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CHAPTER SIX

Cartel Consciousness and Horizontal Integration in Energy Industry

Arthur Mason

> Energy is not a commodity in the sense that societies can switch away from it. Modern energy operates akin to a collective tax gathered by energy companies who themselves are feudal lords.
>
> —Octavia Shadowz, cocktail waitress and fashion designer

INTRODUCTION

The culture of power surrounding large-scale energy systems over the past century can best be described as forms of collusion whose decision-making authority relies on structural positions of bureaucratic- and capitalist-led industry organization. In this chapter, I depart from this model by drawing attention to the increasing role played in energy policy decision-making by one group of experts, intermediaries (consultants) whose authority is based not on their structural position but instead on their theoretical knowledge and independent stance within the energy sector.

In the past, energy systems were highly regulated by a national political community in which expertise was embedded as part of the originary political organizational form. Wrestling civilian control of nuclear power from the military, for example, resulted in the establishment of a core set of experts embedded within U.S. congressional politics. Atomic scientists and expectations of nuclear power as too cheap to meter were present in the popular imagination. However, the transparency of expertise was not autonomous from government nor did experts view themselves as independent of any sector of the industry. This is the case even after the 1970s, when expansion in the scope of conflict and interested publics led to bureaucratic fragmentation and reorganization of nuclear power.

In fact, one need only draw attention to popular catchphrases of collusion and government capture throughout the twentieth century to realize that prior to restructuring of energy markets in the 1980s, the culture of power and political decision-making was based upon structural position in

industrial organization. The notion of *iron triangles* or *subgovernments*, for example, draws attention to the closed-circle partnerships of industry leaders, congressional members, and technocratic elites involved in promoting nuclear power from the postwar years to the 1970s (Temples 1980). *Managerial consensus* reflects the backroom arrangements of public utility officials and industry leaders that results in expansion of electricity transmission from the Depression era to the restructuring of the 1980s (Hirsh 2001). *Natural monopoly* and *negotiated settlements* refer to growth of the natural gas industry to, in the case of the former, a government selection process, and in the latter, pre-agreements that forestall litigation among pipeline builders, natural gas producers, and distributors (Doucet and Littlechild 2006; Tussing and Tippee 1995). The government-sponsored *project*, as in the Manhattan Project that exemplifies an alliance of military and managerial expertise, was not limited to the advent of the nuclear era but inclusive of other federally sanctioned megaprojects (Rochlin 1994). *Interest group* may be included here, especially the forms of claims-making across civil and governmental spheres to remediate environmental insult (Tugwell 1980; Wapner 1995). All such phrases call attention to a crucial feature of twentieth-century styles of collusion: the forces that influence and indeed authorize political and economic arrangements are based on decision-making authority in which possessors of theoretical knowledge are the dominated faction of the dominating group.

Curiously, the most pervasive arrangement of collusion in which the dissembedding of expertise becomes transparent is the *cartel*. A cartel refers to a group of sellers whose intent is to fix prices and production outputs in concert to maximize wealth, usually by strategy of trial and error. The cartel arrangement is associated with oligopolistic industries in which the presence of few sellers facilitates coordination. Oligopoly means few sellers in the marketplace, often with strategic interaction among rival firms. While each firm may independently decide its strategy, its actions anticipate the reaction of rival firms.

Among students of cartel theory, anticipation and reaction represents a "consciousness of interdependence" (Dibadj 2010:595). That is, even without intent to agree on specific conditions, oligopolies are marked by coordinated conduct across industries where prices are suspiciously similar or change in rapidly parallel ways (gasoline, airline tickets, cell phone rates, credit-card fees, movie tickets). This coordinated conduct has given rise to the phrase *conscious parallelism*, to describe a tacitly collusive conduct in which firms engage in parallel behavior in order to gain collusive profits but where a cartel is not set up explicitly. The absence of explicit agreement is consequential in antitrust law, where the cartel fulfills a "contract," "combination," or "conspiracy" requirement (section 1 of the Sherman Act). In the legal profession,

conscious parallelism is restricted to "probable reactions of competitors" in setting their prices (Turner 1962). "Although it is hard to find a precise definition," conscious parallelism refers to "tacit collusion in which each firm in an oligopoly *realizes* that it is within the interests of the entire group of firms to maintain a high price or to avoid vigorous price competition, and the firms act in accordance with this *realization*" (Hylton 2003:73, emphases added).

In this chapter, I highlight the role of independent experts in energy policy decision-making by focusing on the forms they employ for *realizing* interdependence among energy companies. I draw attention to representational strategies used by consultants (workshops, commodified forms of knowledge, expert advice) for translating information into knowledge that becomes the collective property of energy industry elites. I argue that the advisory services of firms such as Wood Mackenzie, Cambridge Energy, and others structure the location and content of high-level conversations within the newly privatized and globalized energy markets. Through mastery of skill gained through experience, competency in education and employment, the discrimination they perform as it pertains to judgment between knowledge claims based on one's involvement in certain social networks, consultants reduce the complexity of facts into the kinds of simplicity that can form the basis of decision-making. In so doing, experts disentangle themselves from political and economic rights in techno-economic decision-making by addressing, at least on the surface of things, reasons for adopting their advice in virtue of the things that they do and know rather than as members of institutions.

To characterize their role, I begin by outlining the ascendency of energy consultants and then identify media representations, such as brochures and advertisements produced by consultant firms, through which clients become witness to a detailed interplay of images about global modernity. These images establish a relation between consultants' intended audience (energy executives), those defined as outside this audience (energy consumers), and the future. Because of its resonance with risk, the future is open to contestation. Contestation is the norm in the energy decision-making arena where a cartel alliance and cartel-like consciousness are reconstructed continuously. The temporary stabilization of an alliance relies upon a sustained perception of the credibility of a given future. To be sustained, it is incumbent to replicate an image of the future that is both believable and authoritative.

Three brief examples suffice. Through the use of graphics, consulting firms portray energy forecasts completely bereft of varying energy demand, thereby simplifying the future as an increased trend in demand, providing an absence of detection to changes in sales volumes. Designs of the market without demand fluctuation lessen the requirement for individual entrepreneurial actions, and thereby strengthen a cartel-like consciousness. Temporalizing

energy demand twenty or thirty years into the future coordinates a diversity of rivals by placing their horizon of expectation on the one and same plane (Koselleck 2004). Furthermore, visualizing the oil and gas industry in the form of a high frequency of sales where future demand for product (both high and low values) does not fluctuate secures an image of regular profits so that firms become more likely to have interests in a cartel-like structure.[1] As cartel theorists argue, the high-volume sales of products with low value creates long-term gains from acting in concert. By contrast, breaks in cartels occur often in cases where firms can benefit greatly in the short term from a small number of high-value contracts (Fog 1956). Finally, the greater the variation in firms, the more probable that each will individually pursue aggressive and independent pricing strategies. Thus, even the nomenclature used in analyses is crucial for providing an appearance of limits, as when reports collectivize the oil and gas industry into two groups on the basis of national oil companies (NOCs) or independent oil companies (IOCs). A reduced variance in firms is a factor in the success of cartel arrangements because it allows the perception of members' behaviors as capable of being monitored by other members.

That the future plays such an important role in the energy industry can be related more broadly to the logic of risk society in which, unlike premodern times where risk was typically personal in nature, today's society is continuously exposed to risk stemming from complex sociotechnological systems. Further, modern society is so preoccupied with responding to the consequences of technology that a reflexive process similar to that utilized by consultants has become the process of modernization itself. In this way, future-oriented reflexivity is a scientized tool to further separate ourselves from scarcity society. Executives become witness to rising trend lines to anticipate future energy productivity, without really understanding what anchors these trend lines. Industry practioners embrace the idea of energy futures, divorced as they may be from events and ideas of the past, and weave new imaginaries of how to get there. The energy industry requires this new vision, this new identity, to prevent decisions from succumbing to the anxieties produced by a truly uncertain future. Thus, consultants totalize and subsume all these uncertainties into a ken, a scope, a collective identity to stave off self-dissolution into paradox.

EMERGENCE OF FIRMS

Energy consulting firms exercise powerful, albeit complex, forms of influence on energy markets. Their ability to process information, promote conformity

of analysis, and build communication networks provides a mediating role between calculation and judgment. Such firms emerged in North America and Western Europe in the mid-1980s, during a period of market restructuring. Their initial duties included collecting, analyzing, and distributing information of relevance to buyers and sellers, including information about weather, future prices, fuel switching, demand patterns, and more. By the beginning of the twenty-first century a more elaborate system of advisory service has emerged, in which consultants rank future energy projects through combining technical prediction with new modes of communicative exchange, making available what might be described as a "community of interpretation" on a commodified basis (Mason 2007:374). That is, through soliciting the opinions of a broad sector of industry, analysts begin to act as organizers of community knowledge for executives and government leaders about the future of energy systems and the viability of particular projects within these systems. Such knowledge begins to form the basis of decision-making strategies and generates profits through client fees for access.

By enabling systematic and commodified access to community interpretations, analysts today provide the grounds for more formalized assessments of energy development projects. They have organizational significance in the way government and industry leaders stabilize future perspectives. Specialist industry analyst organizations such as Cambridge Energy Research Associates have taken center stage in global market forecasting (Banerjee 2002). The growth of Cambridge Energy is no doubt a response to deep uncertainties surrounding the future of supply-and-demand interactions, but at the same time the founding of this organization also provides an opportunity created by and for experts to enhance their own expansion and prestige (Brooks 2002:146).

Calculating future risk in energy markets is an open-ended, future-oriented project, the goal of which is to anticipate all loci of uncertainty while increasing the chance of economic success. The open-endedness of risk assessment is especially the case since the 1980s, when market restructuring resulted in the adoption of institutions by the financial industry so that prices could be based on competition rather than regulation. But the industry's competitive structure has raised problems for an older market segment of energy producers who seek to develop new sources of supply. By renouncing control over energy price, government dismantled a structured risk environment surrounding the high-stakes, high-costs uncertainty of investing in large energy systems. As such, market risk has become critically privatized and it is increasingly difficult to synchronize the long-term horizon of energy production with the long-term stability of primary markets

because of uncertainties around climate and energy policies and increased competition, among other issues.

Tackling these uncertainties is generating interest among industry and government leaders in a market for information that can create perspectives that are fundamental for social coordination surrounding issues of risk. For example, through social technologies—scenario planning, executive roundtable meetings, and Internet-based analyses—consulting firms translate the uncertainties of a variety of stakeholders into their own network. By absorbing the fragmented understandings of their clients, consulting firms can provide them with an objectivized view of how the industry operates, including the risks (Mason 2006, 2008). In short, intermediaries are increasingly important actors in forming post-restructuring (neoliberal) energy regimes. The sets of connections they produce—from communication networks linked to complex financial instruments—disrupt an industrial-based form of production with its emphasis on relations between a national regulatory regime and sovereign bordered economy (LiPuma and Lee 2004).

POWER SUMMIT

Histories of the international oil industry provide examples of collusion on price fixing among companies or by governments (Sampson 1975; Yergin 1991). One example of an oil cartel structure is the As-Is Agreement of 1928, in which leaders of Exxon, Royal Dutch/Shell, and British Petroleum met at Achnacarry Castle, Scotland, to devise a collective strategy to defend their companies' profitability from problems of overproduction and low oil prices. According to news reports at the time, executives of three of the so-called Seven Sisters, an oligopoly of global oil producers that lasted through the 1960s, gathered at an aristocratic site to hunt deer, shoot grouse, hike across the moors, and entertain each other over cocktails. More recent narratives refer to the occasion as a holiday entourage including secretaries and advisors housed in a secured cottage several miles away (Sampson 1975; Yergin 1992). Nevertheless, their activities included a planned limit to commercial rivalry through control that was outlined in a seventeen-page document called the Achnacarry As-Is Agreement. The central features of the As-Is Agreement allocated each company a quota in various markets and identified efficiencies by driving down production costs, agreeing to share facilities, as well as exercising caution in building new refineries and developing new supply.

Thus, the As-Is Agreement specified the details for integration of a system of international oil production and marketing. Profits were secured

horizontally across the industry by controlling efficiencies of collaboration, marketing, and associations. In these details, the built environment fell under a new form of social organization. This new form of corporate collusion implied descriptions, negotiations, and affirmations of meaning (concepts and consciousness of space) and was rendered legible through a distinct form of communication (seventeen-page document). This historical example of the establishment and elaboration of a cartel brings to light the significance of horizontal integration in providing a mode of regulation and control, and producing the effect of consciousness.

One version of the As-Is story is related within the pages of *The Prize* (1991:263–269), a best-selling book about the oil industry by Daniel Yergin, cofounder of Cambridge Energy Research Associates. With a dozen offices worldwide, Cambridge Energy is a leading consulting firm in providing anticipatory knowledge to retainer clients. The renown of Cambridge Energy can be traced to changes brought about in risk assessment and operational models by the restructuring of the energy industry. This development constitutes a space of uncertainty and an economic niche for Cambridge Energy whose products for redressing the uncertainties of clients range from graphics depicting the future to glossy advertisements for round tables.[2]

In the late 1990s and early 2000s, Cambridge Energy established the Global Power Summit, inviting industry leaders to take part in "a private, neutral, club-style setting" to explore issues facing the international energy community (GPF n.d.). The venue offered formal and informal exchange in a focused but relaxed atmosphere. All details—ground transportation, meals, Internet access, language translations, entertainment—were arranged by Cambridge Energy. Attendees included executives of major oil companies. One venue of the biannual Power Summit was the Westin Turnberry Resort in Ayrshire, Scotland, a luxury accomodation several hours' drive from Achnacarry Castle mentioned above. Like Achnacarry, the Westin Turnberry offers hunting, fishing, hiking, and seclusion in an aristocratic Scottish countryside (GPD 2002). The high cost of attendance—$15,000 for three days—ensures that participants are elite members of their organization.

In a promotional brochure titled "Global Power Development: Competitive Realignment in Changing Times," a photograph of the Turnberry Resort shows a stark white manorial building facing the sea. Its stately appearance set against a manicured countryside reflects the historical aura of the 1928 Achnacarry Castle meeting as described in *The Prize*, that of a decaying aristocratic life between the two world wars as popularized in such novels as Evelyn Waugh's *Brideshead Revisited*.

I suggest that the Power Summit venue is a technique for providing "horizontal comradeship" (Anderson 1992:15) among disparate leaders who

seek to internalize an image of energy industry not from their own hierarchically differentiated organizations but instead by participating in a context that can best be described as an exclusive club. As such, the Power Summit serves as an integral constant of the twenty-first century in that industry leaders remain enlightened and aggravated by the collective memory of historical associations, which repeatedly are strengthened by new systems of communication (Luhmann 1998). Cambridge Energy's Global Power Summit provides a discursively shaped historical force. Its form takes shape not only by the way historical facts of the Achnacarry As-Is Agreement have become managed by Daniel Yergin but also by the manner in which Cambridge Energy replicates the event—the Achnacarry meeting—as an executive round table oriented toward managing concepts of risk. In this way, today's special character of interrelated values of oil, natural gas, and coal is reaching a complexity analogous only to an earlier period of mercantilist speculation over coinage and the interrelated values of gold, silver, and copper (Foucault 1970). The restructuring of energy markets has intensified the need not so much for empirical research on ways to move forward but rather, borrowing a phrase from Jürgen Habermas, for attempts to establish a "rational infrastructure of action oriented toward understanding" (1985:106).

But historical associations of the oil industry as "a very exclusive club" have also been attributed to Pérez Alfonzo in reference to his conception of the sovereign cartel Organization of Petroleum Exporting Countries, or OPEC (Sampson 1975:4). Often described as "founder" and "architect" of OPEC (Coronil 1997:353), Alfonzo served as Venezuela's Minister of Mines and Hydrocarbons in the 1950s. He is noted to have spent considerable time studying the papers of the Texas Rail Road Commission (TRRC), which he credits for the original sovereign oil cartel design. During the 1920s, in an effort to bring stability to a market laden with oversupply, the TRRC perfected a cartel-like structure of "prorationing" (to each according to his prior ability), raising it to an art of "regulatory form," capable of being transplanted into different sociocultural milieus (Prindle 1981:34).

IMAGE OF GLOBAL MODERNITY

In the years following 2001, Cambridge Energy acknowledges a series of "key events"—Enron bankruptcy, terrorist attacks, volatility in gas and power markets—for which they began providing clients with interpretations about onsets of danger (CES 2002). In 2002, "The New Face of Risk" was the topic of Cambridge Energy Week, an executive conference that the *New York Times*

referred to as a gathering where "leaders of the world's largest energy companies go to think big thoughts" (Banerjee 2002).

At the conference, a game of chess symbolized "The New Face of Risk." In particular, a figure of the king appeared on program guides, wall posters, Internet key cards, security reminders, and conference hall backdrops. Chess is a game requiring reflection with neither dice nor a stake—that is, outcomes are not governed by rules associated with games of chance. Early modern descriptions note that several figures, including the queen and bishop, are types of advisors or administrators to the king. As to strategy, the straight moves of the king are associated with his legal power in collecting rents while the oblique moves with extortion (Yalom 2004).

Closer inspection of Cambridge Energy's ubiquitous chess symbol connects the king to an image of the earth as seen from the perspective of space. This apparition is displayed most notably on an Internet key card repeatedly used by conference participants at computer kiosks. On one side of the key card a glass earth rested in the hands of an Asian child, suggesting that strategic planning belongs to a future generation of leaders, presumably those living in Asia where strong economic growth reflects increased energy capture, particularly in China. Here inscribed into the features of a living being was an interplay of signs that relate future worth, productive capacity, and investment opportunity. But the scenario conveyed one of several possibilities. Another suggested that perhaps *this* child was "the new face of risk." What was on display here is a symbol of population growth in Asia, increasing demand for higher living standards, greater requirements of energy capture, and anthropogenic climate change.

The image of a transparent earth is itself significant. It marks the hidden presence of fossil fuel (coal, oil, natural gas) and serves as a collective reminder that its buried potential is a visible signature of wealth in the world. The image is necessarily a metaphor for accounting practice in which corporate valuation is measured against a reserve's buried potential and its economic recovery. Finally, its significance also finds meaning by its inversion as an ironic reminder of a lack of transparency surrounding individual proprietary knowledge among companies.

A spherical glass earth in order to peer into what is hidden calls attention to the fortune teller and the crystal ball, both of which are prominent contemporary icons. Such images during this period are employed in the advertisements of global communications companies such as Comcast, representing the company's ability to identify new systems of communication, global insight, and anticipatory knowledge. The image serves as a reminder that the ability to look ahead to anticipate whatever lies in the future is a

desire that dates back as far as Mesopotamia. In the past, the practice of divination—appeals to a deity who is believed to reply through significant tokens—served as a mode of inquiry into future events or matters obscure. Today, the imperative to know the future is no less important than it was in premodern times. Unlike the diviners of yore, obtaining knowledge of secret or future things by mechanical means and manipulative technique no longer depends on the aid of spirits or deities. Differentiating knowledge systems, the rise of nonhuman forces of regulation, cybernetic systems, and probability calculations stand in for and procure the aura of the superhuman powers they replace.

In the context of these images, distance from the world relates confidence and perspective of the future. The child on the Internet key card, for example, exists outside the earth. Outer spatial distance is a style of thinking that is neither unique nor the invention of Cambridge Energy. In 2004, the *New York Times* captured an image of Philip Watts, executive of Royal Dutch/Shell, arriving on stage in a spaceship and an astronaut suit and declaring to six hundred executives, "I have seen the future and it was great" (Labaton, Gerth, and Timmons 2004). These remarks functioned as a rejoinder to accusations that Shell was pumping oil out of the ground faster than it could find new supplies. Watts sought to regain control over corporate valuation not by means of traditional accounting practice but by positioning the uncertainties of the future in the past, behind him. His language and dress proclaimed he had already seen what reserves lie in the future by visiting the future, through his space ship.

Similar images used by WoodMackenzie aim to draw the energy future into the present through a global economic model (GEM). A crystal sphere image symbolizes this software program that appropriately is named after its acronym GEM. In a related promotional brochure, an anonymous, omnipotent hand supports an image of the world.

CONCLUSION

The most prominent discourses of energy capture from the previous century—society's dependence on laws of thermodynamics (Soddy 1920; Odum 1971), civilization's level of achievement based on rates of energy capture (Smil 2000), democracy's undoing by increased energy use (White 1949)—are strangely absent in the sentiments by which today's energy executives strive to realize the value of their commodity. The transitory existence of these earlier discourses is a reminder that in the established order of things,

destined oblivion is immanent (Foucault 1971:8). It is also a reminder that the unabashed economic motivation behind the rise of intermediary knowledge reflects a postwar expansion of expert systems as part of a broader movement to a knowledge economy. The growth of this type of economy itself provides justification of an apparent contradiction, on the one hand, of increased democratization of expertise and, on the other, its privatization (Mason 2005).

Consulting firms, buoyed by venture capital, operate like transnational entities in which their power relies on the strength of their networks. Consequently, emphasis in energy development increasingly is placed on global financial markets, instead of structural positions within national political systems. For the elative isolation and elitism of these deciders who think big thoughts, squirreled away in jaw-droppingly expensive conferences, located in elite resorts, the performativity of knowledge creation suggests knowledge artifacts seem to materialize out of thin air. The use of images of strategy and transparency to ensure control over information is complete, suggesting knowledge is occluded and manipulable by the companies themselves. Thus, cartel consciousness is the reproduction of oligopoly through horizontal integration, a type of "clubbiness" that is strategically beneficial to participants and impenetrable to nonparticipants, who remain vulnerable and at risk in the new world of energy insecurity.

NOTES

1. For example, the average operating expenditures (OPEX) for costs of production ($/bbl) among top producers across major territories (where OPEX is predominantly lifting and transport) is presented in analyses as $6 (2010 prices), but nearly $11 excluding OPEC producers. Therefore, prices set by OPEC have a stabilizing effect for non-OPEC producers (Deutsche Bank 2010:80).

2. Yergin's discourse on market transition is widely recognized (see Wilson 1987:141; Yergin and Hillenbrand 1982).

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