities represent the early stage of oil exploration, for this reason expertise in geophysical methods such as gravimetry, magnetic techniques and seismology, is a necessary pre-condition to limit the dependency on foreign companies.

5 Shifting from a macro-historical to a micro-historical perspective, the author focuses on the process of professionalization of geophysicists in the oil sector, presenting their scientific background and their transnational mobility. Emphasis is placed on the “neglected role of oil exploration geosciences”⁵ in contemporary literature on energy history.⁶ This is particularly due to the perception of geophysics as a “conventional” and “uninteresting” technology, the scarcity of archival sources and the prominence of nuclear culture during the Cold War.⁷ Defying this lack of interest, the book presents the strategic role played by geophysicists from the US-based prospecting companies working in the Sahara training European companies’ technicians, and the role of technology in the systematic oil discoveries during the 1950s. Furthermore, the originality of his interpretation of the early 1960s “midstream shift,”⁸ lies in the analysis of the correlation between the decline of geophysical activities and the sharpened focus on pipeline technology. In fact, the overproduction due to the abundance of Algerian and Soviet oil on the European market imposed a reduction of exploration activities and a focus on the acquisition of pipeline construction know-how so as to ensure national security and international market stability.

⁵ *Ibid.*, 4.

⁶ According to the author geophysics have a limited place in contemporary literature: few works in history of technosciences and monograph studies of geophysical companies such as Compagnie Générale de Géophysique and Schlumberger have been published. Louis A. Allaud and Maurice H. Martin, *Schlumberger: The History of a Technique* (Hoboken: John Wiley & Sons 1972). Ken Auletta, *The Art of Corporate Success: The Story of Schlumberger* (New York: Penguin, 1985). Charles Carpenter Bates, Thomas Frohock Gaskell, Robert B. Rice, *Geophysics in the Affairs of Man: a Personalized History of Exploration Geophysics and its Allied Sciences of Seismology and Oceanography* (Oxford: Pergamon Press, 1982). Geoffrey C. Bowker, *Science on the Run: Information Management and Industrial Geophysics at Schlumberger, 1920-1940* (Cambridge: MIT Press, 1994). Compagnie générale de géophysique, *CGG: 1931-2006: 75 ans de passion* (Paris: Chêne, 2006).

⁷ Cantoni, *Oil Exploration*, 15.

⁸ *Ibid.*, 168.

³ *Ibid.*

⁴ *Ibid.*, 3.

A TELESCOPICALLY STRUCTURED BOOK: FROM NATIONAL TO SUPRANATIONAL DIMENSION

- 6 *Oil exploration, Diplomacy, and Security in the Early Cold War: The Enemy Underground* is a book characterized by a geopolitically “telescopic”-structure.⁹ The reader will be guided through the Cold War oil intrigues, shifting from national to supranational and transnational dimension. This multiscale analysis fosters the understanding of the strategic role of oil exploration technologies in the reconfiguration of oil industry that characterized the period between the end of the 1940s and the early 1960s.
- 7 In the first chapter, Cantoni traces the post-war reconstruction of Italian oil exploration industry and the early steps of the Italian national oil company ENI on the international scene. He overviews the Anglo-American strategy to take control of oil exploration in Italy and their attempt to re-establish the pre-war distribution of the Italian market thanks to the geophysical data in their possession. Cantoni analyses the foundation of ENI in the early 1950s highlighting the role of geoscientific knowledge whose acquisition granted the company greater independence in the development of oil exploration plans. The author praises the foresightedness of Enrico Mattei’s long term strategy which encouraged the training of Italian technicians and the autonomization of the Italian national company through the transfer of foreign technology.
- 8 In the second chapter Cantoni discusses the reorganization of French oil industry in the aftermath of World War II and the implementation of the new oil policy based on the development of a national oil exploration *savoir-faire*. In particular he analyzes the evolution of CFP strategy in decentralizing the company’s core business from Middle East to Africa, other than the establishment of research institutes and public agencies dedicated to hydrocarbons such as the *Bureau de Recherche de Pétrole (BRP)* or the *Institut Français du Pétrole (IFP)*. He questions the role

of Pierre Guillaumat and the influence of the French technical elite in the implementation of a French national oil policy through the development of oil prospection in remote French colonial territories such as the Sahara.

After showing the key role of American companies in training French exploration geophysicists, the third chapter investigates Algerian oil diplomacy adopting a multilateral perspective. In this sense the author proposes an analysis of the Algerian decolonization process that goes beyond the classical literature characterized by a French-Algerian bilateral perspective. Cantoni shows how scientific and technological knowledge is at the heart of the secret war for hydrocarbons that involves France, foreign government officials, the intelligence service, and oil companies.¹⁰ In this context, he analyzes oil discoveries in the Sahara, highlighting the importance of geophysical information in the definition of new strategies that combine French political and economic ambitions with foreign companies’ interests. Roberto Cantoni argues that the need to accelerate exploration activities in the Sahara during the Algerian war of independence encouraged French authorities to adopt a “half-open-door policy,” admitting American companies affiliates in the Sahara. He explains the key role of US technology and investments for the French development plans in the Sahara as well as the need to contrast the Algerian National Liberation Front’s (FLN) lobbying activities that were offering American companies the priority in oil concession in exchange for political and economic support for Algerian independence. Discussing ENI’s secret agreements with the Algerian independentists, Cantoni questions the role of technical knowledge transfer for the emancipation of the newborn African state.

Widening the scope of the analysis, in the fourth chapter Cantoni introduces the concept of “mid-stream shift.” After the period characterized by the multiplication of oil discoveries and the oversupplying in oil market, the author explains the shift from prospection technologies

9 *Ibid.*, 21

10 *Ibid.*, 151.

(upstream sector) to transportation technologies (midstream sector) in the national security priorities. The “mid-stream shift” induced a drastic reduction of the oil companies’ prospecting activities while national energy strategies converged towards the commercialization of crude oil and the construction of pipeline transportation facilities. Furthermore, the author shows that the decline of geophysical activities at the end of the 1950s is inversely proportional to the rate of innovation invested in prospecting methods. The extensive use of computers induced a remarkable acceleration in data processing, reducing the costs of geophysics activities.¹¹ Therefore, the rapid decline of geophysical prospecting is strictly correlated to the beginning of the battle for European pipelines that opposed the French plans for the commercialization of Saharan resources and ENI’s attempt to flood Western Europe with Soviet oil.

- 11 The analysis of the “pipelization”¹² of Europe is the narrative element that allows the transition in the fifth chapter where the author focuses on the role of supranational institutions such as NATO and the EEC in an expanded geopolitical framework. Merging political, economic and military dimension, Cantoni analyzes NATO’s opposition to Soviet oil exports in Europe and the role of the pipeline as a means of political struggle, adopting a transnational point of view.¹³ Studying the international organization discourse Cantoni highlights the role of technological transfer in the relations between the Soviet Union and Western Europe in this delicate phase of the Cold War.

A TRANSNATIONAL ARCHIVAL RESEARCH

- 12 Cantoni’s theorization is based on an extremely solid archival research that confirms the author’s rigorous methodology in comparing historical sources coming from different public and private archives. This approach is an attempt to

¹¹ *Ibid.*, 173.

¹² *Ibid.*, 23.

¹³ Andrew Barry, *Material Politics: Disputes Along the Pipeline* (Hoboken: John Wiley & Sons, 2013). Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (London: Verso Books, 2011).

overcome the lack of primary sources that characterizes research in the field of energy, particularly in the history of geosciences and the history of technosciences. The underestimated role of geophysics in the history of oil exploration is certainly the consequence of the inaccessibility of historical archives from geophysical exploration companies and other contractor companies specialized in oil prospecting. Commenting on his methodological approach, in the footnotes of the book’s introduction Cantoni does not hide the difficulties he had to access the Compagnie Générale de Géophysique (CGG Veritas) documentation center¹⁴ and the limited relevance of the sources kept by this institution, despite the role played by this actor in his narrative. For this reason, he found the main sources for his research both in public archival institutions and in oil companies’ private archives. Roberto Cantoni explores diplomatic and ministerial archives in five different countries: France, Italy, the United Kingdom and the United States of America other than the NATO archives based in Brussels. Furthermore, Total and ENI corporate archives constitute an important part of his work, as well as records of institutions in charge of professional training in the oil sector, such as the *Institut Français du Pétrole* and the *Scuola Superiore di Studi sugli Idrocarburi*.

The use of a great variety of sources demonstrates the author’s attempt to analyze a complex phenomenon through the multiplication of points of view. Adopting a multiscale approach, Cantoni’s analysis embraces the study of the technical elites, the definition of industrial strategies and the geostrategic impact of technoscientific development in the Cold War dynamics. The author integrates sources from different public and international bodies in order to compare the impact of France’s and Italy’s industrial development in the oil sector in the International Relations System and the oil market. In this sense, the most remarkable aspect of Roberto Cantoni’s research is the decision to document the oil exploration development in wartime Algeria exploiting the sources kept by the

¹⁴ Cantoni, *Oil Exploration*, 8.

US National Archives and Record Administration and the Italian *Archivio Storico Diplomatico Del Ministero degli Affari Esteri*. The Algerian war of independence having been perceived by French authorities as a matter of domestic policy, the adoption of an outside view helps the author not only to overcome the restricted access to French public archives but also to contextualize this event in the Cold War dynamics. In the same sense, ENI plans to support the construction of Soviet pipelines in Europe to ensure Italian self-sufficiency appears well documented by British Foreign Office and Ministry of Power files. But only the comparison with sources kept in NATO archives makes it possible to appreciate the importance of this event in the broader pattern characterized by the East-West struggle for energy security.

- 14 But the core of Cantoni's research is characterized by the massive recourse to corporate records kept in Total and ENI Historical Archives that reflects the author's attempt to create a dialogical relation between individuals, firms and governments in oil exploration history. According to the author, oil companies are a fundamental part of the "strategic information collecting apparatus"¹⁵ implemented by states to fulfil the surveillance imperative and to gather strategic information. For this reason, oil companies' archival sources are mainly used to trace the activities of Total and ENI and the strategic role of their decision makers during the Cold War period. Official correspondence and notes kept in CFP president Victor De Metz and ENI president Enrico Mattei's files, helps the author to define the existing connections between oil company executives, political and diplomatic agents. In this sense, Total historical archives have provided many unreleased sources such as geostrategic studies and economic reports kept by the *Centre de Documentation et de Synthèse* and the CFP Secretary General's archives. Cantoni's work shows how Oil companies' historical archives are essential sources for the analysis of the Cold War geopolitical framework and particularly the cooperation between transnational actors and

governments in their quest for energy security. Considering the transnational dimension that characterizes technosciences, the study of the strategic role of geosciences in oil exploration industry adopting an historical perspective cannot bypass the cross analysis of existing public and private sources.

CONCLUSION

The year 1962 marks the end of Roberto Cantoni's analysis of the oil exploration and diplomacy during the Cold War. Characterized by the end of the Algerian War, Enrico Mattei's death, the NATO Large-Diameter Pipe Embargo against the Soviet Union and the Cuba Missile Crisis, this really hectic year has caused a sharp caesura, both in the history of the Cold War and in the evolution of the international energy sector. The narrative stops at that time but the general analysis provided by the author highlights the importance of recurring long-term themes in energy history and the continuity between the recent past and present days.¹⁶ The current dependency on Russian gas has replaced the Cold War dependency on Soviet oil¹⁷ but the intertwinedness and the interdependence of national foreign policies and energy companies' strategies is still relevant nowadays in the attempt to limit Europe's energy vulnerability.

This analysis of the relations between technosciences and diplomacy and the role of oil prospecting in national security opens a new transnational debate on oil exploration history, merging literature and archival sources from different national contexts. Cantoni's work is a synthesis of historical knowledge whose main outcome is a coherent attempt to unify different historiographical traditions. In doing so the author makes us aware of the risk of restraining the analysis of complex phenomena in energy history in a nation-based historiographical debate. Furthermore, Cantoni's argument highlights how the old-fashioned diplomatic history approach is not adapted to respond to the

¹⁵ *Ibid.*, 13.

¹⁶ *Ibid.*, 247.

¹⁷ *Ibid.*

ambitions of history of energy as a new field of research. Through the study of geosciences, the book replaces technology at the center of the narrative, reframing the role of technical elites in the development of oil industry. Examining the interplay of technicians, diplomats, entrepreneurs and intelligence agents, and the “permeability” of these categories¹⁸ Cantoni proposes an original interpretation of the history of oil exploration during the early Cold War where a meticulous historical reconstruction meets a comprehensive analysis of the interaction between geoscience, strategic information and national diplomacy.

¹⁸ *Ibid.*, 248.

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