

Chapter #  
The Archaeology of Oil Production

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**Abstract**

This chapter surveys broadly the archaeology of oil production with particular emphasis on work in the United States. The first section of the chapter explores efforts to designate sites associated with the discovery, transport, and refining of oil and their related workforce heritage status in the US and elsewhere. The second section considers how the distinctly liquid character of oil produces diverse and dynamic “petroleumscape” that integrate the various phases of oil production and consumption. The notion of the petroleumscape and other similar ways of understanding human and archaeological landscapes associated with oil production is then applied to the Bakken patch of Western North Dakota in the final section. This area experienced a number of oil booms starting in the 1950s and culmination in the early 21st century boom at which time a team of archaeologists with the North Dakota Man Camp Project documented both workforce housing in the Bakken and the industrialization of the rural landscape.

**Introduction**

Oil production is a central element in the modern world. Fossil fuels are the primary engines of the global economy. By offering a promise of continuous economic growth, the use of fossil fuels and oil, in particular, powered not only the rise of 20th-century industrial capitalism, but also the aspirations for equality at the heart of global democracy (Mitchell 2011; Morris 2015). In the post-World War II period, oil has shaped the global order and fueled decolonization, nationalism, military conflict, and post-national formations. In this context, the sites associated with the archaeology of oil production contribute to narratives of economic abundance, political liberation, and perennial optimism for a better future. Of course, as with most industrial archaeology, these sites can also sustain counter narratives (e.g. Shackel 2004), however, which regard oil production sites as places of broken promises, social dislocation, and environmental destruction (Sinclair 1927; Munif 1987). The growing concern about global climate change has intensified critiques associated both with the direct role that oil production and consumption plays in transforming the Earth and the indirect role that oil plays in supporting global consumer culture and distributed production practices. In short, an archaeology of oil production operates at the intersection of historical and contemporary narratives of political and economic sovereignty as well deep anxiety for the global future.

The material culture of oil production is nearly as expansive as its consequences. As a result, archaeologists and heritage professionals interested in the contemporary world have struggled to adapt tools often designed to document and preserve spatially defined sites to the requirements of a phenomenon that operates on a much more expansive and often global scale. Moreover, the rate at which landscapes associated with oil production can change through the natural limits of the resource, shifting economic priorities, and military and political conflict has created a moving target for researchers. The ability to deploy significant quantities of capital — workers, equipment,

housing, and infrastructure — in a region and then disappear parallels the liquidity of oil itself. In fact, the liquidity of oil represents its greatest asset as a source of energy and supports the spatially expansive networks that oil production occupy.

The liquidity of oil contrasts with the primordial and geological character of the oil reserves themselves as well as persistent investment in “upstream” infrastructure of wells, the “midstream” infrastructure of pipelines and tank farms, and the “downstream” infrastructure associated with oil refineries (Hein 2018). These variations in spatial and temporal scale presents challenges for the archaeologist. This is further complicated by the status of sites as nodes within substantial networks, the dangers associated with extraction, transport and refining oil, the presence of proprietary technology, and the persistent toxicity of sites associated with refining and extraction. Moreover, documenting these sites requires that archaeologists also recognize their significance as nodes in less tangible and visible networks of political and financial actors, institutions, technologies, and histories. By located sites within wider networks, archaeology can trace the wider impact of oil production which often exceeds the scales of conventional archaeological practices.

The following contribution will survey the existing archaeological and heritage work on individual sites associated with oil production with a bias toward those in the United States. This is largely a concession to my greater familiarity with North American examples documented under the auspices of the Nation Register of Historic Place and the Historic American Engineering Record (HAER). The second section will consider efforts to consider the materiality of oil production in an integrated regional and global context. While archaeologists have generally not contributed this kind of work, it nevertheless offers interpretative contexts for future single and multisite archaeological research. The final section will focus on a case study from the Bakken oil patch in North Dakota and demonstrate how archaeology might integrate global and local perspectives in the understanding of a specific productive landscape.

## **Sites of Production**

Starting in the 1920s, the material legacy of oil production attracted the interest of archaeologists and heritage professionals. The establishment of the Allegheny National Forest in 1923 incorporated parts of the 19th century oil fields in western Pennsylvania where Edwin Drake's first well near Titusville, Pennsylvania inaugurated commercial oil production in 1859. Photographs of these sites in the 1920s and 1930s anticipated more systematic documentation in the 1990s under standards established by the Historical American Engineer Record (Ross 1996). Scholars often regard the recovery of commercially viable oil at the Drake Well as the founding moment in the modern oil industry. The subsequent oil boom in the region followed a similar trajectory to other resource booms with the arrival of a workforce eager to reap the potential rewards offered by this new commodity. Over the next fifty years, the region's various oil fields saw the construction of numerous drill rigs, wells, pumps, power stations, tank farms, pipelines, and rail connections as well as camps and towns designed to serve this industry.

While most of the features that documented over the course of HAER assessments in the mid-1990s date to the turn of the 20th century, they nevertheless offer longterm insights into the technologies used to facilitate oil production. Pennsylvania oil drillers adapted most of their drilling technology from the techniques used to drill for water in the region including cable tool drilling

methods which relied on the impact of a bit dropped along a cable to shatter the rock at the bottom of the well (Ross 1996, p.13). Distinct from rotary drill bits employed in Texas and elsewhere in the West in the early 20th century, cable tool drilling was sufficient for relatively soft stone and shallow depths in Pennsylvania. By the 1870s drillers in the region had incorporated casing to prevent the collapse of the soft rock comprising the walls of the well during the drilling process. Metal casing would become a standard feature of oil wells into the 21st century and casing yards featuring miles of prepared casing would become a ubiquitous site in any oil producing region. The most distinctive and persistent characteristic of the Pennsylvania oil production was the use of central power stations to provide power to pumps which drew the oil out of wells that lacked adequate subsurface pressure to flow on their own. Central powerhouses supported the development of wells located with the proximity of power stations and also removed the steam and later gasoline driven motors from immediate vicinity of the well themselves and their flammable resource. These circular powerhouses required regular maintenance, but also the radiating web of power rods driving the individual pumps demanded an understanding of the terrain and the larger landscape as well (Ross 1996 p.76). Unlike contemporary oil fields where much of the infrastructure designed to connect wells to distribution networks, for example, exists underground and wells are largely powered by reliable, individual electrical motors, central power stations with their spiderwebs of rods make clear the interconnected nature of resources extraction on a literal and practical level.

While efforts to document the interconnected character of the turn-of-the-century western Pennsylvania oil fields offers a remarkable example of regional level archaeological work, the more typical approach to document the heritage of oil production demonstrate the tension between archaeology's and heritage management's traditional focus on individual sites and the dispersed character of oil production. For example, over a dozen individual oil wells from Texas, Oklahoma, Kansas, Colorado, and California are now listed in the US National Register of Historic Places. These wells generally mark the opening of various oil fields of varying degrees of regional and national significance and stressed the significance of these discoveries to regional oil booms and, at times, the work of heroic individuals (Price and Ronck 2017). Despite these regional and even individual associations, the documentation of the wells as frequently stressed their existing state as their integration within a wider network of relationships that facilitated commercially viable oil production. For example, Pico Canyon #4 Well in California dates to 1877, and this commercially viable well revived the oil industry in the state which had languished through the previous decade (Snell 1963). The proximity of the Pico Canyon field to a refinery at Lyon's Station encouraged its development, but the founding of the Pioneer Refinery in Newhall and its connection to Pico Canyon by a two-inch diameter gravity pipeline and access to the Southern Pacific Railroad line made this well particularly profitable (Duane 2020). A similar regional approach that integrated wells, industrial sites, housing, and dumps characterized R. Scott Baxter's treatment of the "Squaw Flat" oil field in Ventura County, California (Baxter 2002).

In contrast, entire oil fields have sometimes received documentation as part of the National Register of Historic Places or HAER. For example, the National Register nomination for the Spindle Top oil field in Texas, where the Lucas Gusher in 1901 introduced Texas as a major producer of oil, includes the general area where oil activity took place, but stops short of unpacking how this productive landscape functioned historically (Heintzelman 1975). Similarly, a HAER report on the infamous Tea Pot Dome field in Wyoming attempted to document the traces of the diverse

range of activities necessary to make this field productive ( Steely, Stribley, & Thomas n.d.). From 1922-1927, the Tea Pot Dome oil field received massive investment before production abruptly ceased for nearly 50 years. The Sinclair Consolidated Oil Company gained the concession to develop of the Teapot Dome Field for the US Navy, thanks to significant bribes paid to President Warren Harding's Secretary of the Interior Albert Bacon Fall. The HAER report documented the remains of not only oil wells, but storage tanks, pipelines, compression stations, bridges, and other features associated oil production. The report also documented scant remains of the the several camps that Sinclair Consolidated Oil constructed to house workers in this relatively remote location and to provide at least some of them with electricity, heat, telephones, and sewage. By the time of the field work in 2015, most of what remains of the Tea Pot Dome site involved foundations, some bridges, capped wells, and parts of the sewage system (Steely n.d.). Less forthcoming in the report was how these various sites functioned collectively to bring oil from beneath the ground to refineries and the market.

These efforts to document sites associated with oil production in the US parallel those elsewhere in the world. For example, Canada has recognized the significance of the first commercial oil field in Oil Springs, Ontario and designated as national heritage several wells, a central power station for pumping, and various tanks associated with oil production (Roos n.d.; Gray 2008). Iran has designated as heritage sites associated with the discovery and commercialization of oil in Khuzestan Province where a museum dedicated to petroleum history exists amid historic sites associated with the early-20th century origins of the Masjed Soleyman oil field (Amirkhani, Farsani & Jamshidi 2021). In these cases, the archaeology and heritage of oil foregrounds the interconnected character of sites associated with oil production. Heritage work in these areas combine wells, refineries, or powerhouses together as a way to demonstrate their significance within wider networks of related installations necessary for the transportation, refining, and distribution of oil. To varying degree research at these sites acknowledge the labor of workers, the dense webs of finance, and the key role by governmental and diplomatic regulations and obstacles. In its most refined state (pun intended) the archaeology of oil production follows the viscous flow oil and capital as it traces relationship between various sites, institutions, technologies, and places.

## **Petroleumsapes**

If archaeological efforts to reconcile a site based approach to oil production and the expansive series of material and non-material contexts necessary to understand the oil as a commodity remains incipient, the role of oil as the key commodity of global capitalism has long occupied scholars elsewhere in the humanities and social sciences. Much of the power of oil derives from its ability to flow, unlike coal, and be easily stored and transported in a liquid state, unlike natural gas. Moreover, the liquidity of oil parallels the concept of liquidity in economic terms where the ability of human and financial capital to move quickly in response to market pressures and opportunities has become a ubiquitous metaphor in contemporary capitalism. Zigmud Bauman's notion of liquid modernity, for example, goes so far to identify liquidity as the defining characteristic of the modern world which produces individuals whose lives move at the rate of capital and are unmoored from earlier notions of community or traditions (Bauman 2000). Similarly, philosophers such as Gilles Deleuze (1992), anthropologists such as Anna Tsing (2015), and geographers such as Deborah Cowen (2014), have

produced probing and critical works that interrogate the concept of flow as central to the experience of late capitalism, modernity, and contemporary life.

Thus oil exists within and reinforces a liquid conceptual world that draws archaeology along in its flow as it traces dense networks of human, financial, social, and political capital. In this sense, the concept of the assemblage has emerged as a useful tool to understand the interplay between various actors, technologies, and systems that describe the production of oil. While the concept of the assemblage remains familiar to archaeologists broadly (GET CITATIONS), work by scholars outside the discipline have suggest how this and related concepts can provide a robust framework for more sophisticated archaeological interventions. For example, historian Katayoun Shafiee (2018) has drawn upon science and technology studies (STS) in her effort to interrogate diplomatic history, global finance, and the development of Iranian oil industry in the first half of the 20th century. For Shafiee, the physical infrastructure such as drill rigs, pipelines, and the massive Abadan oil refinery exists only within an equally expansive assemblage of intangible diplomatic, financial, and racial structures. The sociotechnical devices that define these relations dictated the colonial character of the material culture (and physical infrastructure) of the oil industry. In this context, the assemblage of installations both made manifest the colonial power of British oil concerns, but also created spaces for resistance which eventually included strikes by Iranian oil workers, nationalization of the oil industry by the Iranian state, and the volatile diplomatic landscape between oil producing countries and their former colonizers (see also Fuccaro 2022; Citino 2005-2006). Similar approaches have sought to unpack the significance of certain forms of technology, such as pipelines, in shaping the geography of oil and forging new political, economic, and social relationships. For example, the massive Baku–Tbilisi–Ceyhan (BTC) pipeline and the Dakota Access Pipeline, both became the center of disputes over their technical and material capacities that revealed the complexity of the assemblages associated with oil production. In both cases, the coercive mechanisms of the state, the economic interests of producers and refiners, as well as the environmental, cultural, and historical situation of the pipeline routes played roles in the completion of the project (Estes 2018; Barry 2013). It is hardly surprising that archaeologists played a role in many of these colonial endeavors from colonial pursuits of Ottoman oil in the early 20th century (Havrelock 2015) to more formal heritage management in the 21st century (MacEachern 2010). The concept of the assemblage emphasizes the equal status of environmental, political, social, and even archaeological concerns to the technological, material, and economic character of these undertakings.

Carola Hein's notion of petroleumscapes offers spatial vocabulary for this often dispersed assemblages which serves to encompass the totalizing landscapes of produced by the petroleum industry (Hein 2022). This includes the usual features from the oil fields themselves with their wells, pumping stations, tank farms, and pipelines to the cluster of refineries and industrial facilities associated with global port cities such as Houston, Rotterdam, Philadelphia, Gujarat (India), and Singapore (Hein 2018; Hein 2022). Petroleumscapes also describes the spaces shaped by the rise of the automobile and changes to urban, suburban, and rural space to accommodate the needs of personal and commercial transportation. This extends petroleumscapes from restricted spaces of industrial production to our everyday lives. An archaeology of oil production that stops short at considering oil's distribution and use, for example, might overlook evidence for how oil producers created demand for products that resulted from oil refining methods and technology or supported visions of the world that assumed abundant petroleum based energy. At the same time, the idea of

the petroleumscape has proposed form of oil heritage which articulates the significance of individual sites within historical networks of production. The sites associated with the now largely closed refineries around the port of Dunkirk in Northern France reflect the city's century-long place in the global oil industry which also includes ancillary industries, worker housing, and the polluted soils that will invariably shape the community's future (Hein 2018). In many ways, abandoned fragments of global petroleumscales represent spaces of supermodernity where, as Alfredo González-Ruibal has observed, the hyperabundance of both visible and invisible material created forms of ruin carved out from the nearly incomprehensible scale of the flows produced by the liquid, late modern world (González-Ruibal 2008).

For González-Ruibal there also exists a temporal dimension to supermodernity. As an archaeological period supermodernity accelerates the overrepresentation of the present in our material assemblages. This overwrites the evidence for other periods and destroys the latent potential of the past to produce different futures. A supermodern present formed by petroleum extraction, production, and consumption accentuates pasts that culminate in a world made possible by fossil fuels. Alberto Toscano, for example, has argued that the presence of oil often produces "retropolitical" conditions that dictate a nation's or a community's political and economic development (Toscano n.d.). In these situations, wealth derived from oil represent the short circuiting of developmental models prevalent in the colonialized world (e.g. Chakrabarty 2000). These models assume only wealth derived from increasingly industrialized labor can also produce the necessary social and political "improvements" required for stable, democratic, and compliant regimes. Thus, oil like so many supermodern developments created conditions in petroleum producing states where they are "always-already failing" and this, in turn, justifies continuing colonialist attitudes, interventionist policies, and rapacious economic strategies designed to liberate these states and regions from the source of their misfortune.

Consistent with these supermodern tendencies, the petroleum industry sees the past and the future primarily in terms of its value in the present. Contemporary attitudes toward archaeological sites, for example, represents them as cultural resources of value to the present. Thus, mitigation or monetary compensation can offset damages or destruction in the name of economic and political strategic interests. In this way, oil has the capacity to transform archaeological remains from the past into fungible resources that occupy the same balance sheets as technological, political, and social costs involved in the extraction, transportation, and distribution of oil. The cultural resource management operations supported by oil, then, represent one element in the supermodern process of oil production, which renders all global places interchangeable (Ferguson 2005). A broadly defined archaeology of oil production could extend to include a critique of how the value of oil in the present dictates the value of the past (Havrelock 2015). This process is fundamentally similar to the way that oil reserves represent future value as collateral for present wealth.

## **The Bakken**

An archaeology of oil production that considers the impact of oil on our conception of time itself imagines an archaeology of oil production that effectively constitutes a totalizing archaeology of modern existence. The Bakken oil patch in western North Dakota offers a more tangible case study of part of the contemporary petroleumscape. The Bakken and Three Forks oil formations

exceeds 200,000 square miles and extends from the North Dakota-South Dakota border into Saskatchewan and from central North Dakota to eastern Montana. Starting in 2012, the North Dakota Man Camp Project sought to document and analyze workforce housing in the Bakken at the peak the 21st century Bakken oil boom (Caraher et al. 2017). Our work in the region allowed us to develop a familiarity with not only its history as an oil producing area but also as a dynamic, modern landscape continuously shaped extractive industries.

The earliest history of oil extraction in the Bakken begins in the late 1920s when Big Viking Oil Company and the Standard Oil Company of California sunk a series of deep test wells into a formation known as the Nesson Anticline along the Missouri River in Williams County, North Dakota. These wells did not come into commercial production. In 1951, however, the Clarence Iverson #1 Well nearly Tioga, ND did produce at commercially viable level and the H.O. Bakken #1 well drilled in the same year gave the oil producing formation and the fields centered on the Nesson Anticline their name (Conway 2020 for a survey of this boom). These wells produced “sweet,” easy to refine, North Dakota crude oil and initiated the first of three North Dakota oil booms. The late 1970s witnessed a second oil boom in the region, triggered in part by the global oil crisis earlier in the decade, and reinforced the potential viability of North Dakota oil fields. It also revealed the limits of conventional drilling to extract oil from the “tight” shale layers of the Bakken and indicated that conventional techniques would limit the profitability of the Bakken formation to periods of exceptionally high oil prices. The development of hydraulic fracturing and horizontal drilling technologies in the early 21st century initiated the third Bakken Boom and the emergence of fracking made it possible to extract Bakken “sweet crude” in more cost effective ways. These technical improvements invariably led to growing estimates of the size and potential profitability of recoverable oil from the Bakken formation, and since 2014 the state’s 16,700 productive wells have produced over 1 million barrels of oil per day, despite the fluctuations in global oil marks.

The long history of oil production in the state of North Dakota has received only sporadic attention. Various surveys in the state, for example, have documented significant well sites including the Iverson #1 Well and the H.O. Bakken #1 well, and they have acquired state site numbers. Other forms of oil infrastructure, including pipelines and gas processing plants, also have received inventory numbers in the state archives. Unlike other major oil producing states, however, none of the petroleum related sites have received nomination to the National Register of Historic Places or undergone HAER documentation. In its most recent historic preservation plan, however, the state has recognized “Petroleum” as a significant context theme for the state and this suggests that more comprehensive documentation is possible (North Dakota State Historic Preservation Office 2021). More significantly, as has been the case globally, the history of petroleum production has shaped the archaeological landscape of the state as surveys and excavations associated with the routes of pipelines, gravel pits, well pads, and other infrastructure have provided windows into the state’s and the region’s past.

The irregular efforts to document the material remains of oil production in the state and the ephemerality implied in the concept of the “boom” motivated the research program of the North Dakota Man Camp Project. This project focused primarily on workforce housing and the emergence of so-called man camps along major routes through the area. These temporary housing facilities served the thousands of short term laborers who arrived in the Bakken both to work in the oil industry and to take advantage of economic opportunities that the influx of oil workers created. The

largest and most sophisticated facilities formed massive compounds capable of accommodating thousands of workers and providing meals, recreation, and even water treatment facilities. Many more workers, however, found accommodations in smaller facilities, RV parks, or in quasi-legal camps in shelter belts, abandoned small towns, and, perhaps more famously, the Walmart parking lot in Williston, North Dakota.

The camps themselves reflected negotiation between architectural forms dictated by the requirements of mobility and the expectations of domesticity created by suburban traditions (Caraher et al. 2017). As a result, the requirement of resource extraction not only required housing for the expanded workforce in the oil field but also influenced the form of that housing. Narrow housing units designed to travel on the roads or by rail powered by vehicles consuming gasoline or diesel embedded the life of oil workers within spaces literally shaped by oil. Worker's efforts to adapt their RVs and mobile homes to the requirements of life in the oil patch, however, often violated these streamlined forms. The most distinctive addition involved the construction of mudrooms made of scap wood and set perpendicular to the narrow length of the units. Thus, the mudrooms compromised their mobility of the units and like flotsam blocking the flow of a creek, attempted to establish a kind of fixity during a boom defined as much by the fluidity of oil as human and financial capital.

Our efforts to document and study these workforce housing sites led us to situate them in an expansive Bakken petroleumscape (Caraher and Weber 2017). At the height of the boom, towering drill rigs and more modest workover rigs, used for well maintenance, arose in syncopated rhythms across the flat prairie horizon. Fracking sites consisted of dense, low-slung nests of pipe, pumps, and trucks often in the various colors of major fracking companies: red for Haliburton and blue for Schlumberger. Fracked wells nestled amid tanks, pumps, and pipes disappear and marked by the familiar bobbing grasshoppers of sucker-pumps, often painted tan to blend into the low prairie hillsides. The pumps standing on concrete well-pads and surrounded by rectangles of rust-red scoria gravel. Recent improvement in drilling rigs have allowed companies to drill a series of wells on the same well pad and as a result, more recent well pads often have more pumps. Interspersed with pumping wells are flares burning off gases associated with the oil drawn from the Bakken formation, low shoulders of pipelines protruding from the ground, and signs for deep injection wells used to dispose of "processes water" used in the fracking process. Tank farms, truck stops, food trucks, man camps, and fenced yards full of well casing and equipment, cluster at discernable nodes throughout the region.

Human movement through the oil patch follows the tidy grid section line roads and major thoroughfares. Rail lines and unit yards often shadow the main roads in the area and offers more visible links between the extraction and mid-stream transportation of the region's sweet crude oil. The regular appearance of mile-long unit trains marked with the code "1267" on the old Great Northern Railroad's Hi Line and in various rail yards across the state connects the flow of Bakken oil with larger collection networks. The tragedies in Lac-Mégantic and a similar, but less devastating explosion in Casselton, North Dakota serve as painful reminders of the volatility of this cargo and the extent of its reach. While these surface routes structure human encounters with the productive landscape of the oil patch, they also obscured the flow of the various liquids and gasses from well sites. The efficient routes of pipelines for oil, gas, and wastewater crisscross fields on their way to gathering stations, tank farms, the Hess gas factory in Tioga, and deep injection wells. Efforts to

clean up from the 2013 Tesoro oil spill which dumped over 800,000 gallons of oil in a field north of Tioga, revealed the presence of abandoned and apparently undocumented well pads demonstrating how the negotiation of a crisis in the present can reveal unexpected evidence for the past.

In the broader context of sites and movements, workforce housing appears as momentary nodes in the network of human capital. These nodes reflect the consolidation of labor at the intersection of financial resources and the physical and historical environment in much the same way as drill sites, pipeline crews, and railyard crews. The ephemerality of these sites reflect the insistent present created by the speed of capital in global markets and the always accelerating ability to subdue the intransigency of millennia of geology, the remoteness of the region, and the variability of the seasons. In other words, the spatial reach of financial capital, labor, and ultimately the oil itself facilitates the rapid consolidation and dissipation of the material traces of human activities in the region.

The flow of oil and people form the backdrop for the protest camp that emerged near Cannonball, North Dakota at the intersection of the Missouri River and the Dakota Access Pipeline (DAPL) in 2016. Superficially, this camp had parallels to the early workforce housing encampments present across the Bakken, but unlike these momentary aggregation of human capital, the DAPL protest camp revealed how alternate forms of temporality can disrupt the functioning of Bakken petroleumscapes. On the surface, the DAPL protest movement crystalized around the vulnerability of the Standing Rock Indian Reservation water intakes to the route of the pipeline beneath the Missouri River. Nick Estes's thoughtful analysis of this protest, however, emphasized that it represented not a single response to a particular event, but part of a history of indigenous resistance to colonial control over the land and resources and a responsibility to preserve indigenous landscapes that embody ancestral knowledge, contemporary life ways, and future generations (Estes 2018). In this context, the pipeline made manifest how the rapacious desires of the present overwhelming the indigenous past (Beisaw and Olin 2020). The capital that funded the pipeline anticipates and requires the continued flow of oil from the Bakken despite the proximate risks associated with oil spills and the longer term vulnerability of the world to the destabilizing impacts of climate change.

## **Conclusions**

The archaeology of the oil production demands an attention to the liquidity of both oil itself and the networks of labor, financial capital, and communication that make oil valuable in the contemporary world. As a result, the archaeology of oil production involves documenting both individuals sites and recognizing their places within expansive petroleumscapes. These petroleumscapes not only constitute the spatial and material aspects of oil production and consumption, but also the social, technological, economic, and political institutions that rely upon and make oil production possible. This invariably requires that we recognize oil production as a historically constituted component of the modern world. In doing so, archaeologists have the opportunity to break down the temporal domination of the present and to reveal how even the massively destructive powers of globalized, supermodernity possesses historical contingency. By pulling apart the foreshortened experience of booms and busts, emphasizing the ephemeral and occluded traces of earlier phases of the present, and recognizing the sometimes forcible assertion of

pasts that will not succumb to the urgency of supermodernity, an archaeology of oil production offers a distinct critical perspective on the modern world.

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