Industry restructuring as Alaska's ethnographic present

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Observations of policy interactions in developing an Alaska natural gas pipeline suggest that informants register historical details of energy market restructuring differently than how such details appear to scholars of the natural gas industry. In this article, I present this contrast by reference to the *Articraft*, a graphic created and disseminated by energy consultants. I employ the *Articraft* in order to illustrate how industry practitioners encounter a singular idea from a distinct historical period of market restructuring. I argue that the aura of the *Articraft* provides an example of the imitable character of ethnographic authority: its capacity, that is, for fragmenting the influence scholars assign to history.

Keywords: Alaska; natural gas; industry restructuring; energy consulting

That is why [Dostoevsky's] characters remember nothing, they have no biography in the sense of something past and fully experienced. They remember from their own past only that which has not ceased to be present for them, that which is still experienced by them as the present. [...] There is no causality, no genesis, no explanations based on the past...every act a character commits is in the present, and in this sense is not predetermined; it is conceived of and represented by the author as free.¹

The encounter

In this article I describe an encounter between my informants and the appearance of an object of energy industry restructuring, namely the de-control of natural gas price. I argue that the singular idea (de-controlled price), while emerging from a distinct moment in the past, today confronts Alaska state officials from the vantage point of a PowerPoint image as part of a graphic, what I call the *Articraft*.

The *Articraft* combines graphic design with energy consultant analysis and, when presented in PowerPoint slideshows by experts, serves as a potent emotional marker of the industry's past, present and future. For clients of energy consultants, many of the figures and characters that populate the *Articraft* remain incomprehensible without translation. Creating comprehension lies, therefore, in the corporeal skills of the consultant who translates its meaning for clients. Reducing the complexity of energy data analysis into the kinds of simplicity that can form the basis of immediate and partial forms of recognition endows the *Articraft* with a sense of its own special aura. The effect of viewing the *Articraft* is not unlike the feeling a pedestrian acquires when passing an awning with Chinese characters. For the non-Chinese speaker, Chinese characters printed on an awning have definite meaning,

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¹Bahktin, *Problems*, 30.

but they require translation to become comprehensible. Thus, establishing the decay of the aura while bringing the meaning of the *Articraft* closer to the client provides the energy consultant with a special kind of charisma, that of someone capable of overcoming the *Articraft's* uniqueness.² The *Articraft* is a special feature of the newly restructured natural gas industry, and, by combining forces with the de-controlled price, it serves as the embryonic centre of an ever-expanding set of concentric circles about ideas, emotions and tableaus that, together, orchestrate the motivations and attitudes of industry practitioners.

My aim for providing this encounter is to connect the *formation of practice* by which informants operate in the natural gas industry with *written descriptions* about a material order that govern the way informants must now act in the industry. The link is no trivial matter, especially when working among Alaska state officials, as I have done, promoting the construction of a natural gas pipeline where written materials about industry restructuring – descriptions that directly bear upon activity – remain silent. Stated differently, my aim is to explore the ethnographic encounter that brings together, on the one hand, an **empirical world** in which informants run around in the name of promoting an Alaska natural gas pipeline, and, on the other hand, a **written world** to which this running around is attributed, but whose vocabulary and intentions rarely appear, from my observations.

Exploring this encounter also offers an opportunity to reconsider the role of history in ethnography, an indirect result of the writings of Michel Foucault,³ with whom anthropologists credit the nurturing of ideas related to their increasing concern about the relationship between the conduct of institutions and the production of particular kinds of disciplined subjects.⁴ Constructing ethnographies of the present by reference to information organized through elaborate historical genealogies is the most apt example of Foucault's impact on anthropology.⁵ Such genealogies retrieve specific meanings from the past in order to reveal a coherence about the way various types of knowledge today *could* make sense and *could* produce truth. In this process, genealogies identify the overall historical organization of meanings that bind institutions, experiences and doctrines and to which these meanings refer when elements of them refer to the present.⁶ But such narratives that assert a historical rationality of meaning in the present, while illuminating, may be serving at the risk of glossing over how the spectral present – expressions of humour, cynicism, expertise, ignorance and, above all, serendipity and the impact of communication technologies – is a force to be reckoned with in its own right.

As I argue here, indicators of industry restructuring's past do emerge as signposts for how actors understand the present. Nevertheless, such indicators *are truncated from their historical settings* and, more often than not, appear thrown into a richly adorned horizontal community of ritual-like activities unique to the present. They are drawn into and out of focus, and are by no means the only items that garner attention. Such singular ideas of today's natural gas industry – de-controlled prices, open access, open season – that emerge from a distinct moment of restructuring appear forced into

²Benjamin, *Illuminations*.

³Foucault, *Nietzsche*.

⁴Faubion.

⁵Hayden, *When Nature Goes Public*; Verdery, *Vanishing Hectare*; 2003; see also Agrawal, *Environmentality*.

⁶De Certeau.

a concantenated chain of ritual-like activity, embedded in PowerPoint images, marginalized in elaborate graphic designs conveying the future, or competing for attention against smartly dressed event coordinators passing out fat, paper-bound booklets at executive round tables within which such indicators are buried.

Events of industry restructuring that I witness during fieldwork *never* appear in the same manner as historical description, but *always* as the ethnographic present. Key aspects of structural change continually emerge as actual events in my informants' lives, torn out of their own genealogy, and now meaningful from their newly residual appearance in a shadow kingdom of ritual- and spectral-like practices that instruct my informants about operations of industry without reminding them of an originary moment when initially they were forced into the empirical world. Yes, events of industry restructuring as described in historical discourse do exist – they were real – but such events must now be discovered through an ethnographic eye, because they are embedded among the shifting daily debris over which industry practitioners stumble, making use for themselves of any object when seeking to govern over industry.⁷

The story of natural gas

Scholars commenting on the oil and natural gas industries often remark that the story of oil is one of global dimensions, whereas the story of natural gas remains continental, in large part, because of the delivery requirements of the latter, primarily through pipelines.⁸ But in writing such stories, these same scholars create a unique pattern of discourse that has profoundly shaped the way this anthropologist has come to understand the ethnographic encounter with practitioners of these fuel delivery systems.

In written documents, a central feature in the *story of oil* is the entrepreneur in the role of an author-creator who is charged with delivering progress pure and simple. The entrepreneur is a style of understanding that accepts humans as part of the forces that influence market evolution and indeed authorizes them to intervene on behalf of some modern condition that is desired. Here, language, dress and gesture perform a narrative in which the leader envisions a desirable state of things and then develops a strategy for achieving it, what might be called *backcasting*, as distinct from forecasting.⁹ The entrepreneur makes events visible and concrete. His interpretive force is performative for drawing up signposts about the state of industry and its development. His statements, while not fully understandable, are open and malleable to a degree that potentially outweighs those aspects that are determining. Everything affirmative, obligatory and desired becomes weighty, authentic and persuasive through the entrepreneur. No matter how much wealth is generated, without him the *story of oil* is denied a basic concreteness and feels empty and fragmented.¹⁰

⁸Davis, *Energy Politics*; Tussing and Tippee, *Natural Gas Industry*.

⁷Anthropologists Kathleen Stewart (1996) and James Faubion (1995) both examine how remnants of the past become potent emotional markers of a personal present, in the former, by examining how West Virginia's abandoned industrial remains bind residents to "useless" objects and in the latter, how Athenians historically construct their present by reference to remnants associated with the greatness of the Ancient City. Nevertheless, in this article, I am concerned with persons who speak on behalf of these remnants and not as subjects of them. ⁸Davie, *Europe Political Turner, Network Cas, Industry*.

⁹See Quist, *Backcasting*, on looking back from desirable futures.

¹⁰Tugwell, "Energy;" Wilson, "World Politics;" Yergin, Prize.

By contrast, when reading about *natural gas*, the entrepreneur is absent altogether. Instead, a list of citations to changes in energy legislation and of government agencies passing specific Orders rule over human agency. Both types of events, the passage of laws and the passing of orders, are described as having had profound effects on the workings of industry, especially over the past 30 years. Such descriptions are available in articles produced by economists, policy analysts and lawyers.¹¹ It is clear that these descriptions are indeed written assertions. That is, from their reading, I imagine a self-enclosed discursive world that has little to do with an empirical reality out there. For example, the descriptions employ similar styles of writing, often dry and impersonal. They share in the manner of identifying periods of industry development. That is, they describe the natural gas industry as belonging to an *early period* of technological formation, to a *middle* period of heightened government regulation and finally to a recent period of industry restructuring. This emphasis on periodicity alone demonstrates a preference by authors for discontinuity and the irruption of events over continuity through stable structures.¹²

Yet to take these documents as written assertions alone would be a mistake. They account for the actual workings of the United States-Canada natural gas industry. This industry is a large technical system consisting of a vast continental-sized machine made up of two million miles of steel pipe. An interconnected maze of steel pipes of various sizes, this network at each moment – *at this very moment* – is delivering enormous quantities of natural gas fuel from supply zones located in North America's mid-continent to energy consumers living along the coasts in urban areas. Because these pipes remain buried, few people actually witness the *techno-ontological dimension* of this network first hand. Nevertheless, the steady stream of fuel to consumers and occasional explosion that destroys lives and entire neighbourhoods is testimony to these pipelines' very real material presence.

But herein lies the problem: at first, my study of Alaska natural gas development led me to a trove of written documents that describe historical changes to the North American industry, many occurring recently, within the past 30 years. These descriptions, according to my understanding, structure how industry practitioners now make their business plans, including strategies for developing Arctic Alaskan and Canadian gas reserves. Afterward, my investigation led me then to ethnographic encounters with industry practitioners, who, I discovered, scarcely refer to the written industry descriptions with which I am familiar. On the one hand, written documents exist about real events occurring only recently that no doubt influence the present. On the other hand, practitioners working among the debris of these events do not acknowledge their vocabulary, structure or necessity.

Here is a typical description of changes to this pipeline system which I have read many times: "Order No. 636 converted bundled sales contracts into unbundled transportation and sales contracts. Most of these transportation contracts terminated of their own terms during the mid-1990s."¹³ This quote describes critical events in the sector partially leading to de-control by government over natural gas prices.

¹¹Griggs, "Restructuring;" MacAvoy, *Natural Gas Market*; 2000; Jess, 1997; Sonderman, "Behavioral or Structural Solutions;" Tobin, "Natural Gas Transportation."

¹²Foucault, Archaeology, 6.

¹³Sonderman, "Behavioral or Structural Solutions," 34; see also Federal Energy Regulatory Commission, "State of the Markets;" Rasmussen, "Majors' Shift."

Yet, in all my years of observing and working with industry and government, on only two occasions have I heard someone speak the words "Order No. 636" or "bundled sales" or "transportation contracts terminated."

What is the *ethnography*, then, by which the practical strategies, intellectual technologies and social authorities of my informants encounter the operational dynamism found in written descriptions of industry restructuring? How does the macro-structure discourse manifest itself in the fleeting phenomena (gesture, speech) of my informants?

Claude Lévi-Strauss¹⁴ pioneered an approach to address this problem by suggesting that mythical modalities govern over the actions of informants. And the idea appeals to me. My informants do things not knowing what they do, but governed by powerful myths of industry regulation embedded into their mental faculties (while in the oil industry, actors remain wilful, infilled with a sense of historical purpose).

The method, however, requires denying key observations that I gathered by spending some part of my life with these industry actors. My informants are experts and clients of expertise who, much like the story of oil, *act on behalf* of the companies and government institutions they represent.¹⁵ They include state, territorial, provincial and federal officials of United States and Canadian governments, executives of ExxonMobil, British Petroleum, ConocoPhillips and Transcanada Pipelines Ltd, as well as experts of the consulting firms Boston Energy Research Associates and Wood Mackenzie. Indeed, when I use the term "we" in the following paragraphs, I refer to a small elite of State of Alaska officials who participated as *innercircle* members of Alaska governor Tony Gardener's Pipeline Cabinet, and with whom I was closely associated from 2000 to 2003 while working as an energy lobbyist in the Office of the Alaska Governor in Washington, DC.

While these practitioners operate in one corner of a vast industry over which they have little control, their careful manipulation of understandings of industry, orchestrated through personal and community experiences, suggests some practical connection with written description. In what follows, I provide one example of an encounter between industry practitioners and a singular idea of history (de-control of natural gas price). In doing so, my aim is to acknowledge the imitable character of the present: that is, its capacity for fragmenting the privilege scholars currently assign to the influence of history.

Articrafts of the de-controlled price

During winter 2000–01, energy analysts arrived in Alaska with the idea that a large volume of Arctic natural gas had suddenly become valuable. Natural gas located under the earth's crust at Prudhoe Bay on Alaska's North Slope near the Arctic Ocean represents a vast amount indeed – 10% of the North American reserve base. But its extraordinary positioning, far outside the continental energy market, is a feature of extreme importance. Since its discovery several decades earlier, Prudhoe Bay's gas reserves have been considered "stranded", far away from consuming markets.

¹⁴Lévi-Strauss, Savage Mind.

¹⁵Mason, "Condition;" idem, "Rise;" idem, "Neglected Structures;" idem, "New Research;" idem, "Of Expectation."

At first, Alaska state officials did not want to believe and could not believe the message of energy analysts. But the seed remained and grew. Energy analysts were teachers uttering immense words. Alaska politicians drew these ideas into their thoughts and, as I relate elsewhere,¹⁶ set a target on raising an impossible pipeline project from the dead. The consultants I became familiar with explained the probability and embraced the plausibility of the rise of a new techno-logical formation. The energy industry was fixed on a very ambitious target. They referred to a growth *imperative* that was likely to fundamentally alter the structure and functioning of the North American natural gas market. Through specialized client privilege reports and descriptive scenarios available on the Internet, in newspapers and on news-talk outlets, they explained that the industry had entered along a path, "The Long Ascent". as they put it. The road promised to be an interplay of conflicting supply and demand forces, and accentuating boom and bust cycles. As the path spiralled upward, indeed, they guaranteed that the climb would be a "wild ride for the entire industry."¹⁷ The size of the challenge, the current strength of the market and improved technological and infrastructure advancements, inevitably, with some unexpected twists and turns, would lead to construction of a 20-billion-dollar, 3,500mile pipeline to deliver Alaska's Arctic gas reserves to the US mid-continent. "In this new environment," they opined, "the greatest value will be exploited by those who can understand the new cycles and who position themselves to take advantage of them."¹⁸ Alaska politicians grasped at these original thoughts and were shaken.

To this day the Alaska natural gas pipeline remains unbuilt, unplanned and "rolling 20 years" into the future. Perhaps no one is at fault for wishful thinking on such a grand scale. In addition, there exists no such council or arbiter of predictions that can assign blame for such failed projections. One unresolved mystery is how an ordinarily remote possibility – 'what are the chances of Alaska's stranded gas becoming valuable?' – should be turned, right from the first go, from an idea, into a cascade of events threatening to shake the foundations? How did we seize on this idea so?

It was as if experts, along with the consulting firms they work for, provided the very idea, the Eureka! if you will, that created in many of us, something strange and long-lasting. We encountered a certain turn of thought and an inclination towards certain special views. On this point, I no longer refer only to myself and of those regarded among the *inner-circle* of the Alaska governor's Pipeline Cabinet, with whom I was closely associated. I refer also to spokespersons for energy producers and organizations interested in promoting specific plans as well as to legislators and staffers, former Alaska governors, former Alaska legislators, current mayors, lawyers, lobbyists, and residents of Alaskan communities.

Perhaps the most compelling structure of our thoughts came from exposure to a graphic of the energy future that I call the *Articraft*. As mentioned above, the *Articraft* employs graphic design to portray energy analysis and is often presented to clients in the form of PowerPoint presentations. The *Articraft* is a product of inscription – numerous acts that translate the testimony of non-humans (natural gas

¹⁶Mason, "Forms of Time."

¹⁷Robinson and Hoffman, "Long Ascent," 3; Cambridge Energy Research Associates (CERA), "Long-Term Outlook;" CERA, "In the Midst;" INGAA, "Future Gas Supplies;" "US Gas Market."

¹⁸Robinson and Hoffman, "Long Ascent," 3.



Figure 1. Note: Henry Hub spot price as reported in Natural Gas Week.

supply) into representations that can be read, compiled and compared.¹⁹ According to Bruno Latour,²⁰ inscription conveys the practices that "enroll" nature to speak on behalf of that interest group which requires nature to stand as an agent. It is a practice not necessarily for acting upon nature, so much as it is to resurrect nature as a living embodiment of political speech. It is the translation of the "testimony of nonhumans" (trees, rocks, natural gas supply) into representations that can be read, compiled, compared and translated. The result is to displace and simplify complex landscapes into an image that can be taken in and understood at a glance: in essence, objects that are turned into easily read signs (Figure 1).²¹

In fall 2000, the consulting firm of Boston Energy Research Associates²² circulated the above *Articraft* at their executive roundtable events. The *Articraft* depicts an eight-year span of natural gas price, both historical and projected, as understood during the fourth quarter of 2000. The *Articraft* appeared before us as a wall-sized PowerPoint image but also as an 8-by-11-inch illustration printed in an agenda booklet. The title of the *Articraft* is an open-ended question: *Natural Gas Markets: How Long Will High Prices and Volatility Last?* Together, the *Articraft* and title provide an outlook of expectation on the future of higher natural gas price in the North American energy market.

A likely entry point into crypto-symbolism of the *Articraft* is at the year 2000, printed directly at the bottom. It appears there, located at the mid-point of a timeline. As it was, the year 2000 referred neither to a bygone past nor to a speculative future. It was the temporal present and carried the weight of a self-evident fact. The weightness of the temporal present and prime location on the

¹⁹Braun, Intemperate Rainforest, 221; Latour, "Visualization," 131.

²⁰Latour, "Vizualization."

²¹Also Braun, Intemperate Rainforest, 221.

 $^{^{22}}$ The names of consulting firms and persons have been changed and modifications to images have been made.

timeline gave the figure 2000 an attention-grabbing significance. It is a departure point for an internal exploration of the *Articraft*. Once focused on the year 2000, the human eye begins to shimmy and shake, wandering sideways across a continuum of coordinates. To the left, the eye glides across a projection of six years then diagonally upward to a historical record of natural gas price. To the right is a five-year projection of the future. Thus, the year 2000 is a starting point for an equi-temporal wandering. The *Articraft* was created in late summer 2000 and distributed among clients during autumn. It was discarded by late winter 2001. The closely knit correspondence between the time of production and use-value, and relatively short shelf-life is not a coincidence. The *Articraft* is a knowledge-product whose obsolescence is a result of an industry need for reliable data and relevant energy forecasts.²³

I present the *Articraft* here as an originary visual to the *growth imperative*. It is a fragment of evidence for the existence of "The Long Ascent", an industry expectation for increasing natural gas consumption, then estimated at 22 trillion cubic feet (tcf), toward a 30 tcf market by 2010. But the *Articraft* is also an entirely new creation, a fact that must be attributed to industry restructuring. Beginning in the 1980s, the natural gas industry shifted to a liberalized market form. Previously, government provided energy companies with a structured risk environment in which stringent agreements secured rates of profit over fixed time periods. The shift to a newly liberalized market collapsed these agreements.²⁴ The appearance of the *Articraft* – with its emphasis on price projection – is evidence that energy companies have since entered into more a competitive arrangement with each other. It is an indication that each company, today, looks over the shoulder of the other in hopes of a discovery of how increases to supply can maintain a balance with incremental rises in demand.

As such, the Articraft is testimony that there are economic disadvantages to destabilizing balance. An abundance of supply, for example, will destroy price. The destruction of price could be disastrous for new development projects, whose investment recovery depends upon stability of long-term prices. Thus, by forecasting both the incremental amount of new energy additions that can satisfy demand and by depicting the actual price these energy additions will fetch in the market place, the Articraft is an image of the changing politics surrounding the development of new supply sources. Prior to restructuring, the political community established a framework of incentives for corporate decision-making. Today, evidence of fluctuation in market price, as witnessed in the *Articraft*, establishes the risks by which industry seeks political concession. But the Articraft is evidence also of new determinants oriented toward securing investment decisions. It is a bit of knowledge in a stable stream of information that consultants provide to clients about a system of gas pricing. As such, it suggests that new instabilities have given rise to a field of consultant forecasters whose expertise is an announcement of the collective need within industry for knowledge on pricing, since knowledge of future price facilitates trade, provides longer-term signals that govern investment decisions and allows producers and consumers to manage risk.

²³Reliable and relevant in this context derive their meaning from financial accounting and tax reporting. Reliable means *faithful representation*, *verifiability* and *neutrality*. Relevance signifies information having *feedback value*, *predictive value* and *timeliness for decision-making* (Rasmussen, "Majors' Shift").

²⁴Ridlehoover and Pulliam, "Alaska Gas."

Finally, from the above *Articraft*, one becomes witness to partial evidence that an Alaska natural gas pipeline could be built and that natural gas could flow by year 2010, a remarkable projection for a pipeline proposal left languishing for 30 years. For example, skipping ahead within the same agenda booklet in which this *Articraft* was printed, a different *Articraft* appears that also depicts a decadal temporality. Instead of an 11-year range, this next *Articraft* depicts a 15-year trajectory. Instead of splitting time into a past, present and future, this second *Articraft* confronts a singular future extending directly out of an isolated present. The *Articraft* provides a visual into the expected planning stages for a large pipeline construction project to bring Alaskan gas "on-stream." The image portrays a series of dates and events and is a history lesson of the projected gas flow to North American markets by year 2007. The *Articraft* appears in the shape of a pipeline, and printed directly below in the booklet are specifications that provide information relating to expectations: capacity size, date of initiation and timing completion (Figure 2).

At the risk of stretching the boundary of imagination, I employ a classical music metaphor to compare the range of excitement generated by these two *Articrafts*. The first *Articraft*, for example, portrays an orchestral-type image with a stratified harmony of points. By contrast, the second *Articraft* presents itself as a singular melodic form, a Gregorian chant, perhaps, rhythmically punctuated with arrows like staccato emphases, along its way. In this latter depiction of reality, a simpler story is told. Return for a moment to the first *Articraft*. There, in the terms printed, one encounters a constellation of rhythmic movements: *drivers, ongoing demands, pressures, cycles, playing fields, frontiers, minimum and potential ranges, high growths, spikes*. By its very trend, the jagged lines that guide our eyes from left to right, toward a finality of straight parallel lines, the first *Articraft* presents a two-part illusion of progression that could well be referenced to a musical score by Jean Sibelius, perhaps *Symphony Number Five*, with its swan-theme motif in which time accelerates toward the finale where tempo decreases, becomes more powerful, rises higher and the universe is set right.



Arctic Gas Supply Build—Supply Realignment

- · Current supply disappointments accelerate Northern development
- Strong prices lead to pipe capacity commitments by the end of 2001
- Plans develop for a large project(s) to bring both Alaskan and Mackenzie gas on-stream
- Project size of 4 Bcf per day
- Regulatory and government requirements necessitate building pipe capacity to "market"
- New pipe to California and Pacific Northwest: 1.75 Bcf per day growing to 2.4 Bcf per day by 2015
- New pipe to Midwest: 2.0 Bcf per day growing to 2.7 Bcf per day by 2015
- Total of 4.25 Bcf per day of supply by 2015

Figure 2. Arctic Gas Supply Build - Supply Realignment.

By contrast, the second *Articraft* emphasizes a staid and conservative set of terms: *commitments, design, approval, service, flows, full capacity, preparation, process, orders.* It is a series of harmonic frames of movement for which the scores of Johannes Brahms come to mind. The lumbering feel of the second *Articraft* provides it with a sense of stability, finality, and the feeling of inevitability and commitment to procedure. It is a step-by-step recipe for achieving full capacity placed into linear visual style. A painting by numbers, hopscotch and cakewalk-like activity come to mind. It is precisely this kind of artistic type craft, the *Articraft*, with its parade of robust confidence that create such strong impressions among State of Alaska officials over the potential for building an Alaska pipeline.

Of course, the *Articrafts* above were not to be abstracted on their own as isolated images. They are visuals as part of an installation within a series of *Articrafts* about energy futures. Both *Articrafts* – the *Natural Gas Markets* and the *Arctic Gas Supply Build* – share a similar placement within the agenda booklet. They appear as the last *Articraft* in a sequence of *Articrafts*. They represent the final images of two separate presentations. They are concluding images. As such, they carry the drama of a finale. Their emotive power lies in their being presented as last (a lasting image), and by their capacity to represent a climax as the sum total of previous *Articrafts* – that is, to have greater meaning than the previous parts to which they owe their final existence.

For example, the *Natural Gas Market Articraft* sums up a story about market dynamics that is captured in a series of roughly 30 *Articrafts* that precede it. The information of these earlier *Articrafts* recounts the content assumptions of *The Long Ascent*, Boston Energy's mythical tale of expectation and a growth imperative.²⁵ In short, these previous *Articrafts* help build up information for the final image, but also inscribe the final image into a self-enclosed visual installation.

Actually, there is more. The *Natural Gas Market Articraft* was part of a presentation titled *Market Focus*. According to a Meeting Agenda printed in the booklet for a North American Natural Gas Executive Roundtable Session, which took place in Calgary, on 2 October 2000, the *Market Focus* presentation took place between 8.45 a.m. and 10.00 a.m. At one hour and fifteen minutes, the duration for this presentation was atypically long. Usually, presentations by experts at executive roundtables last no longer than 20 minutes. That is, experts of Boston Energy provided themselves with a longer period to build up client exposure to the final image. One might say that clients exposed to the contents of a story titled *The Long Ascent* were also experiencing the story itself as a long ascent (one hour and fifteen minutes).

The Articraft titled Arctic Gas Supply Build appears in a different presentation titled Arctic Gas, which, according to the same agenda schedule, is the last presentation of the entire two-day executive roundtable session. The Arctic Gas Supply Build is the final image of all previous Articrafts, combined.²⁶ It is the final and lasting image of a set of presentations. The executive roundtable venues where these Articrafts and presentations appeared during fall 2000, in addition to Calgary, include

²⁵Most of these earlier graphics indicate supply declines and thus, the need for Alaska gas. There is one graphic depicting an early withdrawal of stored natural gas, titled "This Winter and Beyond – Depleted Storage in the United States Keeps the Pressure On." Another graphic is titled "The Effect of Tight Margins on Ammonia Production."

²⁶After the Market Focus presentation, the following presentations took place: Canadian Dynamics (10.00 a.m.–10.45 a.m.), Coffee Break (10.45 a.m.–11.00 a.m.), Supply Response (11.00 a.m.–11.45 a.m.) and Arctic Gas (11.45 a.m.–12.20 p.m.).

Houston, Mexico City, New York and San Francisco. Thus, the concluding images derive their strength as part of the series, presentation, agenda and executive roundtable session to which they belong. But they also have the capacity to allow, in one image, for the viewer to *take it all in*. The whole scene, so to speak, of market forces and the potential supply responses appear *in one glance*. It is a type of "staging of verification"²⁷ that recounts the entire installation itself. The drama of the last image derives its force from the knowledge that all previous *Articrafts* are *rolled into one*.

While the *Articraft* is a nucleus product of analysis in the energy industry, as a form, it makes its public appearance in a small corner of an elaborate ritual-like activity called the executive roundtable, to which I now must turn.

Introduction to the Articraft

Rising up by escalator from the metro to San Francisco's financial district, I noticed, under my suit jacket, silk threads hanging from an \$85 tie. I purchased the tie only two months previously in Houston, Texas, while attending Boston Energy Week, an annual conference where "leaders of the world's largest energy companies and those who aspire to replace them go to think big thoughts."²⁸ Carrying the tie's shameless appearance now inside San Francisco's Palace Hotel lobby, I walked toward the Boston Energy Executive Roundtable meeting to gather ethnographic data on a community of energy intermediaries and their clients.

My contact is instantly identifiable. Boston Energy roundtables employ a battery of young, smartly attired, special-event coordinators. Today it is Natasha from St Petersburg, Russia, who hands me two 50-page agenda briefs, within which a number of *Articrafts* are printed. Emblazoned on the cover is "Boston Energy Executive Roundtable", and again, "Boston Energy Advisory Service: North American Natural Gas."

Natasha holds out a name tag and, with a wave of her hand, provides beauty news (her profile is smokey eyes paired with pale lips), and directions into a familiar setting: a conference suite with a large U-shaped table around which are seated energy executives who have come to see PowerPoint *Articrafts* depicting dramatic changes in technology, market structure, and environmental regulations driving North American energy markets.

Entering amidst introductory commentary by Ed Mathews, Director of Boston Energy's North American Natural Gas team, I find refuge in a row of banquet seats for over-capacity participants and shake hands with Peter Murrybrok, a Boston Energy Associate Director. In a short period of time, I would be meeting with Lawrence Hammels, Deputy Commissioner of the Department of Revenue for the State of Alaska. We had scheduled a private briefing with the Boston Energy consultant, Ed Mathews, to take place after the roundtable.

Later that day, in the Palace Hotel room where we had scheduled our meeting, Ed Mathews practically never budged from the window. He just stood there tall, lean and erect, staring out across Market Street toward San Francisco Bay with one hand calmly holding aside the white lace curtain. Quantitative forms of rhetoric connected to prediction and the gaze of a dreamer inevitably figure strongly in conversations with Ed Mathews. We noticed this during the afternoon in question, during a conversation with Ed over how to jump-start plans for building an Alaska natural gas pipeline.

²⁷Whitehead, Science, 11.

²⁸Banerjee, "Energy Industry."

In fact, Ed's gaze was typical of consultants that I had come to know through my work as an energy lobbyist for the Office of the Alaska Governor. Ed Mathew's need for a long-distance perspective when talking about the future first captured my attention in February 2001, when I served as an aide in the Alaska State Legislature. There, along the overly heated hallways of the Capitol building in Juneau, I made the acquaintance of Ed and his colleagues, Ed Hollander and Dimitris Karousos. They walked straight into the social life of Alaska politics through an introduction by Will Carson, Commissioner of Revenue. Carson explained that Boston Energy was under contract to the State of Alaska to provide ongoing research relating to the North American natural gas market. Ed Matthews, Director of Research, provided testimony several times over the course of their week-long stay.

In the weeks prior to Ed's arrival, elected officials, their staff and lobbyists, had been mulling over recent events that had raised hopes for building an Alaska pipeline. Few, however, chose to comment on their significance. Certain events were well known to most persons generally. Yet, when commented upon by Ed and his colleagues who, through the use of *Articrafts*, did so down to their smallest details, the same events were no longer understood by anyone. On 27 February, for example, following a two-hour-long presentation in which the above *Articrafts* first appeared before me, there was little evidence that much was understood by lawmakers. One elected official asked, "Could you please start over and explain that again?" A second lawmaker added, "And this time, maybe you could do it in English?" Ed apologized and tried to sum up everything but with little apparent success. Later that afternoon, one journalist printed the rather complicated explanation that

what [Matthews] seemed to be trying to point out was that different natural gas trading points are linked not only by physical facilities, but by sophisticated trading mechanisms that allow market participants to either buy protection from the uncertainty caused by changes in price differentials, or to sell their ability to absorb such uncertainty.²⁹

My impression of Ed was of a man with a patrician's attitude. He displayed no mark of self-deprecation and provided, from memory, tightly knit sentences. His immaculate features, thick brown hair and slightly wooden manner conveyed total control over some constellation of events believed to be responsible for shaping the world of energy prices. Some observers wondered aloud how his perception of energy markets 10 to 20 years in the future might be affecting his day-to-day experience. There was general concern among us that he was occupied primarily with the task of becoming conscious of the energy future. For these reasons and others, he made a lasting impression on Alaska state officials.

The governor's Pipeline Cabinet members became familiar with Boston Energy's *Articrafts* – and by extension, Ed Mathews – on 20 September 2000, when then governor Gardener, also chairman of the Interstate Oil and Gas Compact Commission (IOGCC), co-hosted with Ohio governor, Bob Taft, a national governor's *Natural Gas Summit*. The meeting was a nationally publicized event sponsored by the IOG-CC, a caucus of governors from 37 oil and natural gas producing states. In press releases, the programme was designed to help governors "understand the fundamentals of the North American gas marketplace and build individual state action plans."³⁰

²⁹Capitol Information Group, "Cambridge Reports."

³⁰Interstate Oil and Gas Compact Commission, News Release.

The Ohio site was selected to "maximize participation among energy consuming states, and the date was timed for the beginning of the home-heating season when attention to energy issues is typically high."³¹

The Ohio Summit was an initiation site among IOGCC members for appropriating new ideas about relations of natural gas supply, demand and price projection. The event remains in the memory of Alaska state officials as the moment when Boston Energy provided them with the "image of progress" on Alaska natural gas development. Through *Articrafts* Alaska state officials began forming an idea of a *higher price playing field* and a *new price regime*. According to one official:

it was when gas prices were starting to rocket up, and Boston Energy had a bunch of their analysts come up one after another and explain what was going on. But it was sort of, mainly introducing the public to the *new gas paradigm* and why prices were going so high.³²

Boston Energy Research Associates is a consulting firm based in Boston, Massachusetts, with 11 offices globally. It was founded in 1982 by partners with credentials from the Kennedy School of Government, Harvard University. Boston Energy began their North American gas research service in the mid-1980s during industry restructuring. They have approximately 195 North American gas retainer clients from all sectors of the business and 650 retainer clients of their services worldwide, including government entities, legislatures, producers, pipelines and distribution companies. In his testimony to a US House subcommittee on energy and mineral resources, Ed Matthews states that the firm offers service "independent of any particular sector of the energy industry."³³

The prognostic force of Boston Energy analysis derives from the promise that they address short-term and long-term futures of energy prices in the context of scenarios rather than single forecasts. In a follow-up letter to William Carson, Ed Matthews states that focusing on scenarios allows "clients better to understand the forces driving the future, and how significant uncertainties can affect the future strategically."³⁴ Nevertheless, Boston Energy is unique in that in addition to providing clients with an understanding of energy markets, it actively promotes its analyses through a savvy marketing division, which coordinates presentations through globally located conferences, media coverage and, of course, the glossy techno-economic imagery of the *Articraft*. According to a senior economist for British Petroleum whom I met at a roundtable event:

Boston Energy is ubiquitous, dominant and good analysts [but] its all marketing, their conversations with the President [of the United States], their editorials published in newspapers, their ability to give [the CEO for BP] a phone call and get him to buy their reports – which I don't even think we need.

The novelty of the new gas paradigm and the presentation style of consultants created a view among state officials that Boston Energy could be a key resource for developing Alaska's natural gas. According to one Pipeline Cabinet member, the event gave

³¹Ibid.

³²Roger Samuels, interview with the author, Juneau, Alaska, 23 May 2001.

³³Matthews, Testimony.

³⁴Matthews, Letter.

rise to a "fantasy" that Boston Energy was going to "guide" the State of Alaska in getting the pipeline built "very fast." A different inner-circle member notes:

at the Gas Summit, the governor turned to us at some point and said: 'I want to get these guys on contract, as advisors'. And we sort of said, 'Okay, what do you want them to do', but of course the governor just said 'no, I just want them, they can advise us.'

Two months after the Natural Gas Summit, the Gardener administration awarded a \$350,000 contract to Boston Energy.³⁵

Conclusion

For the past several years, in the introduction of each of my articles I have include a clichéd description of energy industry restructuring. I make the *assertion* that restructuring influences the practices of actors I observe. That is, I do not actually demonstrate the *ethnographic encounter* between the historical and the empirical. I simply assert that people do new things (empirical) because of changes to industry (historical). In these articles, which appear in peer-reviewed academic journals, I do not return to the topic of restructuring in the body of the manuscript, nor in the conclusion.

Thus, in my previous treatments, restructuring of industry appears as a given, something that has taken place and continues to influence the present. It is a dead event, a genealogy of the present that remains fixed in the past, with the exception of *when I decide* to interpret its influence, without any requirement to demonstrate to the reader how the past actually registers before my informants in the present. In doing so, I avoid disturbing the ethnographic ground upon which my informants live off the remains of industry restructuring, their inheritance. For peer-reviewers of my work, these clichéd accounts of industry offer a talisman of legitimacy for an ensuing analysis of micro-practices – as if the anthropological world breaths a sigh of relief, now having gotten the serious part (macro-descriptions) out of the way.

Successfully publishing a faulty encounter between ethnography and history can only be attributed to a preference for descriptions of the past for interpreting data gathered in the present, as if the authority of ethnography amounts to the tip of an iceberg because the so-called real meaning of data is buried beneath the surface of the present, in historical genealogy. Such a structure – an in-depth history and then, afterward, anecdotal ethnography, as if fieldwork is merely an appendage to a genealogy of the present – is not an adequate measure of understanding how informants register industry restructuring in Alaska natural gas development. This textual approach glosses over how key indicators of industry restructuring emerge as signposts embedded in concantenated chains of mundane and ritual-like activity, concentric circles of aesthetics and aura that gathers around the *Articraft*, an object of industry restructuring grafted onto the entrepreneurial skills of intermediaries.

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³⁵"Knowles Awards."

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