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Class and Nature in the Oil Industry of Northern Veracruz, 1900–1938

Myrna I. Santiago

Edward L. Doheny, Cruz Briones Rodríguez, and countless American drillers met in northern Veracruz in the early 1900s, but their experience of place differed so much an observer might have never guessed they shared the same geography. In 1900 Doheny, an oil magnate who multiplied his fortune many times over in northern Veracruz, for example, was moved by the “beautiful and awe-inspiring scenery[:] . . . rivers of clear blue-green water; . . . a forest so dense[;] . . . [and] jungle-covered country which extends clear to the harbor of Tampico.”¹ In 1913 he affirmed categorically and without a hint of irony that the petroleum companies “have been a blessing to the communities in which they have operated,” congratulating himself for paving Tampico’s streets with his asphalt and turning the port into “one of the happiest communities of any city in the world.”² Briones Rodríguez, an oil worker, was more succinct and critical in his recollections. He described northern Veracruz as “the devil’s collection of plagues.”³ American drillers working in Mexico left little testimony, but their actions were recorded by photographers and travelers who witnessed a life defined by risk and danger. The differences were rooted in the class relations that ruled the industry; that is, class position profoundly shaped how the men viewed and experienced the natural world around them.

Class is not yet an explicit concern of environmental history. The field is growing robustly among Latin Americanists, but labor does not figure much in the literature.⁴ Similarly, environmental history is not prominent in labor and working class history.⁵ But looking at environmental history from a labor perspective and looking at labor history from an environmental

perspective is fruitful and rewarding. Insofar as historians are practitioners of the craft of disaggregating generalizations in favor of specifics, disentangling the “humans” of environmental histories into constituent groups (for example, classes) sheds light on the very dynamics that explain changes (or continuities) in the interactions between humans and nature. That is, although humans as a species modify, destroy, or protect their environments, not all of them share the same views or experience, wield the same amount of power, and play the same role in the process. Doheny, Briones Rodríguez, and nameless American drillers worked and lived in the same place at the same time, yet they might as well have inhabited separate universes because the social class they belonged to created wildly divergent realities for each one. While Doheny’s testimony was plentiful, workers were more circumspect about how they felt or what they thought about nature and their place within it. Their testimony is parsimonious. Yet there is plenty of information about their fortunes, and that material can help the historian reconstruct the men’s lives. Doing so with ecology in mind can lead us to see how class relations are embedded in environmental history, as the occupational ladder in the work “environment” becomes the point where workers and the natural world meet and interact. Thus, a focus on the social organization of labor reveals that the labor hierarchy determined, in many ways, everyone’s experience in and of nature.

To be specific: those at the top of the socioeconomic structure wielded more power over nature than did those at the bottom. Likewise, the upper classes exerted significant control over the lives and energies of human beings of the lower classes in any given environment.⁶ That dual authority positioned the upper echelons of the companies as masters of nature’s creatures, subordinate men included. Yet there were gradations of domination down the occupational ladder among workers themselves. Drillers and craftsmen occupied an intermediate position between the big bosses and the less skilled bulk of the workforce. They exercised some level of control over their environment through their skills and supervisory roles, but they were exposed to extreme bodily danger on a daily basis. Laborers—Mexicans all and the lowest rung on the ladder—were the most vulnerable. They were subject to high levels of occupational risk, toxic environments, tropical disease, and the vagaries of weather. Those differences underlined the intense class conflicts that characterized the oil industry for decades, leading Mexican oil workers to develop a strong sense of nationalism alongside a blistering critique of foreign capital. In time, the environmental, ideological, and class turbulence in oil country became an issue of national importance. Thus, Mexican oil workers played a crucial if not fully recognized

role in the single most important display of Mexican nationalist fervor in the twentieth century—the nationalization of the oil industry decreed by President Lázaro Cárdenas in March 1938.⁷ The nexus of labor and environmental history, then, deepens and enriches our understanding of both the Mexican Revolution and modern Mexican history and adds a new, environmental, dimension to the history of the politics of energy production in the world.

A Sense of Place, Before and After

The Mexican oil industry was born at the opening of the twentieth century in northern Veracruz. The exact location was the Huasteca, so named after the dominant indigenous population, the Huastecos, or Téenek.⁸ Until 1900, the Huasteca was a tropical rainforest, the northernmost tropical rainforest in the Americas. Its most prominent feature was the mass of trees that covered the territory, but the landscape was composed of more than just trees. There were streams and waterfalls and the confluence of two of Mexico's most important rivers, the Tamesí and the Pánuco. The seasonal rains, which included hurricanes in the late summer and fall, flooded all waterways, forming and feeding numerous lakes and lagoons between the two ports that flanked the Huasteca, Tampico (in Tamaulipas) and Tuxpan. The precipitation also maintained the marshes and bogs that surrounded the lagoons and lined the rivers and streams, as well as the mangroves that hugged the coast along the Gulf of Mexico. Fish, shellfish, and mussels abounded in that environment. They provided food for numerous species of birds, both local and migrant, and for amphibians and reptiles, from frogs and turtles to caimans. Inland, the forest provided habitat for a diverse population of flora and colorful or fearsome fauna, including *guacamayas*, snakes, *jabalí*, monkeys, jaguars, and insects capable of inflicting much suffering upon humans.⁹

The human inhabitants of the Huasteca were also diverse. Although their numbers were not great, the population was a mixture of indigenous farmers, mestizo *rancheros*, and a few *hacendado* families of colonial Spanish descent trying to transform the rainforest into pasture. That desire had a history dating to the sixteenth century and had been the cause of incessant conflict with native peoples. Through the colonial period and the whole of the nineteenth century, peasant farmers and cattle ranchers had battled over the ecology of the Huasteca. At the end of the century, they had reached a stalemate. Then the oilmen landed.¹⁰

In 1900, Texas was awash in oil. That fact persuaded two very astute men that the neighbor to the south might also be equally rich in fossil fuels. After all, nature did not recognize fictitious borders drawn by statesmen. Both men came to the Huasteca as experts in the exertion of power over nature and workers. Both had a history of causing dramatic ecological change. The first was Doheny, an American entrepreneur who owed his millions to the transformation of the Los Angeles scrublands and beaches into a forest of wooden oil derricks and pools of petroleum. The second was Weetman Pearson, an Englishman whose profession, by definition, transformed the environment: he was a civil engineer. Pearson had already left a deep ecological imprint in Mexico. He had been the successful director of the drainage works for the Valley of Mexico, the man who claimed to put an end to the floods that had plagued Mexico City since Cortés destroyed Tenochtitlan in the sixteenth century.¹¹ In four short decades, the oil companies the two men founded and others that followed altered the Huasteca forever.

The oilmen were never conflicted about using their power over nature. They appreciated the landscape before them as unique and beautiful, to be sure. Pearson, for instance, took friends on tours of the “jungle.”¹² Doheny, meanwhile, built a special herbarium for Huasteca specimens in Los Angeles to re-create “the jungle” in his arid backyard.¹³ For both entrepreneurs, the very existence of so much foliage was proof of the absence of energetic men to make the land “productive.” They identified human effort, that is, labor, with a specific, manufactured landscape, one incompatible with a rainforest. It never occurred to them that the Huasteca was already a man-made landscape after thousands of years of human occupation. What the oil tycoons saw instead was a “wilderness,” a land going to “waste” because the local population was lacking in ambition, wanting in application and clearly unacquainted with the notion of “progress.”¹⁴ Progress was how the early twentieth-century oilmen understood capitalist economic development and what justified ecological change.¹⁵

As soon as they incorporated their companies in Mexico, the oilmen initiated the great transformation of the Huasteca rainforest. Flooding the forest with thousands of workers from the countryside and abroad, the oil barons erected an impressive industrial apparatus. It included fourteen refineries, two thousand miles of pipeline, dozens of pumping stations, thousands of storage tanks for crude oil, miles of roads, railways, telegraph and telephone lines, thousands of wells, one airport, and three full-service oil ports of different sizes: Puerto Lobos, Tuxpan, and Tampico. As the number of companies chasing black gold multiplied into the hundreds, the forest

fell to the workman's machete, its verdure suddenly replaced by blackness. Oil spilled from wells and broken pipelines blanketed foliage, waterways, sand dunes, swamps, and beaches. The "gusher" wells that made Mexico famous exploded and burst into flames—"blow-outs," as they were called, spreading oil, fire, and fear far and wide.¹⁶ Fuel-soaked rivers and streams caught fire, at times reaching oil tankers and detonating them like matches on dynamite.¹⁷ Pollution on that scale had no precedent in the history of the Huasteca. Neither did that level of environmental destruction. The oil industry spared no ecosystem. No mangrove, marsh, coastal sand dune, or estuary escaped its stranglehold. The rainforest was no exception. On the ground, the industrial apparatus of oil, including extraction, refining, transportation, and shipping, translated into an ecological rampage envisioned as progress. In forty years of exercising power over nature, the oilmen destroyed the rainforest. In the process, they also enforced a class regime that determined relations not only among humans but also between human beings and nature.

Class and Nature

The same men who dictated the fate of the forest designed the system of class divisions and relations that would rule in the Mexican oil industry and shape how workers experienced life in the tropical rainforest. The founders of the industry established a rigid occupational hierarchy embedded with the same racial categories that they used to classify the workers in the United States and oil fields everywhere.¹⁸ The top echelons—executives and geologists—were white, Americans or Europeans. The half-dozen Mexican engineers the companies hired were never promoted to executive status.¹⁹ The master craftsmen and the drillers, the indispensable working-class men of the industry, were also exclusively white, as in the United States. The oil barons barred Mexicans from these positions. Mexican craftsmen were hired as assistants, never as masters. The executives reserved the overwhelming majority of Mexican workers for manual labor. Thus the oil companies organized and managed some 2,500 to 4,000 foreigners and possibly upwards of 45,000 Mexicans at the peak of employment in 1921, to tap Mexico's black gold.²⁰

The class hierarchy the executives crafted governed not only the organization of the workplace but also the social and environmental spaces outside work. All facilities in the industry were segregated according to skin color, with "whites-only" dining halls, dormitories, hotels, housing complexes,

infirmaries, and recreational clubs. The quality of the physical structures, the spatial locations, and the services offered in each improved according to the employment category of the worker. In addition to the sting of social categorization based on artificial constructions, that hierarchical structure meant vastly different encounters with nature for each occupational layer. For executives, the tropical rainforest was a malleable location that they could alter through their control of labor for profit, comfort, and recreation. Working-class men, both foreign and Mexican, by contrast, encountered nature through work.²¹ Neither group of workers assumed control over the environment they inhabited like their bosses did. They interacted with their natural environment through the course of the day based on their working conditions. Yet their commonalities ended there. As recognized masters of their craft, foreign workers were steps above in the occupational hierarchy, and that status afforded them protections laborers lacked. Coupled with the premiums the oil barons conferred upon foreign men because of their nationality and race, the privilege this small group of men enjoyed was considerable, extending well beyond substantially higher wages. For the lowest rung on the occupational ladder, Mexicans all, extracting oil from the Huasteca never ceased to be a risky proposition, with nature representing a hostile and dangerous force that battered them in many and often unexpected ways.

Lords of the Fields

The oil executives were confident men accustomed to using and displaying power and control over men and nature alike. They celebrated their prowess thus:

Discovery and development of the known oil fields in Mexico were the achievement of British and American pioneers, who came into this region at a time when it was a little-known, pest-infested, tropical wilderness. . . . In the face of almost insuperable obstacles, they made remarkably rapid progress. In less than 10 years Mexico had begun to attract worldwide attention as an oil producer. Development of the famous “Golden Lane,” one of the world’s greatest known oil fields, discovered in 1910, placed Mexico in the first rank among oil-producing countries. The transformation was profound. Tampico, a sleepy little fishing port, became almost overnight a thriving city. . . . In the oil fields, where formerly the tropical jungle supported only a few Indians, 50,000 oil field workers, largely Mexicans, found immediate, continuous employment.²²

Yet industrial infrastructure did not describe the whole picture. The oilmen changed the face of the tropical rainforest for other reasons as well. To “make living bearable” in the tropics, the executives ordered the remaking of the landscape in the image of the one they had left abroad: company men replaced the rainforest with imitations of the English countryside or Southern California. Pearson’s firm *El Aguila*, for instance, surrounded employee homes with “English gardens” planted with exotic flora such as rosebushes and begonias.²³ The Americans, for their part, assigned Mexican workers to surround executives’ homes with white picket fences and Los Angeles landscaping: palm trees uprooted and replanted in neat rows, citrus trees for shade, and imported seed for green front lawns and grassy backyards.²⁴

To relax from the arduous tasks of bringing progress to tropical landscapes and peoples, the upper echelons of the oil companies engaged in recreational activities that reaffirmed their mastery over nature. With Mexican guides and porters to lug equipment, they hunted the fauna already under pressure from habitat loss as wells replaced trees: jaguars, pumas, ocelots, wild turkeys, and other aptly named “game.” Alligators were harpooned. Prize fishing for shark or tarpon, a marine fish that swam upstream through increasingly oil-polluted river waters to spawn and could weigh over one hundred pounds, was all the rage. Other sporting activities among oil bosses entailed hiring laborers to eliminate the habitats of local flora and fauna and replace it with “slick greens” for golf.²⁵

By virtue of their class position, then, the oilmen reshaped nature to fit their desires, whether in the form of a profitable industrial site or as a familiar, comfortable, and recreational space. In production and recreation, at work and at play, oil executives played the role of masters of nature rather “naturally,” as befit members of a social class accustomed to command. Elsewhere in the class divide, nature looked and felt considerably different.

Masters of Their Craft

Drillers and craftsmen, the middle rung in the occupational hierarchy of the oil industry, knew nature intimately but not with the intimacy of domination their executive bosses manifested. These men were hands-on, immediate agents of environmental change, digging up the earth’s entrails with their coarse tools, channeling fossil fuels through man-made contraptions and inventions, and transforming crude oil into usable liquid energy. They worked in the great outdoors for eight to twelve hours per day (depending on the decade), wrestling “resources” from the earth through considerable

physical effort and technical skill, that is, exercising control over their bodies and craft. In the process, they met the forces of nature head-on, and they were not always the winners. Their value to the oilmen lay in their skill, so they merited investment in a harsh natural environment. The experience of this small group of men in the Huasteca rainforest is revealed by looking at health, safety, and leisure patterns.

Skilled workers from outside the Huasteca did not know necessarily that health conditions in the tropical rainforest were difficult. The bosses, however, were well informed and careful about providing protection for the men who would make them rich. The Huasteca hosted a variety of microscopic life that caused humans trouble: dysentery, malaria, yellow fever, smallpox, and bubonic plague were all part of the landscape. To combat them, the executives made sure their craftsmen enjoyed the best sanitation money could buy at the dawn of the twentieth century: potable water, indoor plumbing, fans and ice to tame high temperatures and humidity, mosquito netting, window screens, clean bedding, and showers and baths. By all accounts, such public health measures were quite successful in keeping foreign workers as healthy as possible.²⁶

Safety, however, was a separate issue. Oil was an inherently dangerous enterprise, flammable from extraction to consumption. Accidents routinely occurred, including many directly related to the natural chemical composition of Huasteca crude. The petroleum was heavy in hydrogen sulfide, a gas capable of poisoning any creature that inhales it. Drillers were keenly aware of the dangers, as the gas hissing was the first sign of having tapped oil. When the whistling hydrogen sulfide or the gushing oil caught fire, the risks increased exponentially. American worker testimonials recalled deaths of foreign and Mexican workers killed under such circumstances.²⁷ The photographs of executives and workers taken when the Huasteca well Cerro Azul No. 4 came in epitomize the class differences among foreigners in their relationship and interactions with nature. The higher echelons look very bright in their light-colored and spotless suits and hats, while the workers, “all white American citizens,” are totally black, drenched in oil from head to toe, their whiteness limited to their eyeballs.²⁸ For the drillers, then, nature was unpredictable and dangerous. They did not presume to be masters of the ecology surrounding them. At work, their position was a defensive one, where mastery over their craft was not only what made them a living but also what provided them protection, preventing them from becoming the next victims of the nature of crude oil.

The impulse to shield themselves from danger was most obvious in another way: white working-class men transferring risks to Mexican workers.

The “wages of whiteness” that American social structure conferred on fair-skinned workers in the United States also applied in Mexico.²⁹ Foreigners became supervisors in the Mexican oil fields, a position in the labor hierarchy that allowed them to avoid some dangerous tasks by assigning such tasks to their Mexican subordinates. Thus, foreign white working-class men in the Mexican oil industry also received an environmental wage, paid by the companies’ efforts to keep them disease-free and by the bodies of Mexican men.

Nevertheless, the class differences among the foreigners were deep and significant in environmental terms. Although the craftsmen and the executives shared the social privileges of whiteness in Mexico, the two did not mingle. Craftsmen were entitled to membership in corporate social clubs by virtue of nationality and skin color, but they did not take advantage of the opportunity. There is no record that they played golf, joined prize-fishing expeditions, or engaged in outdoor adventures with their superiors. By all accounts, they spent their scant off-duty hours in the male entertainment centers that sprang up throughout oil country: casinos, bars, and brothels.³⁰ Given how hazardous oil extraction was, craftsmen seem to have decided that indoor recreational activity was more appealing than chasing tropical rainforest fauna.

Laboring Mexicans

If the occupational status of craftsmen meant some protection from the natural dangers of oil extraction, the men at the bottom of the ladder enjoyed no such considerations. Such an assertion may seem contradictory in light of the fact that Mexican men held nature in their hands, literally and often. They chopped down the trees, dug up the mangroves, cleared away the marshes, and filled in the swamps as needed for the infrastructure of oil extraction and refining. Like the foreign craftsmen, Mexicans knew nature through work. Yet precisely because their labor entailed sheer physical exertion in intimate and extensive bodily contact with the natural world, they were the humans most exposed to the risks and dangers of oil production in a tropical environment. If master craftsmen survived the grueling task of petroleum extraction largely healthy and minimally mutilated, hundreds of Mexicans did not. Work for laborers was a daily struggle against the weather, injuries and disease, toxic chemicals, fire, and workplace hazards of all types, including those passed on to them by working-class men steps above in the hierarchy.

The lowest-ranked workers, for starters, were affected by weather more than anyone else. Company housing for Mexican workers was consistently built in the floodplain, as whatever high ground existed was reserved for lodging foreigners. That location meant that seasonal rains and hurricanes—an inconvenience and annoyance to those higher up in the labor hierarchy and the terrain—were disastrous for Mexicans. Their quarters were always the first to flood and be carried away by raging rivers.³¹

Mexican workers also suffered the most from the biological specimens that crowded the forest they were uprooting. Malaria, the fallout of the rainy season, downed laborers by the thousands, killing countless every year. Epidemic disease (including yellow fever, influenza, and bubonic plague) ravaged Mexicans. In large part, squalid living conditions accounted for those illnesses: company-issued housing for Mexican workers lacked the most basic public health necessities, including running water and toilets that were routine among foreigners. Not until the labor unions and local authorities instituted basic public health services in the 1920s did epidemic diseases abate among Mexican working-class men and their families.³²

Similarly, the men who did the heavy lifting and menial labor in the construction process risked life and limb on a daily basis. Demolishing a rainforest was terribly dangerous work. Broken bones were common as Mexican workers chopped down trees. Being crushed to death under falling tree trunks or branches was also not unusual.³³ Laying pipeline to transport crude oil from the wells to the refineries or loading docks posed serious dangers as well. Workers pulled muscles, dislocated shoulders, sprained ankles, tore ligaments, or twisted joints with regularity in this task. Others, such as carpenters, blacksmiths, and storage tank builders, reported hand, foot, and head injuries on a regular basis. Many more men complained of sore muscles and heat exhaustion from working up to fourteen hours in high temperatures and humidity.³⁴

Chemical agents also affected low-level workers more than anyone else. At work, Mexican men, like their foreign working-class brethren, were exposed to the full toxicity of hydrocarbons in all their permutations: crude oil and distillates such as gasoline, kerosene, solvents, and other refined products. The “irritating gases” they inhaled on a daily basis affected their overall health. Refinery workers, for instance, exhibited symptoms of mild poisoning: nausea, heartburn, headaches, eye irritation, sore throats, tremors, and difficulty breathing.³⁵ But while many craftsmen and virtually all executives could escape “the stench of petroleum” after the work shift by living on breezier higher ground, Mexican laborers could not. In the camps, the companies erected laborers’ quarters next to wells or tanks, exposing

workers to steady chemical emissions.³⁶ In Tampico the story was similar. Workers' houses were next to plants that released toxins into the air and water, polluting both and endangering the health of workers and their families.³⁷ The location of housing engineering by executives, then, spared them considerable exposure while they condemned Mexicans to life in toxic neighborhoods. Pollution, therefore, was a class issue as well.

Although fire was a risk everyone shared, Mexican workers experienced its dangers most. On the worksite, Mexican laborers were the ones ordered to become fire fighters whenever a well or a tank ignited. Needless to say, the men received no training for that job. Equipment for fire control was all but nonexistent throughout the period of foreign ownership of the industry, so the men confronted the flames with nothing more than shovels, thin metal chest shields, and "wet sac[k]s around their heads and hands."³⁸ Exposure to fire, moreover, followed Mexican workers home. Their housing quarters, by company design, were built in the shadow of storage tanks, making them susceptible to tank accidents. When one storage tank blew, there went the neighborhood.³⁹

Lastly, individual Mexican workers were subjected to the dangers foreign workers passed on to them. The most common example involved work in confined spaces, such as measuring the amount of oil in a storage tank or diving into a recently emptied boiler or still to clean its hydrocarbon residues. In every instance, containers were extremely hot and exuded poisonous compounds that could kill a man within minutes if vigilant safety precautions were not followed. There is no evidence that supervisors offered to Mexican workers the experimental protective respiratory equipment that circulated prior to nationalization.⁴⁰ So it was that the men at the bottom of the occupational hierarchy, Mexican oil workers, were the bull's-eye for natural phenomena of every possible kind. Their experience of and in nature was quite distinct from that of foreign white working-class men and utterly remote from that of the oil barons. The reality of class was that the unequal distribution of power among the different groups of men in large part determined the way those men moved through their common environment. All of them lived in the same place, but they all inhabited very different spaces.

Environment and Class Warfare

The conditions Mexican workers faced in the oil industry did not go unchallenged. On the contrary, Mexican workers were notoriously riotous and militant from the 1910s through the 1938 nationalization. Scholars

recognize that the petroleum industry was a site of intense class conflict in the first decades of the twentieth century.⁴¹ Labor conditions made Mexican workers quite angry, “naturally.” I suggest that this class struggle had environmental dimensions. Likewise, the battles between the Mexican revolutionary state and the oil companies, well documented in the historiography, were also fights over nature. At issue was who would control nature and for what ends. The Mexican oil workers were key players in these conflicts, which ultimately led to nationalization of the industry in 1938, although the credit does not typically accrue to them.⁴²

Workers did not speak the language of environmentalism, of course. The times availed them of radical discourses coming out of anarchism and the nationalism of the Mexican Revolution itself, which coincided with the oil boom of 1910–21. The language adopted by the oil workers’ movements assailed oilmen as “bloodsucking” capitalists bleeding workers for profit and as shameless imperialists bent on extracting every last drop of Mexico’s petroleum wealth. Such ideas made clear the connection between the exploitation of nature and the exploitation of men.⁴³ As radicals and nationalists, Mexican oil workers denounced the negative effects that oil had on the land.⁴⁴ But their militancy was not about the land. It was about economic conditions and discriminatory treatment. Yet they also placed concerns over health and safety “very near the surface,” as American workers did contemporaneously.⁴⁵ Therein lay the environmental aspects of this particular labor struggle: the men’s health was affected by the toxic hydrocarbons they were exposed to at work and at home and the microscopic rainforest life that produced illness in men living in suboptimal conditions. Those were the aspects of nature and the interactions with the natural environment that Mexican oil workers highlighted, the ones that affected them directly in daily life. Indeed, scholars who have catalogued oil workers’ demands have found that while wages and ill treatment topped the list, health and safety were next.⁴⁶

Health and safety issues thus became a hidden environmental battleground ensconced in class relations and labor struggles in the oil industry. The 1924–26 strikes that won recognition for the unions and the first collective contracts included extensive health and safety issues that revealed a broad definition of occupational health. Gulf company strikers, for instance, demanded compensation for accidents that resulted in death or injuries such as the loss of fingers, legs, eyes, ears, or teeth, as well as face burns; a hospital with “modern comforts and advantages”; and prostheses for those who lost limbs at work. They also formally requested individual safety equipment: gloves, helmets, chest shields, and boots. Furthermore, they wanted free

health care and full pay in case of illness contracted on the job. That included “even,” as they labeled it, those illnesses contracted on account of “poor climate.”⁴⁷ Men from the Pierce refinery made similar demands, including double pay for work in “unhealthy” locations.⁴⁸ The men from Cerro Azul were equally adamant. In 1925, their demands included environmental elements: double wages for work inside bodies of water and oil containers, and when pipelines broke.⁴⁹ Men at El Aguila’s Potrero del Llano camp submitted a similar document in 1926, demanding compensation for accidents, a hospital, safety equipment, and lower temperatures for tank cleaners or double wages for working inside tanks over 55°C (122°F).⁵⁰

The companies fought back hard against the workers on all counts. Forced to sign contracts because of strikes and disruptions in production, they failed to deliver on contractual obligations. Instead, they fired hundreds and closed facilities. In 1932 only three refineries remained open in Tampico. Those who kept their jobs endured wage cuts of up to 50 percent.⁵¹ They did receive some safety equipment and free care at existing clinics, but the companies found ways to dismiss claims for health issues, including docking pay for sick days and summarily firing injured workers.⁵² If the men wanted any compensation for health problems, they had to sue before the arbitration boards, the official bodies established by the 1917 Constitution to resolve employer-employee conflicts. Arbitration files, as a result, bulge with such cases in both Veracruz and Mexico City.

The arbitration cases reveal the radically different interpretations that the workers and the companies had developed regarding health and safety. While the companies held workers individually responsible for their bodily integrity, workers subscribed to a more complex and integrated approach. They held the companies responsible for workers’ health and safety on the job, the neighborhood, and the rainforest in general—in other words, all the spaces where the men interacted with the natural world. Workers did not disentangle spaces. Oil effluents permeated all three. Furthermore, the companies recruited workers from other ecosystems and brought them into the tropics, in essence leading the men to cross ecological boundaries they might not have trespassed otherwise. The assaults workers encountered at work, at home, and in the tropical rainforest were one package, the direct consequence of oil work. Thus, the men held the companies responsible for their health and safety throughout. As José Ramírez argued before the arbiter, “Well, doesn’t the businessman or owner pay from his own pocket the repairs that have to be done to the machines when these wear out in the production process?”⁵³ Workers deserved the same treatment as machines, at the very least.

All those experiences crystallized in the final confrontation between the companies and the workers, the November 1936 union contract. The unified oil unions, representing some 13,000 to 18,000 men, submitted their most ambitious list of demands ever. Chapter 8 alone, entitled “Of Illnesses and Medical Care in General,” for example, had forty-three separate clauses, while chapter 9, “Compensation, Safety and Industrial Hygiene,” demanded in clauses 56 and 131 that the companies work to prevent industrial accidents and take “all precautions that science demands.”⁵⁴

The proposed contract illustrated the negative ways in which workers encountered nature in its many guises. It included clauses that demanded double salary for dangerous jobs, including work more than ten meters (thirty-three feet) above ground as well as those involving environmental hazards, such as temperatures exceeding 100°F or areas of “excess gas,” pipeline repair, tank and still cleaning, oil spill remediation, and work in the tropical rain.⁵⁵ Workers demanded salary-and-a-half for any work that required handling toxics, corrosives, acids, sulfur, phosphorus, dynamite, gunpowder, and “similar substances.”⁵⁶ Furthermore, the men demanded recognition of certain ailments as occupational diseases, including malaria and tuberculosis, on top of comprehensive health care not only for active workers but also for retired men and their families.⁵⁷

The negotiations were extremely hard-fought, yet ultimately they failed. After 120 days of talks, the workers went on strike at the end of May in 1937. They shut down 178 oil installations for 13 days. With gasoline lines stretching for miles, the president sent the contract to state officials for resolution. The conflict reached the Supreme Court while wildcat strikes rocked the industry. In a decision that was heard around the world, the court ruled against the companies in March 1938. The companies rejected the ruling, and Mexican petroleum workers called for a general strike, prompting the president to take drastic action. Cárdenas chose expropriation, closing a chapter in the history of oil in Mexico and opening another one in the history of oil companies abroad.⁵⁸

Conclusion: Hidden Histories of Class and Nature

Humans interact with nature as a species. They utilize, modify, destroy, or protect nature together. But just as class shapes and molds attitudes, tastes, worldviews, and relations among humans, it also shapes and molds how humans experience their natural environments. Taking class into account in this way complicates and reveals hidden histories of nature and class.

Thinking about class sharpens our understanding of the relationship between labor and nature and gives us a more fluid and complex view of nature itself. The notion also suggests that every class evokes a different definition of nature rooted in its social practices and relations.⁵⁹ The oil barons, an undeniably important group of the upper class in the twentieth century, showed through their praxis a definition of nature that conforms best to the American contemporary popular view of it: as wilderness, a place to be tamed, enjoyed, or exploited, depending on the purpose or occasion. But the same was not true for working-class men in the oil industry. For them, nature exhibited additional dimensions: microorganisms, chemical compounds, fire, heat, weather. That is not to say that the great oil capitalists of the early twentieth century were not aware of those other facets of the natural world or were not affected or even hindered by them. It is just that their class position removed them from close proximity to such uncomfortable features and sheltered them from the most negative effects. Working-class men suffered nature differently, in their work exposures, in their safety and health, in the pollution in their neighborhoods and the shifts of weather cycles.⁶⁰ Disassembling class into its occupational hierarchy, moreover, allows us to see just how such skill-and-power arrangements made nature operational in the daily life of workers. Thus, finding ways to bridge labor and environmental history allows us to highlight aspects of nature that would otherwise be obscured, to participate in the continuous cultural reinvention and reinterpretation of nature.

Linkages across discrete fields can unveil other hidden histories. The Mexican oil industry during the period of foreign ownership is a good example. Labor, environment, class, and nature intersected in explosive ways, both literally and figuratively. Mexican workers confronted the oil companies over wages, hours, and working conditions, as most workers of the world still do. Those struggles and discourses, nevertheless, had nature imbedded in them, pieces that might not be obvious at first glance but are integral to such battles and constitute a critical part of the history of how working-class men and women have lived and interpreted their subjectivity in their environments. The radicalism and nationalism that Mexican oil workers embraced and manifested over decades was in fact tinged with environmental concerns. Indeed, the same is true of President Lázaro Cárdenas's nationalization decree. As several environmental historians have documented, Cárdenas was quite conscious of the importance of nature in the economic life of the nation. He took conservation and what he called "the salvation and protection of nature" seriously.⁶¹ No one would go as far as calling Cárdenas Mexico's first "green" president or his ideology a "green

nationalism,” but historians have begun to recognize his environmental sensibilities. A joint labor and environmental history approach shows how much the oil workers pushed him to deliberate on the relationship between labor, nature, and nationhood.⁶² What has yet to be fully explored is how working-class (and peasant) voices and struggles in general informed Cárdenas’s praxis regarding the management of nature. Without a doubt, hidden histories lie in wait there. The invitation to uncover them is open to all interested historians.

Notes

1. Doheny quoted in PanAmerican Petroleum and Transport Company, *Mexican Petroleum* (New York: PanAmerican Petroleum and Transport Company, 1922), 16–17.

2. Testimony of Edward L. Doheny, United States Senate Committee on Foreign Relations, *Investigation of Mexican Affairs*, 66th Cong., 2nd sess. (Washington, D.C.: Government Printing Office, 1920), 2:236–38.

3. Interview with Cruz Briones Rodríguez, conducted by Lief Adleson on 28 November 1976 in Tampico, Tamaulipas, Proyecto de Historia Oral (PHO), Instituto Nacional de Antropología e Historia, 4/52.

4. On Latin America, see Steve Marquardt, “‘Green Havoc’: Panama Disease, Environmental Change, and Labor Process in the Central American Banana Industry,” *American Historical Review* 106, no. 1 (February 2001): 49–80, and “Pesticides, Parakeets, and Unions in the Costa Rican Banana Industry, 1938–1962,” *Latin American Research Review* 37, no. 2 (2002): 3–36.

5. Christopher Sellers, “The Dearth of the Clinic: Lead, Air, and Agency in Twentieth-Century America,” *Journal of the History of Medicine and Allied Sciences* 58, no. 3 (July 2003): 255–91.

6. Elite control over nature and large numbers of humans is one of the hallmarks of civilization and one of the causes of environmental degradation since antiquity, according to Sing C. Chew, *World Ecological Degradation: Accumulation, Urbanization, and Deforestation, 3000 BC–AD 2000* (Walnut Creek, Calif.: Altamira Press, 2001). See also Angus Wright, *The Death of Ramón González: The Modern Agricultural Dilemma*, 2nd ed. (Austin: University of Texas Press, 2005).

7. Myrna Santiago, *The Ecology of Oil: Environment, Labor, and the Mexican Revolution, 1900–1938* (Cambridge: Cambridge University Press, 2006), 340–41.

8. Bernardino de Sahagún, “Quiénes eran los huastecos?” in *Huastecos y Totonaecos: Una antología histórico-cultural*, ed. Lorenzo Ochoa, 133–34 (Mexico City: Consejo Nacional para la Cultura y las Artes, 1984).

9. Santiago, *Ecology of Oil*, 19–27.

10. *Ibid.*, 27–30, 37–57.

11. *Ibid.*, 64–66.

12. Bess Adams Garner, *Mexico: Notes on the Margin* (Boston: Houghton Mifflin, 1937), 118.

13. Margaret Leslie Davis, *Dark Side of Fortune: Triumph and Scandal in the Life of Oil Tycoon Edward L. Doheny* (Berkeley: University of California Press, 1998), 88.

14. Santiago, *Ecology of Oil*, 15, 76, 101, 115.
15. Carolyn Merchant refers to the changes that capitalism wrought as an “ecological revolution.” See Carolyn Merchant, *Ecological Revolutions: Nature, Gender, and Science in New England* (Chapel Hill: University of North Carolina Press, 1989).
16. Santiago, *Ecology of Oil*, 102, 108–9, 115, 118–19, 125–29, 133–34.
17. *El Mundo*, 20, 28, and 30 January 1927.
18. On the United States, see Nancy Lynn Quam-Wickham, “Petroleumocrats and Proletarians: Work, Class, and Politics in the California Oil Industry, 1917–1925,” PhD diss., University of California, Berkeley, 1994. On the organization of labor in oil fields abroad, see Robert Vitalis, *America’s Kingdom: Mythmaking on the Saudi Oil Frontier* (Stanford: Stanford University Press, 2007); and Miguel Tinker Salas, *The Enduring Legacy: Oil, Culture, and Society in Venezuela* (Durham, N.C.: Duke University Press, 2009).
19. Testimony of Edward L. Doheny, *Investigation of Mexican Affairs*, 220, 228–29.
20. Jonathan C. Brown, *Oil and Revolution in Mexico* (Austin: University of Texas Press, 1993), 319; Informe, 18 November 1921, Departamento del Trabajo (hereafter DT), Archivo General de la Nación (hereafter AGN), caja 326, exp. 3.
21. See Robert White, *The Organic Machine* (New York: Hill and Wang, 1995).
22. Huasteca Petroleum Company, *Expropriation* (New York: Huasteca Petroleum Company and Standard Oil Company of California, 1938), 1–2.
23. H. S. Wood to DeGolyer, Tampico, 1 November 1917; U. S. Wood to Messrs. Peter Henderson & Co., Tampico, 11 September 1917; and H. S. Wood to DeGolyer, Tampico, 11 September 1917, Papers of Everett Lee DeGolyer (hereafter ED), Southern Methodist University (hereafter SMU), Box 117, Folder 5377.
24. The irony of the Los Angeles landscape the oilmen reproduced in Mexico is that it was itself the product of men like Doheny who transformed it from a desert and semidesert into their own interpretation of a Mediterranean landscape. *Boletín del Petróleo* 25, no. 4 (April 1928), photographic section; *Boletín del Petróleo* 23, no. 4 (April 1927), photographic section.
25. Charles W. Hamilton, *Early Day Oil Tales of Mexico* (Houston: Gulf Publishing Company, 1966), 47, 130; DeGolyer Diary, 27 and 29 February 1916 and 5 March 1916, SMU, ED, Box 105, Folder 5.
26. John Spender, *Weetman Pearson, First Viscount Cowdray, 1856–1927* (London: Cassell and Company, 1930), 106; Interview, Doheny Mexican Collection, Occidental College, Los Angeles, California, Labor File I, #958, #2724.
27. Transcribed interview with W. M. Hudson, Oral History of the Texas Oil Industry Collection, 1952–1958, Dolph Briscoe Center for American History, University of Texas at Austin, Tape 79, p. 35.
28. Mexican Petroleum Company of Delaware, *Cerro Azul No. 4: World’s Greatest Oil Well* (New York: DeVinne Press, n.d.).
29. See David Roediger, *Wages of Whiteness: Race and the Making of the American Working Class* (London: Verso, 1991).
30. Hamilton, *Early Day Oil Tales*, 24–25, 34, 40.
31. Santiago, *Ecology of Oil*, 187–88.
32. *Ibid.*, 169–70, 189–93.
33. *Aurelio Herrera vs. El Aguila*, Archivo General del Estado de Veracruz (hereafter AGEV), Junta Central de Conciliación y Arbitraje (hereafter JCCA), caja 65, exp. 65,

1927; Informe del Inspector del Trabajo A. Araujo, AGN, Departamento del Trabajo (hereafter DT), C 489, exp. 9, 1922.

34. Gerente General to Presidente Municipal, 20 August 1919, Archivo Histórico del Ayuntamiento de Tampico (hereafter AHAT), exp. 85-1919; Gerente General to Presidente Municipal, 24 March 1920, AHAT, exp. 78-1920, no. 1693; Leopoldo Alafita Méndez, "Trabajo y condición obrera en los campamentos petroleros de la Huasteca, 1900-1935," *Anuario* 5 (October 1986): 187-96.

35. W. A. Jacobs and C. W. Mitchell, "Métodos industriales usados para la eliminación de los gases tóxicos, altamente sulfurosos, desprendidos del petróleo mexicano," *Boletín del Petróleo* 21, no. 1 (January 1926): 1-2.

36. Verna Carleton Millan, *Mexico Reborn* (Cambridge, Mass.: Riverside Press, 1939), 215.

37. Santiago, *Ecology of Oil*, 195-96.

38. Arthur B. Clifford, "Extinguishing an Oil-Well Fire in Mexico, and the Part Played Therein by Self-Contained Breathing-Apparatus," *Transactions of the Institution of Mining Engineers* 63, no. 3 (1921): 3.

39. Santiago, *Ecology of Oil*, 194.

40. One piece of protective equipment was a gas mask, but the instructions for its use were in English. "Rules and Precautions to be Observed When Using the Proto-Self-Contained Breathing Apparatus," AGN/DT, caja 224, exp. 24, 1919.

41. Alan Knight, *The Mexican Revolution*, vol. 1, *Porfirians, Liberals and Peasants* (Lincoln: University of Nebraska Press, 1990), 406-7.

42. Santiago, *Ecology of Oil*, 330-41.

43. *Sagitario*, 25 October 1924.

44. Santiago, *Ecology of Oil*, 271-73.

45. David Rosner and Gerald Markowitz, eds., *Dying for Work: Workers' Safety and Health in Twentieth Century America* (Bloomington: Indiana University Press, 1986), ix.

46. Armando Rendón Corona, Jorge González Rodarte, and Angel Bravo Flores, *Los conflictos laborales en la industria petrolera*, vol. 1, 1911-1932 (Mexico City: Universidad Autónoma Metropolitana, 1997), 131-33, 171.

47. Pliego petitorio, "Dificultades: Mexican Gulf, 1924," AGEV, JCCA, caja 40.

48. Rendón Corona, González Rodarte, and Bravo Flores, *Los conflictos*, 1:230.

49. Petitions, Huasteca Strike in Cerro Azul, January 1925, AGEV, JCCA, caja 48.

50. *Sindicato de Obreros del Petróleo de Potrero del Llano vs. El Aguila*, 1927, AGEV, JCCA, caja 59, exp. 24.

51. Santiago, *Ecology of Oil*, 310-11.

52. Enclosure No. 1, Visit of President Cárdenas to Tampico and Its Effect on the Local Strike Situation, 11 January 1935, Record Group 59, General Records of the Department of State, Records of the Department of State Relating to Internal Affairs of Mexico, 1930-1939, National Archives, College Park, Maryland, 812.001—Cárdenas, Lázaro/40.

53. *José G. Ramírez vs. East Coast Oil Company*, AGN, Junta Federal de Conciliación y Arbitraje, C 22, exp. 15/928/130, 1928.

54. Collective contract proposal, AGN, Departamento Autónomo del Trabajo, caja 154, exp. 4, 1937.

55. *Ibid.*, clauses 53-55.

56. *Ibid.*, clause 56.

57. Armando Rendón Corona, Jorge González Rodarte, and Angel Bravo Flores, *Los conflictos laborales en la industria petrolera y la expropiación*, vol. 2, 1933–1938 (Mexico City: Universidad Autónoma Metropolitana, 1997), 155–58.

58. Santiago, *Ecology of Oil*, 330–39.

59. On the multiple meanings of nature in the United States, see William Cronon, ed., *Uncommon Ground: Rethinking the Human Place in Nature* (New York: W. W. Norton and Company, 1983).

60. The literature on environmental justice addresses the issue of pollution and neighborhood. See, for example, Laura Pulido, *Environmentalism and Economic Justice: Two Chicano Struggles in the Southwest* (Tucson: University of Arizona Press, 1998); and Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder, Colo.: Westview Press, 2002). To examine how the concept is being applied to Latin America, see David V. Carruthers, ed., *Environmental Justice in Latin America: Problems, Promise, and Practice* (Cambridge, Mass.: MIT Press, 2008).

61. Quoted in Simonian, *Defending the Land of the Jaguar: A History of Conservation in Mexico* (Austin: University of Texas Press, 1995), 87; Christopher R. Boyer, “Contested Terrain: Forestry Regimes and Community Responses in Northeastern Michoacán, 1940–2000,” in *The Community Forests of Mexico: Managing for Sustainable Landscapes*, ed. David Barton Bray, Leticia Merino-Pérez, and Deborah Barry, 27–48 (Austin: University of Texas Press, 2005); Emily Wakild, “‘It Is to Preserve Life, to Work for the Trees’: The Steward of Mexican Forests, Miguel Angel de Quevedo, 1862–1948,” *Forest History Today* (Spring/Fall 2006): 4–14.

62. Santiago, *Ecology of Oil*, 289–90, 351.