

## SOVEREIGNTY AND PETRO-KNOWLEDGE

*When I no longer know where your power ends and mine begins; . . .  
when the more I try to force you to depend on me, the more I depend on you;  
when world politics becomes a test of vulnerability,  
and degrees of vulnerability are not identical with power supplies,  
who can feel secure?*

—Stanley Hoffmann, *Primacy or World Order*

In 1959, when the renowned *Oil and Gas Journal* brought out a special issue marking the one hundredth anniversary of oil production in the United States, every significant company with a stake in the sector took out major advertisements. Halliburton's contribution reflected the oil industry's characteristic self-confidence, which was anchored in the increasing economic and social significance, in the mid twentieth century and beyond, of the natural resource it processed. Grouped around a depiction of the first legendary oil well, the Drake Well in Titusville, Pennsylvania, were images of civilizational achievements, from the ancient wonders of the world to modern ships, aeroplanes, trains and cars, a refinery, a factory and a farm, the goal being to highlight oil's elementary significance to the emergence of modern civilization.

The text of the advertisement reinforced the visual message that oil helped create civilization and was of constitutive importance to the Western world:

The needs of civilized man have increased throughout the ages based on desires of increasing populations to live better. Oil and its energy making components have been and will continue to be part of this progressive program of civilization which guarantees function and preservation of this ideology. On this theme the future of democracy will forever depend. Halliburton's extensive research and development programs are devoted to this progressing civilization.<sup>1</sup>

**OIL** ENERGY FOR CIVILIZATION

Institut f. Geologie  
Techn. Hochschule  
München 2  
Arculestr. 23  
B 1212

The needs of civilized man have increased throughout the ages based on the desires of increasing populations to live better. Oil and its energy making components have been and will continue to be a part of this progressive program of civilization which guarantees function and preservation of this ideology. On this theme, the future of democracy will forever depend.

Halliburton's extensive research and development programs are devoted to this progressing civilization... through scientific application of Halliburton services and techniques, our tomorrows will be better... because of oil.

**HALLIBURTON COMPANY**  
DUNCAN, OKLAHOMA

TUM040002667187

Figure 0.1. Halliburton advertisement, in 'Petroleum Panorama: Commemorating 100 Years of Petroleum Progress', *Oil and Gas Journal* 57(5) (1959), inside front cover.

Just under two decades later, in 1977, physicist and environmental activist Amory Lovins constructed a fundamentally different relationship between energy use and economic, social and political systems. He distinguished between a 'soft energy path' centred on the decentralized use of renewable sources such as wind, sun and water, and a 'hard energy path', which he believed to be the current trajectory of Western societies. The latter, he explained, was based mainly on fossil fuels and increasingly on nuclear energy and was producing unwelcome economic, social and political effects:

The hard path . . . demands strongly interventionist central control, bypasses traditional market mechanisms, concentrates political and economic power, encourages urbanization, persistently distorts political structures and social priorities, increases bureaucratization and alienation, compromises professional ethics, is probably inimical to greater distributional equity within and among nations, inequitably divorces costs from benefits, enhances vulnerability and the paramilitarization of civilian life, introduces major economic and social risk, . . . and nurtures – even requires – elitist technocracy whose exercise erodes the legitimacy of democratic government.<sup>2</sup>

In the eighteen years lying between these two quotations, the international oil economy, along with energy policy structures and strategies, changed dramatically in Western Europe and the United States. Ideas about oil and energy and debates on these topics in the scientific, political and public spheres also changed as part of this process. Chiefly as a result of accelerating shifts in the oil market in the early 1970s, a set of problems and discursive frameworks emerged that continue to exercise an effect to this day. But this was by no means a linear development away from the notion of a brave new world of oil to an acknowledgement of the negative domestic and international consequences of the increasing use of fossil hydrocarbons, as the quotations from Halliburton and Lovins might seem to imply. Instead, the oil industry's claim to have created modern civilization and buttressed Western democracy on the one hand, and the environmental movement's critique of fossil fuels on the other, mark out the two poles of the political and social debate on oil and energy from the 1970s to the present.<sup>3</sup>

Yet despite all their differences, energy companies and environmental activists shared the same basic assumption: that the growing use of fossil fuels was constitutive of the development of modern, industrial, affluent societies. From the 1960s onwards, both viewed the modern world essentially as a world of oil. The exceptional economic boom of the postwar decades, the 'Golden Age' (Eric Hobsbawm) or 'Trente Glorieuses' (Jean Fourastié), which ended in the mid 1970s, was based in large part on the

unlimited availability of cheap fossil fuels.<sup>4</sup> The most significant development was the rapidly mounting use of oil, which increasingly came from the Middle East and superseded coal as the most important primary energy source in the Western industrialized countries. Within the discourse of national security and the critique of oil, both of which identify a close connection between the growing dependency on oil and the United States' military engagements, oil is considered the leading basic commodity of modern industrialized societies.<sup>5</sup> In the absence of an adequate supply of this substance, it is commonly argued, the economy would collapse and the entire social structure would face challenges that might threaten the stability of the political order. In the days of the Cold War, this nexus seemed all the more dramatic inasmuch as the legitimacy of Western democracies was essentially derived from increasing affluence, which was in part facilitated by the rapidly growing consumption of energy and oil.

Irrespective of whether oil, modern economic and social forms and the legitimacy of Western democratic institutions were truly linked in this way, those who believed they were saw the first oil crisis of 1973–74 as a fundamental challenge to political legitimacy and sovereignty in the United States, Western Europe and Japan.<sup>6</sup> During the 1960s, resource-rich 'Third World' countries, and above all the oil-producing countries that had united in the Organization of Petroleum Exporting Countries (OPEC), had already made increasingly strident calls for the right to exercise permanent sovereignty over the natural resources in their territories. Even after their political independence, these resources were still being extracted by companies headquartered in the United States and Western Europe on the basis of concessions dating back to the colonial era. When negotiations between the producing countries and the oil firms on an oil price hike collapsed in October 1973, the former unilaterally sent prices soaring, and before long the cost of oil had quadrupled. At the same time, the Arab producing countries in the Organization of Arab Petroleum Exporting Countries (OAPEC) announced production cutbacks and imposed an embargo on the United States and the Netherlands. Their objective was to support the Arab side in the Yom Kippur War with Israel and compel Western countries to adopt a more pro-Arab position.

The course pursued by OPEC and OAPEC destroyed the complex communicative and interactive routines of the global oil economy and challenged the sovereignty of the Western industrialized nations on a fundamental level. While the producing countries acquired rights of sovereignty and coordinated their production policies, the sovereignty enjoyed by the governments of Western industrialized nations appeared to be under threat. The oil crisis showed what energy experts and attentive observers had been concluding since the late 1960s: the Western European, North

American and Japanese political systems rested on a foundation that they themselves could not guarantee, namely the cheap and unlimited availability of low-priced energy sources, chiefly oil. In what follows, I investigate the measures and strategies adopted by political actors in Western Europe and the United States in response to this challenge to national sovereignty and their political authority, that is, to the legitimate exercise of sovereignty.

## **Sovereignty**

The concept of sovereignty has always been an ambiguous one.<sup>7</sup> As Jean Bodin framed it from a constitutional law perspective, it initially referred to the ‘ultimate decision making authority within a state and the complete independence of this state from the external world’, a concept that was supposed to supersede the older forms of legitimate authority (such as that of the estates).<sup>8</sup> In the nineteenth century, partly through attempts to get to grips with the colonial Other, the concept of sovereignty attained the status of a European norm, prompting Lassa Francis Lawrence Oppenheim to declare that, in addition to territory and people, a sovereign government was one of the state’s key components: ‘There must . . . be a sovereign government. Sovereignty is supreme authority, an authority which is independent of any other earthly authority. Sovereignty in the strict and narrowest sense of the term includes, therefore, independence all around, within and without the borders of the country’.<sup>9</sup> In the twentieth century, as large-scale imperial structures collapsed or dissolved as a result of the world wars, and the United Nations was founded as an organization of sovereign states, the principle of sovereignty attained universal validity. Having been granted no rights of sovereignty in the course of European expansion, the colonized peoples obtained them in the process of decolonization, though only while recognizing international law.<sup>10</sup> But its rules immediately placed new limits on their sovereignty, forcing them to adhere to the treaties through which Western firms extracted the raw materials within their territory. In the 1960s, the decolonized countries of the so-called Third World thus began to demand ‘permanent sovereignty over natural resources’.<sup>11</sup>

In the final third of the twentieth century, however, it was not just the countries of the Third World that faced restrictions on their sovereignty. Around 1970, in Western Europe and the United States, influential economists and political scientists increasingly identified an erosion of national sovereignty and questioned whether the idea of supreme and absolute authority over a given territory could still capture the present-day structures

and problems of statehood.<sup>12</sup> First, as a result of far-reaching economic globalization – ‘interdependence’ as it was generally referred to at the time – economic structures appeared to have emerged that were largely beyond the control of individual states, while simultaneously having a potentially enormous impact upon them. For economic historian Charles Kindleberger, as early as 1969 the nation state could no longer be taken seriously as an economic unit. And in light of the existence of powerful multinational companies, economist Raymond Vernon stated: ‘Suddenly, it seems, the sovereign states are feeling naked. Concepts such as national sovereignty and national economic strength appear curiously drained of meaning’.<sup>13</sup> Second, transnational organizations and international treaty systems appeared to curb nation states’ scope for action, as argued by Robert Keohane and Joseph Nye.<sup>14</sup> The global politics of human rights and the United Nations, for example, increasingly came into conflict with national claims to sovereignty.<sup>15</sup> At the same time, the treaties of the European Communities were a much-discussed example of the voluntary surrender of national sovereignty through supranational structures.<sup>16</sup>

In the early 1970s, however, highlighting the example of West Germany, conservative constitutional law expert Ernst Forsthoff questioned the sovereignty of Western democracies in an even more fundamental sense. The ‘state of the industrial society’ could no longer be called sovereign in the classical sense because it had lost the ‘right of, or de facto capacity for, decision-making within the existential conflicts’.<sup>17</sup> As this student of Carl Schmitt elaborated, this was because ‘the hard core of the present-day social whole is no longer the state but industrial society, and this hard core is typified by the watchwords full employment and economic growth’.<sup>18</sup> As he saw it, the legitimacy of the state – especially that of West Germany – was entirely dependent on the economic performance of industrial society and would inevitably erode when the economy ceased its by then customary steady growth. In 1972, another constitutional law scholar, Ernst-Wolfgang Böckenförde, highlighted an ‘increasing tendency to identify state with economy’, the state alone being incapable of carrying out its additional responsibilities, namely ensuring social security, increasing affluence and guaranteeing social progress. Instead, the crucial factor was economic growth, for which the state could only try to provide a general framework.<sup>19</sup> So Böckenförde’s dictum, already formulated by 1967 and much quoted ever since, that the ‘liberal, secular state’ is dependent on prerequisites that this state ‘itself [cannot] guarantee’, applied not just to the spheres of religion and morality that he had in mind.<sup>20</sup> In the oil crisis, it appeared as if it was also true of the state’s energetic base and its potential to pursue economic policies.

Against the background of this theoretical debate on sovereignty, leading politicians in Western Europe and the United States perceived the actions of OPEC and OAPEC as a threat to their political sovereignty. Many agreed with British opposition leader Harold Wilson when he claimed, in November 1973, that the policies being pursued by the producing countries represented the greatest threat to British sovereignty since the Danish invasion more than a millennium ago.<sup>21</sup> So in the present work I do not apply the concept of sovereignty to events *ex post*; contemporaries were already using it to interpret them. The oil crisis itself influenced the debate on sovereignty, which received new impetus in the 1990s after the end of the Cold War and remains ongoing.<sup>22</sup> In the following chapters, I aim to establish the exact nature of the challenge posed by the oil crisis to political sovereignty, while simultaneously locating this challenge within the history of sovereignty. This throws up a fundamental problem. While I historicize the debates on sovereignty and seek to assess the impact of the oil crisis upon them, I have to work with a concept of sovereignty that is itself located within this discursive tradition. This requires me to begin by elaborating the different strands of the concept of sovereignty, in order to resolve or explicate this ambivalence in the conclusion.

In what follows, I understand sovereignty not as an attribute that a state may or may not have, but as a claim that may be asserted, questioned, attacked and defended.<sup>23</sup> In other words, sovereignty is constituted through social and communicative processes: to be sovereign means to be recognized as such by others, and the establishment of sovereignty is closely bound up with its demonstration. So sovereignty rests not just on the effective exercise of power over a particular territory and the securing of this authority against the external world, but also on its communication, as practised, in the second half of the twentieth century, through globally networked media ensembles.<sup>24</sup> We can expand on this dual character of the concept of sovereignty with respect to its internal and external dimensions by drawing on the insights of Stephen D. Krasner. He distinguishes four aspects of the concept of sovereignty, which may be but are not necessarily linked: ‘international legal sovereignty’, that is, mutual recognition within the system of states; ‘Westphalian sovereignty’, the exclusion of external influences from one’s own territory; ‘domestic sovereignty’, the capacity to exercise political authority in a given territory; and ‘interdependence sovereignty’, the ability to regulate the flow of ideas, goods and people across borders.<sup>25</sup>

In what sense, then, did the actions of OPEC and OAPEC threaten sovereignty in Western Europe and the United States? So-called Westphalian sovereignty was never at issue. It was interdependence sovereignty that

faced a challenge, though not in the sense of the ability to keep certain goods, people or ideas out of a given territory by securing its borders, but in the sense of the capacity to guarantee an adequate flow of a particular good, in this case oil, across borders. OAPEC also attacked the Western democracies' international sovereignty by trying to compel them to adopt a particular foreign policy position through production cutbacks and the embargo. The basis of this threat was that sustained supply shortages might impair states' domestic political sovereignty and imperil their governments, if not their political systems as a whole.

### **Petro-Knowledge**

The oil economy and the politics of oil formed a complex, global system of interaction and communication within which numerous actors had varying options to influence the flow of oil – the oil firms, particularly the large multinational companies, the governments of the producing countries, international organizations such as OPEC, OAPEC, the Organization for Economic Cooperation and Development (OECD) and the European Communities (EC), governments, but also individual governmental institutions or other authorities in the consuming countries, scientists and oil experts of various disciplines and, ultimately, individual consumers of oil and energy. Their interaction and communication were governed by routines and habitual practices that had been established over many years. In October 1973, OPEC and OAPEC challenged and destroyed these routines. A new sense of uncertainty prevailed as key actors were unable to easily anticipate or make assumptions about others' conduct as well as their own responses to it. In the absence of new routines, this doubly contingent state of affairs inevitably generates great insecurity among all those involved.<sup>26</sup> The scope for action is crucially dependent on how much one knows, or believes one knows, about other actors and topics of shared concern.

At the time, contingency, uncertainty and ignorance reinforced the impression that the changes in the international oil economy and national energy policies touched on fundamental issues of political sovereignty, legitimacy and authority. At the moment of crisis, in the United States, West Germany, Western Europe and Japan, democratically legitimized governments and their civil services seemed to lack oil-related knowledge, casting doubt on their capacity to take effective action. When Democratic Senator Henry M. Jackson opened a hearing of the US Senate Committee on Government Operations concerning the oil crisis in January 1974 with the following words, he expressed a sentiment widely



felt in the public sphere and governmental circles in the United States and Western Europe:

The first conclusion that we have drawn from the first three days of hearings is that we still do not have the facts we need to make sound national economic and energy policy. We know we have an energy shortage but we do not know how big the shortage is or how bad it will get. We don't have accurate or reliable figures on stocks, on demand, on costs, on imports, or virtually anything else. Today, no one, I repeat no one, has access to accurate current information on energy reserves or resources.<sup>27</sup>

Statements like this were underpinned by a scientized conception of policymaking. The idea was that political decisions ought to be based on knowledge, understood as justified, true belief, generated in the correct – and this generally meant scientific – way.<sup>28</sup> Specifically, the knowledge at issue in the oil crisis was that concerning the future availability of oil, referred to hereafter, following political scientist Timothy Mitchell, as 'petro-knowledge'.<sup>29</sup> Mitchell uses the term to refer to a form of Keynesian economic knowledge after the Second World War, which he claims to have been based on the unlimited availability of cheap energy sources, and oil in particular, though he fails to adequately reflect on this epistemic foundation. In what follows, meanwhile, the term is extended to include all forms of expert knowledge about oil. When Western democracies' supply of oil and energy began to look shaky in the early 1970s, and above all during the oil crisis, the political and public demand for oil-related knowledge skyrocketed. Petro-knowledge became almost as inflationary as so-called petrodollars, thereby changing its importance to policymaking.<sup>30</sup>

In the early 1970s, Western European and US politicians found themselves confronted with a new problem in the field of energy, one they had previously spent little time considering. In response, by drawing on supposedly solid expert knowledge, they aspired to enhance their capacity for effective political action while at the same time demonstrating it publicly. Initially, during the period of acute crisis, the main focus was on highly specific questions, such as how much oil would be lacking on a daily basis or what energy-saving measures might offset this deficit without impairing economic development. Beyond this, over the medium and long term the key goal was to determine likely energy needs and, by attending to the composition and origin of primary energy, ensure that the supply of energy would be sufficient, secure and as cheap as possible. The development of official governmental expertise in the United States, or the recourse to the expertise of research institutes and think tanks that was solicited or offered, was thus intended to safeguard energy sovereignty. At the same time, the public demonstration that the government was acting on the

basis of the best possible expertise was meant to help secure its legitimacy vis-à-vis the general population as well as its standing in relation to the multinational oil companies and the producing countries.

Petro-knowledge neither grows on trees nor is it as fluid and transitory as many theoretical discussions of the concept of knowledge might lead us to believe. In fact, it emerged in very specific places: among the petroleum engineers involved in its extraction and production, within petroleum geology and the discipline of economics, but also in the social and political sciences. Beyond practices in the oilfields and manufacturing sector, its emergence was closely bound up with specific disciplines, making classical assumptions about the diffusion and popularization of scientific knowledge quite plausible in this context. Ultimately, in the twentieth century, petro-knowledge became so highly differentiated that even experts in one discipline could often receive the findings of other disciplines only as popularized by the media.<sup>31</sup> If for no other reason, petro-knowledge was far from disinterested because it was produced mainly in the major oil companies' research departments and was thus directly bound up with economic processes.<sup>32</sup> The economization of petro-knowledge continued in the 1960s and 1970s as oil's importance to modern economies and societies increased. But at the same time, it was politicized, as an increasing number of political and social scientists began to contemplate the importance of oil and the securing of energy supplies and sought to insert their expertise into the political decision-making process.<sup>33</sup> At the time, the various economic and political interests involved in the production of petro-knowledge prompted some contemporaries to question whether political strategies could truly be underpinned by objective data. In what follows, I neither uncritically embrace the notion of knowledge-based policymaking nor do I seek to unmask it as ideological.<sup>34</sup> Instead, my goal is to determine the significance and instrumentalization of petro-knowledge in the strategies pursued by Western industrial countries as they strove to bolster their political sovereignty.

In addition to the production and use of energy-related knowledge, domestic and foreign policy measures were pursued in an effort to guarantee governments' capacity for effective action and secure their sovereignty. Attempts were made to centralize energy policy or institutionalize it on a higher level, while simultaneously expanding the executive's capacity to take emergency measures to safeguard energy supplies. Historically, political competences relating to coal, oil and nuclear power were dispersed among various governmental agencies. But what now emerged was an independent political field with a comprehensive focus on energy, one that has become increasingly significant up to the present day.<sup>35</sup> This book is interested both in these changes and in the specific energy policy measures

intended to ensure 'energy security'. Essentially, this security could be enhanced either by diversifying sources of energy, diversifying countries of origin or introducing energy-saving measures. But because it takes a long time to restructure energy industries, in the acute phase of the oil crisis only energy-saving measures held the prospect of short-term improvements. All governments therefore called on citizens to save energy or implemented compulsory energy-saving measures, further increasing the public visibility of the oil crisis. These sparked both discussions in the media and direct processes of communication between governing and governed, highlighting what happens to a highly mobile and technological society when energy threatens to become scarce.

The oil embargo and the regime of production cutbacks were in part attempts by the producing countries to force Western Europe, the United States and Japan to adopt more pro-Arab policies, so foreign policy or international relations was another field in which the latter felt compelled to safeguard their sovereignty. Here, especially, we can see the analytical strength of the concept of sovereignty, as it enables us to get to grips with the interplay of foreign and domestic political strategies. Energy savings in a given country were meant to enhance its negotiating position vis-à-vis the producing countries; the restructuring of energy policy was intended to get across the message that the latter would only damage themselves, because over the medium term Western Europe and the United States would reduce oil imports from the Middle East. In negotiations with the producing countries, the governments of the consuming countries tried to eliminate or at least alleviate production restrictions and limit oil price rises. At the same time, however, along with other consuming countries, they looked for possible ways of enhancing their position within the global oil economy or restructuring the world of oil as a whole. In the context of the oil crisis, the world of oil or its order hitherto had lost their taken-for-granted status and now differing visions of a new order jostled with one another. While the French government called for a dialogue to include producing, developing and industrial countries under the aegis of the UN, the United States and the other Western European countries sought to establish an organization of the leading consuming countries, and this came to fruition in the shape of the International Energy Agency.

### **Structure of the Present Work**

Because oil reserves are distributed unequally across the world, and for the most part oil is not processed and consumed in the same places where it is extracted, in the twentieth century the oil economy took the form of a

worldwide lattice of interconnections. The moment at which changes in the flow of oil crossed a certain threshold, they were felt throughout the entire system. And the oil crisis too was a global phenomenon. Only the countries of the Eastern Bloc, which were essentially self-sufficient in oil and energy due to the Soviet Union's oil reserves, were initially spared any direct impact. In fact, over the medium term they profited from the increased cost of energy and the Western Europeans' interest in importing oil and gas, only to be hit all the harder by plunging oil prices in the 1980s.<sup>36</sup> Given the global structure of the oil economy, studies that restrict themselves to a single country are necessarily deficient.<sup>37</sup> At the same time, it would be illusory to seek to achieve a complete global picture or even a globally balanced one. Because the present work examines the Western industrialized countries' strategies for enhancing their political sovereignty, one focal point must inevitably be the United States. The US was the homeland of industrial oil production, the largest producing and consuming country until the early 1970s, the hegemonic power within the Western alliance and home to five of the seven largest oil companies. To achieve a more balanced picture, a second key focus will be on West Germany, which lacked major oil reserves and was home to no significant oil companies. When it came to energy and foreign policy, West Germany was integrated into the international and supranational structures of the European Communities, so I also consider its European partners, particularly the United Kingdom and France. In addition to these national case studies, I take a close look at the interaction and communication within international organizations such as the OECD and the UN, which sought to give structure to the world of oil. From a global perspective, the present work's greatest shortcoming is probably its merely second-hand view of the producing countries and their policies. I examine the conduct of OPEC and OAPEC first through the media in which their representatives expressed their views and, second, in light of the diplomatic reports produced by Western governments. However, in what follows, my goal is not to grasp the world of oil as a whole but to understand Western Europe's and the United States' place and self-placement, or assertion of sovereignty, within this world, phenomena that underwent rapid change in the first half of the 1970s as a result of the producing countries' policies.

The key sources for the present work are records and official government publications from the United States and West Germany and to a lesser extent the United Kingdom and France, published and unpublished scholarly studies on the issue of energy from these countries, and media reports on the oil and energy crisis, mostly in daily newspapers and on television. Methodologically, I attempt to link the history of energy policy in the 1970s with a history of knowledge about oil and energy in the

second half of the twentieth century. By scrutinizing the significance of petro-knowledge in the oil crisis while simultaneously investigating its transformation by that crisis, I seek to contribute to the history of the scientificisation of the political sphere.<sup>38</sup> At the same time, due to its temporal anchorage in the 1970s, the present study finds itself amid a booming field of research, one dominated so far by a narrative that was already being spun by contemporaries. According to this perspective, the 1970s was an important period of transformation in the history of the Western industrial societies. It is believed to be a time when a shift occurred, away from the exceptional postwar economic boom towards the crisis of the present era, away from full employment towards mass unemployment and all its attendant problems, away from an industrial society towards a 'post-industrial society', away from a time of seemingly unlimited possibilities towards an acknowledgement of limits, away from euphoric hopes towards dark fears of decline, and away from the idea of economic and social planning by rational experts towards pragmatic crisis management.<sup>39</sup> In many of these contexts, the oil crisis of 1973–74 is identified as a key factor or even just as a particularly significant indication of changing times, but only rarely is the crisis itself made an object of investigation.<sup>40</sup>

A closer examination of the oil crisis only partially confirms the standard narrative. In some respects it adds nuance to it, and in others again calls it fundamentally into question. So in what follows the oil crisis serves as a means of getting to grips with key changes that occurred in the Western democracies in the 1970s. While oil and energy are central to the present study, my goal is only partly to write a history of the oil and energy crisis or, more generally, of the politics of energy in Western Europe and the United States in the 1970s. In analogy to the micro-historians' determination to carry out research *in* rather than *about* villages, I instead aim, in light of the oil crisis, to investigate fundamental problems of Western industrial societies. Though these problems did not arise in the 1970s, it was during this era that they became clearly evident, taking on concrete forms in the context of the energy crisis. What I am essentially concerned with here are strategies for asserting sovereignty under conditions of global economic entanglement; to put it another way, I seek to illuminate national governments' ability to communicate and ensure both their capacity for effective political action and their legitimacy under conditions of contingency, uncertainty and a highly differentiated ensemble of mass media. I also discuss the plannability and controllability of the political process by experts and the closely related issues of the 'governability' of modern democracies and the role of the state in the economy. The oil crisis turned a whole range of problems – from energy security through the Middle East conflict to economic globalization and issues of global 'governance' – into key politi-

cal issues, so exploring its history means grappling with the genesis of the present.

To understand what the governments of Western Europe and the United States did during the oil crisis, the present work begins by reconstructing the world of oil in the 1950s and 1960s (chapter 1). By ‘world of oil’, I mean both the specific practices of production, processing and consumption and, by extension, the economic, social and political world shaped by these practices. What were the key structures and who were the main actors? What was the significance of oil and oil products to the increasing prosperity of Western Europe and the United States in the years of the economic boom? And which knowledge systems grew up around the international oil economy? I then examine the expectations that determined the responses of experts, within and outside of governments, to the actions taken by OPEC and OAPEC (chapter 2). By whom and in what form was a set of circumstances such as the oil crisis expected, and what preparatory measures did Western governments take? Here the standard narrative – that the oil crisis of 1973–74 suddenly descended upon the Western industrialized countries, which only then became aware of their dependency and began to reorganize their energy sectors – emerges as false. With the help of the OECD’s Oil Committee, the governments of all member states had already considered their growing vulnerability to supply disruptions and sought to identify countervailing measures. Nonetheless, it was the skilfully communicated, so-called ‘Arab oil weapon’, that is, the effectively asserted claims to sovereignty put forward by the OPEC and OAPEC countries, that first created a global constellation of contingency and uncertainty, one in which energy was suddenly on everybody’s lips and was catapulted up the list of political priorities (chapter 3). It was not until the world of oil fell into disarray that the reshaping of energy policies really took off.

The following two chapters (4 and 5) concentrate on the strategies pursued by the US and West German governments to enhance political sovereignty as a result of the oil crisis, strategies that led to a reorganization of the energy sectors and continue to influence energy policies to this day. I analyse the establishment of energy as a political field, the national communication of sovereignty vis-à-vis the general population and the significance of an oil- and energy-related expertise or expert personnel in this process. In addition to national efforts, I examine international strategies intended to assert and safeguard a given country’s sovereignty through public and diplomatic communication with both the producing countries and other consuming countries. West Germany was integrated into a European framework of political cooperation so I also pay attention to its European partners, particularly France, the United Kingdom and the Netherlands.

I then further expand the international perspective, investigating the conferences at which governments, in the wake of the oil crisis, sought to reorder the world of oil (chapter 6). In light of the complex global interdependencies so dramatically illuminated by the oil crisis, most governments argued that national sovereignty could no longer be safeguarded in isolation but only through international cooperation. Yet it would be too simple merely to reproduce the contemporary opposition between national and international strategies. In fact, these were not mutually exclusive but in many ways intertwined. To conclude, I investigate the discursive changes that went hand in hand with developments in oil and energy policy in the first half of the 1970s (chapter 7). On the one hand, I explore to what extent, on the international and domestic level, key actors perceived the new conditions governing the national politics of sovereignty. On the other, I scrutinize how the view of the oil crisis that prevails today emerged within these discussions on oil and energy – namely the notion that it was a significant turning point in the history of the Western industrialized nations and perhaps beyond. The goal here is not to recapitulate contemporary interpretations but to assess their impact on the politics of energy in subsequent years and thus on our own thinking about energy and sovereignty in the present.<sup>41</sup>

## Notes

1. Halliburton advertisement, in 'Petroleum Panorama: Commemorating 100 Years of Petroleum Progress', *Oil and Gas Journal* 57(5) (1959), inside front cover.

2. Amory B. Lovins, *Soft Energy Paths: Toward a Durable Peace* (Harmondsworth, 1977), 148.

3. Commonly, oil price increases and oil disasters trigger broad debates on the future of fossil fuels. See: 'Over a Barrel: The Truth about Oil', ABC News, 2009; *The End of Suburbia: Oil Depletion and the Collapse of the American Dream*, film, dir. Gregory Greene (Canada, 2004); 'The Hunt for Black Gold', TV series, dir. Jeff Pohlman (United States, 2008); *A Crude Awakening: The Oil Crash*, film, dir. Basil Gelpke and Ray McCormack (Switzerland, 2007); *Gasland*, film, dir. Josh Fox (United States, 2010).

4. John A. Hassan and Alan Duncan, 'The Role of Energy Supplies during Western Europe's Golden Age, 1950–1972', *Journal of European Economic History* 18 (1989), 479–508; John G. Clark, *The Political Economy of World Energy: A Twentieth-Century Perspective* (New York, 1990); Christian Pfister, 'Das "1950er Syndrom": Zusammenfassung und Synthese', in Christian Pfister and Peter Bär (eds), *Das 1950er Syndrom: Der Weg in die Konsumgesellschaft*, 2nd ed. (Bern, 1996), 21–48; Vaclav Smil, *Energy in World History* (Boulder, CO, 1994); Vaclav Smil, 'Energy in the Twentieth Century: Resources, Conversions, Costs, Uses, and Consequences', *Annual Review of Energy and the Environment* 25 (2000), 21–51.

5. Michael T. Klare, *Blood and Oil: The Dangers and Consequences of America's Growing Dependency on Imported Petroleum* (New York, 2005); Ian Rutledge, *Addicted to Oil: America's Relentless Drive for Energy Security* (London, 2005); Jay E. Hakes, *A Declaration of Energy Independence: How Freedom from Foreign Oil Can Improve National Security, Our Economy, and the Environment* (Hoboken, NJ, 2008); Thomas Seifert and Klaus Werner, *Schwarzbuch Öl: Eine*

*Geschichte von Gier, Krieg, Macht und Geld* (Vienna, 2005); Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (New York, 1991).

6. Timothy Mitchell sees a constitutive link between hydrocarbon-based energy systems and democratic political orders, with coal facilitating modern forms of political participation while oil has imperilled and destroyed them. Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (London/New York, 2011), 6: 'The leading industrialised countries are also oil states'.

7. Reinhart Koselleck, 'Staat und Souveränität', in Otto Brunner, Werner Conze and Reinhart Koselleck (eds), *Geschichtliche Grundbegriffe*, vol. 6 (Stuttgart, 1990), 1–154, here 98–154; Dieter Grimm, *Souveränität: Herkunft und Zukunft eines Schlüsselbegriffs* (Berlin, 2009); F.H. Hinsley, *Sovereignty* (London, 1966).

8. Koselleck, 'Staat und Souveränität', 1; Hinsley, *Sovereignty*, 25; Grimm, *Souveränität*, 16–34.

9. L. Oppenheim, *International Law: A Treatise*, vol. 1, *Peace* (New York/Bombay, 1905), 101. On the significance of the colonial context, see Andreas Osiander, 'Sovereignty, International Relations, and the Westphalian Myth', *International Organization* 55(2) (2001), 251–87; Martti Koskenniemi, *The Gentle Civilizer of Nations: The Rise and Fall of International Law, 1870–1960* (Cambridge, 2002).

10. Antony Anghie, *Imperialism, Sovereignty and the Making of International Law* (Cambridge, 2005), 5.

11. *Ibid.*, 196–243, esp. 213; see chapter 6.

12. Niels P. Petersson and Wolfgang M. Schröder, 'Souveränität und politische Legitimation: Analysen zum "geschlossenen" und zum "offenen" Staat', in Georg Jochum (ed.), *Legitimationsgrundlagen einer europäischen Verfassung: Von der Volkssouveränität zur Völkersouveränität* (Berlin, 2007), 103–50, here 105. Daniel Philpott, *Revolutions in Sovereignty: How Ideas Shaped Modern International Relations* (Princeton, NJ, 2001), sees decolonization as a second 'sovereignty revolution' following the first, which occurred at the end of the Thirty Years' War.

13. Raymond Vernon, *Sovereignty at Bay: The Multinational Spread of US Enterprises* (London, 1971), 3; Charles Poor Kindleberger, *American Business Abroad: Six Lectures on Direct Investment* (New Haven, CT, 1969), 207; see also David A. Lake, 'The New Sovereignty in International Relations', *International Studies Review* 5 (2003), 303–23.

14. Joseph S. Nye, Jr., and Robert O. Keohane, 'Transnational Relations and World Politics: A Conclusion', *International Organization* 25(3) (1971), 721–48.

15. Samuel Moyn, *The Last Utopia: Human Rights in History* (Cambridge, MA, 2010).

16. On the issue of sovereignty, see the debate on the 'saving of the European nation states' through integration. Alan S. Milward, in collaboration with George Brennan and Federico Romero, *The European Rescue of the Nation-State* (Berkeley, 1992); see also James J. Sheehan, 'The Problem of Sovereignty in European History', *American Historical Review* 111(1) (2006), 1–15; Kiran Klaus Patel, 'Europäische Integrationsgeschichte auf dem Weg zur doppelten Neuorientierung: Ein Forschungsbericht', *Archiv für Sozialgeschichte* 50 (2010), 595–642.

17. Ernst Forsthoff, *Der Staat der Industriegesellschaft: Dargestellt am Beispiel der Bundesrepublik Deutschland* (Munich, 1971), 12, 17.

18. *Ibid.*, 164; in a similar vein, see the report for the Trilateral Commission on the crisis of democracy by Michel Crozier, Jōji Watanuki and Samuel P. Huntington, *The Crisis of Democracy: Report on the Governability of Democracies to the Trilateral Commission* (New York, 1975).

19. Ernst-Wolfgang Böckenförde, 'Die Bedeutung der Unterscheidung von Staat und Gesellschaft im demokratischen Sozialstaat der Gegenwart [1972]', in *Staat, Gesellschaft, Freiheit: Studien zur Staatstheorie und zum Verfassungsrecht* (Frankfurt am Main, 1976), 185–220, here 206.

20. Ernst-Wolfgang Böckenförde, 'Die Entstehung des Staates als Vorgang der Säkularisation [1967]', in *Staat, Gesellschaft, Freiheit*, 42–64, here 60.



21. [Karl-Günther v.] Hase, Bericht über den Besuch Abdessalams und Yamanis in London, 30.11.1973, Politisches Archiv des Auswärtigen Amtes, Berlin (henceforth PA AA), B 36 (Referat 310), 104992.

22. Joseph A. Camilleri and Jim Falk, *The End of Sovereignty? The Politics of a Shrinking and Fragmenting World* (Aldershot, 1992); Saskia Sassen, *Losing Control? Sovereignty in an Age of Globalization* (New York, 1996); Manuel Fröhlich, 'Lesarten der Souveränität', *Neue Politische Literatur* 50(4) (2005), 19–42; David J. Eaton (ed.), 'The End of Sovereignty? A Transatlantic Perspective', Transatlantic Policy Consortium Colloquium, Hamburg, 2006; Trudy Jacobsen, C.J.G. Sampford and Ramesh Chandra Thakur (eds), *Re-envisioning Sovereignty: The End of Westphalia?* (Aldershot, 2008); Grimm, *Souveränität*.

23. Hinsley, *Sovereignty*; Camilleri and Falk, *The End of Sovereignty?*, 11; Sheehan, 'The Problem of Sovereignty in European History'; Michael Stolleis, 'Die Idee des souveränen Staates', in *Entstehen und Wandel verfassungsrechtlichen Denkens (Der Staat, Beiheft 11)* (Berlin, 1995), 63–85.

24. Thomas J. Biersteker and Cynthia Weber, 'The Social Construction of State Sovereignty', in Thomas J. Biersteker and Cynthia Weber (eds), *State Sovereignty as Social Construct* (Cambridge, 1996), 1–21.

25. Stephen D. Krasner, *Sovereignty: Organized Hypocrisy* (Princeton, NJ/Chichester, 1999), 3.

26. Niklas Luhmann, *Soziale Systeme: Grundriß einer allgemeinen Theorie* (Frankfurt am Main, 2001), 148–90.

27. US Congress. Senate. Committee on Government Operations, *The Federal Energy Office: Hearings before the Permanent Subcommittee on Investigations* (Washington, DC, 1974), 597. See also Martin Greenberger, *Caught Unawares: The Energy Decade in Retrospect* (Cambridge, MA, 1983).

28. It is in this sense that the concept of knowledge is used throughout the present work, with its justification always relating to contemporary conditions and with no intention of affirming these claims to knowledge from a present-day perspective.

29. Timothy Mitchell, 'Carbon Democracy', *Economy and Society* 38(3) (2007), 399–432, here 417; Mitchell, 'The Resources of Economics: Making the 1973 Oil Crisis', *Journal of Cultural Economy* 3(2) (2010), 189–204; Mitchell, *Carbon Democracy*, 139.

30. Ibrahim Oweiss, 'Petro-Money: Problems and Prospects', in G. C. Wiegand (ed.), *Inflation and Monetary Crisis* (Washington, DC, 1975), 84–90.

31. Gerhard Bischoff, Werner Gocht (eds), *Das Energiehandbuch* (Braunschweig, 1970).

32. On the transformation of scholarship under the conditions of industrial big science in the twentieth century, see Steven Shapin, *The Scientific Life: A Moral History of a Late Modern Vocation* (Chicago, 2008).

33. Rüdiger Graf, 'Expert Estimates of Oil-Reserves and the Transformation of "Petro-knowledge" in the Western World from the 1950s to the 1970s', in Frank Uekötter and Uwe Lübken (eds), *Managing the Unknown: Essays on Environmental Ignorance* (New York, 2014), 140–67.

34. The latter project is pursued by Aaron B. Wildavsky and Ellen Tenenbaum, *The Politics of Mistrust: Estimating American Oil and Gas Resources* (Beverly Hills, CA, 1981), 133–35, 228.

35. Peter Z. Grossman, *US Energy Policy and the Pursuit of Failure* (Cambridge, 2013), 67.

36. Stephen Kotkin, 'The Kiss of Debt: The East Bloc Goes Borrowing', in Niall Ferguson (ed.), *The Shock of the Global: The 1970s in Perspective* (Cambridge, MA, 2010), 80–93.

37. Jens Hohensee, *Der erste Ölpreisschock 1973/74: Die politischen und gesellschaftlichen Auswirkungen der arabischen Erdölpolitik auf die Bundesrepublik Deutschland und Westeuropa* (Stuttgart, 1996); Meg Jacobs, *Panic at the Pump: The Energy Crisis and the Transformation of American Politics in the 1970s* (New York, 2016).

38. Lutz Raphael, 'Die Verwissenschaftlichung des Sozialen als methodische und konzeptionelle Herausforderung für eine Sozialgeschichte des 20. Jahrhunderts', *Geschichte und Ge-*

sellschaft 22 (1996), 165–93; Jakob Vogel, ‘Von der Wissenschafts- zur Wissensgeschichte: Für eine Historisierung der “Wissensgesellschaft”’, *Geschichte und Gesellschaft* 30(4) (2004), 639–60; Margit Szöllösi-Janze, ‘Wissensgesellschaft in Deutschland: Überlegungen zur Neubestimmung der deutschen Zeitgeschichte über Verwissenschaftlichungsprozesse’, *Geschichte und Gesellschaft* 30 (2004), 277–313.

39. ‘Die siebziger Jahre’, *Archiv für Sozialgeschichte* 44 (2004); Eric J. Hobsbawm, *The Age of Extremes: The Short Twentieth Century 1914–1991* (London, 1995), 248–86; Tony Judt, *Post-war: A History of Europe since 1945* (New York, 2005); Thomas Raithel, Andreas Rödder and Andreas Wirsching (eds), *Auf dem Weg in eine neue Moderne? Die Bundesrepublik Deutschland in den siebziger und achtziger Jahren* (Munich, 2009); Anselm Doering-Manteuffel and Lutz Raphael, *Nach dem Boom: Perspektiven auf die Zeitgeschichte seit 1970* (Göttingen, 2008); Konrad H. Jarausch (ed.), *Das Ende der Zuversicht? Die siebziger Jahre als Geschichte* (Göttingen, 2008); Ferguson, *The Shock of the Global*; Daniel T. Rodgers, *Age of Fracture* (Cambridge, MA, 2011), 9; Elke Seefried, *Zukünfte: Eine Geschichte der Zukunftsforschung in den 1960er und 1970er Jahren* (Munich, 2015). Now and then contemporaries repeat their earlier assessments thirty years later as historical analysis; see Hans Maier, ‘Fortschrittsoptimismus oder Kulturpessimismus? Die Bundesrepublik Deutschland in den 70er und 80er Jahren’, *Vierteljahrshefte für Zeitgeschichte* 56 (2008), 1–17.

40. But see Hohensee, *Der erste Ölpreisschock 1973/74*, who tries to reconstruct government action on the basis of published sources and therefore fails to obtain an accurate picture either of such action or of public discourse. From a political science perspective, Fiona Venn, *The Oil Crisis* (London, 2002), asks in what respects the oil crisis was a turning point. There is a greater number of studies on specific countries; see, for example, Karen R. Merrill, *The Oil Crisis of 1973–1974: A Brief History with Documents* (Boston/New York, 2007), though she merely provides a very short introduction; Duco Hellema, Cees Wiebes and Toby Witte, *The Netherlands and the Oil Crisis: Business as Usual* (Amsterdam, 2004), concentrate on the Netherlands. Jacobs, *Panic at the Pump*, which is chiefly concerned with the impact of the energy crises on US domestic politics and the transformation of the right, appeared after the German publication of the present study.

41. Rüdiger Graf and Kim Christian Priemel, ‘Zeitgeschichte in der Welt der Sozialwissenschaften. Legitimität und Originalität einer Disziplin’, *Vierteljahrshefte für Zeitgeschichte* 59(4) (2011), 1–30.