The Black Mesa Syndrome: Indian Lands, Black Gold

By Judith Nies

BLACK MESA is NOT BLACK and it is not a mesa. It is four thousand square miles of ginger-colored plateau land in northern Arizona, a distinct elevated landmass the shape of a bears paw. On a map, the Black Mesa coal field looks like an inkblot on a Rorschach test, following the contours of the Pleistocene lake it once was. Over thousands of years the vigorous forests and plant life embraced by the lake decayed into a bog which in turn hardened to coal—some twenty-one billion tons of coal, the largest coal deposit in the United States.

Until 1969, the coal lay untouched and so close to the surface that the walls of the dry washes glistened with seams of shiny black. With a long- term value estimated as high as \$100 billion, it lies completely under Indian reservation lands, for Black Mesa is also home to some sixteen thousand Navajos and eight thousand Hopis. In 1966, the Hopi and Navajo tribal councils—not to be confused with the general tribal population— signed strip-mining leases with a consortium of twenty utilities that had designed a new coal-fired energy grid for the



urban Southwest. Under the umbrella name WEST (Western Energy Supply and Transmission), the utilities promised more air conditioning for Los Angeles, more neon lights for Las Vegas, more water for Phoenix, more power for Tucson—and for the Indians, great wealth.

Today, thirty years after the strip mining for coal began, the cities have the energy they were promised, but the Hopi and Navajo nations are not rich—that part of the plan proved ephemeral. Instead, Black Mesa has suffered human rights abuses and ecological devastation; the Hopi water supply is drying up; thousands of archeological sites have been destroyed; and, unbeknownst to most Americans, twelve thousand Navajos have been removed from their lands—the largest removal of Indians in the United States since the 1880s.

In the following pages, I want to untangle what went wrong on Black Mesa. When you look at the map of Arizona on this page, you see a series of lines radiating out from the Black Mesa coal field. Each line represents the enormous political and economic powers that have shaped the contemporary reality of this region. And yet, for twenty-five years, the American press, with few exceptions, has presented the Black Mesa story as a centuries-old land dispute between two tribes. The story that has not yet emerged is about the syndrome in which transnational corporations take and exploit indigenous lands with the cooperation of host governments. I want to hold up Black Mesa as a domestic example of that global syndrome, and I want to ask why our free press has largely been unable to tell the truth about Black Mesa.

Chester arthur's square Surrounding the ink blot of the coal deposit on the map above is an almost perfect square of land— one cartographers minute by one cartographers minute—drawn by President Chester Arthur in 1882. His Executive Order created a reservation for Indians as the government might "see fit to settle therein."

Why would Arthur, a New Yorker and a product of political patronage, give a land grant three-fourths the size of Connecticut to a population that consisted of eleven hundred Hopis, three hundred Paiutes, and a few hundred Navajos? The answer has far less to do with safeguarding Indian residency than with timber, copper, and coal. Chester Arthur was a rich man with rich tastes and no stranger to the alchemy of transforming government service into economic wealth. As far as we know, he never visited the West, but he was knowledgeable about

Western railroad charters, land grants, and mineral exploration leases. He understood the trick of transforming wilderness into public domain lands, and then into prospecting leases. He understood how business and government worked hand-in-glove. In those days, land development companies were frequently subsidiaries of the railroads, and several years before the transcontinental railroad reached Arizona in 1881, the U.S. government had already explored, surveyed, and mapped the mineral riches of the Arizona Territory. Also in advance of the railroads, the government sent the Army to subdue the "savage tribes," such as the Navajos in the north and Apaches in the south, who blocked access to Arizona's resource-rich lands.

"The only minerals discovered in this region are coal and copper," wrote surveyor A. M. Stephen in 1879 to his superior, General Howard, who also held the title of Indian Inspector. "The coal deposit is lying between Oraibi and Moenkopi," the report continues. "The only white people... are about twenty families of Mormons at Moenkopi [sic] and Tuba City." Stephen accompanied his survey with a map of the coal deposit location.

Arthur understood immediately the implications of the map. If the Mormon families were allowed to continue to settle and improve their lands, they would, according to the provisions of the Desert Lands Act of 1877, be able to buy 160 acres at \$1.25 per acre. They would also gain title to whatever mineral resources lay beneath those acres. But if the same lands were removed from the public domain and designated as Indian reservation lands, they would no longer be open to white settlement. On December 17, 1882, Arthur signed the Executive Order Reservation of 1882 "for the use and occupancy of the Moqui [Hopi] and such other Indians as the secretary of the interior may see fit to settle therein." By this act, Arthur kept control of the mineral resources of the region, and set them aside for another day.

The West, American myth tells us, was a place where there was real freedom—where you came with what you could carry and you made a life from it. The government was meddlesome, an intrusion, an invasion into the individual resourcefulness of the Western pioneers. That is the myth. In reality, the government and big business made it all happen.

John Boyden and the Peabody Leases

Chester Arthur's square remained untouched for seventy-five years, into the 1950's when a Utah lawyer named John Boyden found a way to transmute the coal of Black Mesa into gold. A bishop in the Mormon Church and a former U.S. attorney, Boyden's dapper, modest appearance masked a fierce ambition and the hardball skills of a trial attorney. Beginning in 1957, he began to craft the legal, political, and economic strategy which would open up the coal deposit of Black Mesa to major energy development.

As a first step in his plan, Boyden needed the cooperation of the tribal council of one of the Indian tribes on Black Mesa. He approached the Navajo, who turned him down. He then went to the Hopi, whose leaders were bitterly factionalized between traditionals and progressives. Lacking a governing tribal council since 1938, the Hopi had no legal entity to hire Boyden, but as a law partner of the man who wrote the 1946 Indian land claims law, Boyden was knowledgeable about both tribal council politics and Bureau of Indian Affairs policies. Accompanied by the government Indian agent, he set about traveling to all the Hopi villages, and talking to all the Hopi men who spoke English and who had been to government boarding schools. In the process, Boyden created a new tribal council.

Boyden was controversial from the minute he assumed his new role. One of his first actions was to introduce a bill in Congress creating a special court to allow the Hopi to sue the Navajo to clear title for the coal lands. Thousands of Navajos had settled on Black Mesa, and no energy company would take a chance on a lease that could be contested. Of the bill, Hopi leader Dan Katchongva wrote prophetically in 1956, "If [this bill] becomes law, it will destroy our Hopi way of life, religion and law. ...The majority of the Hopis are against him as a lawyer."

The traditional Hopi were furious with Boyden's role and saw his presence as an intrusion from Washington. Caleb Johnson, a Hopi student at Princeton Theological Seminary writing to the Senate on behalf of traditional Hopi priests, made the astute observation that leadership of the Hopi and the boundary issue were linked. He

added that leadership had a religious component and that the man Boyden had chosen as Hopi chairman was not respected. "The chairman of the tribal council," he wrote, "is a man who does not have a good record and has been convicted of a felony in a Federal court."

Others opposed the bill too, including the U.S. Attorney General William Rogers, on grounds that Indian land issues and reservation boundaries derived from treaties that were outside American property law. But in 1962, the special court did clarify title to the subsurface mineral estate and divided the surface rights. The Supreme Court declined to hear an appeal, and in 1966 the leases were signed. At the top of the 1882 boundary (see map) are two irregular rectangles. These represent some sixty-five thousand acres leased by the Hopi and Navajo tribal councils to the Peabody Coal Company of Kentucky, the largest coal producer in the United States. The leases were signed secretly by the tribal councils and the company in 1966, with no larger tribal referendum on either side. The Navajos tried to block the mining equipment by setting up blockades in the

road. The Hopi priests eventually sued their own tribal council, claiming the leases were illegal because they had been signed without a quorum.

John Boyden remained the Hopis lawyer for thirty years. Although he presented himself as a humble country lawyer working for the Hopi pro bono, his fees—paid by the government out of monies held in trust for the Hopi—totaled \$2.7 million, a figure revealed only after a Freedom of Information suit filed by the Native American Rights Fund.

Kennecott Copper and Strip Mining

Today at Black Mesa, buckets the size of a four- story building peel the topsoil off in mile-long strips—a technique called strip mining. Instead of burrowing into the earth to find the mineral seam, the land over the mineral deposit is removed. Bulldozers shape the underlayers into enormous slag heaps, workers dynamite the exposed mineral bed, and steam shovels load the coal into massive transport trucks. By the time the coal is extracted, the land has turned gray, all vegetation has disappeared, the air is filled with coal dust, the groundwater is contaminated with toxic runoff (sulphates particularly), and electric green ponds dot the landscape. Sheep that drink from such ponds at noon are dead by suppertime.

In 1966, Kennecott, an international mining company seeking to diversify, bought Peabody Coal. Four years later, John Boyden moved his law offices to the tenth floor of the Kennecott Building in Salt Lake City, overlooking the Mormon Temple. As Boyden leveraged this land issue into a huge case, he violated a basic tenet of legal ethics: he represented two sides in the same case, working simultaneously for the Hopi tribe and for Peabody Coal. Although his former partners maintained it was "a mistake" that Martindale Hubbell, the national legal directory, listed Peabody Coal as one of Boyden's firms clients, legal scholar Charles Wilkinson published an article in a 1996 issue of Brigham Young University Law Journal reproducing Boydens correspondence with both parties. When Boyden wrote to the Peabody vice president as a Peabody attorney, he addressed him as "Dear Ed"; when he wrote to him as a Hopi attorney, he called him "Dear Mr. Phelps." Not surprisingly, Boyden had not done particularly well for his Hopi client in the lease provisions: low royalty rates (the two tribal councils split a royalty rate of thirty cents a ton at a time when the government royalty rate for coal extracted on public lands was \$1.50 a ton), few environmental safeguards, and no provisions for renegotiation. The worst, however, was the provision that allowed Peabody to pump four thousand acre-feet (approximately a billion gallons) of water a year to run a coal slurry line.

The Black Mesa Coal Slurry Pipeline

The dotted line on the map that extends 273 miles from Black Mesa to the Mohave Generating Station represents this slurry line, the only operating coal slurry line in the United States. A slurry line, for those who have never seen one, operates like a giant garbage disposal, grinding huge chunks of coal into nugget-size pieces through enormous steel blades, mixing them with water, then sluicing the batter through a pipeline.

For this operation, Peabody Coal has pumped a billion gallons a year for almost thirty years from the Black Mesa aquifer, the sole water source for the Hopi and Navajo peoples of the region. In these three decades, groundwater levels have dropped, wells and springs have dried up, and the entire ecology of Black Mesa has

changed: plants have failed to reseed and certain vegetation has died out. "The water has become more valuable than the coal," exclaimed Hopi Marilyn Masayesva at the government's environmental hearings. "The water is priceless. No amount of compensation can replace the source of life for the Hopi and Navajo people. It is absolutely immoral and irresponsible for the federal government to support a continuation of mining activities." Ms. Masayesva was one of hundreds of Hopi and Navajo who testified in 1989 about the negative effects of mining on their lands and against the government's extension of the mining permit. Thousands of years of water had been used up in a few decades. The governments environmental impact report concluded, however, that water "was outside the scope of their study" and the mining continued.

ONE COLD MARCH DAY in 1990, I visited the office of Black Mesa Pipeline, Inc. A dusting of snow still lay on the ground. In the distance, a weak sun illuminated the drag lines and I glimpsed cone- shaped piles of coal waiting to be fed into the conveyer belt. Lowell Hinkins, the operations manager, assured me that there was no connection between the Indian wells going dry and the operations of the slurry. The pipeline wells went a thousand feet deeper than the shallow wells of the Hopi and Navajo, he told me. He also confirmed that, yes, "Black Mesa is the only operating coal slurry line in the United States. The others are being built in China and Russia." I had just had seen a company video that claimed coal was bringing economic prosperity and the "finer things of life" to the Hopi and Navajo. But it is hard to define prosperity.

The effects of coal slurry pipelines on water tables are known, and in all-white communities where such pipelines have been proposed, citizens have had enough political voice to defeat them. The larger truth about the Black Mesa pipeline must include the fact that it was built in part as an experiment—to test and improve technology primarily intended for other countries, like China and Russia. The Bechtel corporation had designed the pipeline in conjunction with a new design for an electrical generating station—the Mohave Generating Station of Laughlin, Nevada—which was also a test of technology for dewatering coal slurry. The owners of the new plant were Los Angeles Water and Power, Southern California Edison, Nevada Power (Las Vegas), and the Salt River Project (Phoenix)—all members of the energy consortium, WEST. In terms of population served by the utilities, their combined political power represented seven state governors, fourteen senators, and at least forty-eight Congressmen.

The Mohave Generating Station

When the Mohave plant was completed, Bechtel's company magazine saluted it as "1.5 million megawatts for the West." Twenty-eight years later The Los Angeles Times observed, "The Mohave Generating Station is the biggest uncontrolled source of sulfur dioxide in the Southwest—a prime contributor to the gaseous haze that clouds visibility over the Grand Canyon."

Bechtel, of course, is famous for its multibillion dollar projects, and for shaping the politics and technology of the markets in which it does business. With forty thousand employees, Bechtel has built the three largest government-funded projects in U.S. history—the Hoover Dam, the Central Arizona Project, and the Central Artery Project in Boston.

When the Mohave plant opened in 1970, it raised new questions of strategic planning. A second plant, the Navajo Generating Station near Page, also engineered by Bechtel, was due to go on line in 1974. The two plants combined would require twelve million tons of coal a year for at least fifty years. Black Mesa would become home to the largest strip mine in the United States. What to do about the thousands of Navajos who lived in the way of the mining?

John Boyden was up to the challenge. He went back to Congress with new legislation to divide Black Mesa and give almost a million acres to the Hopi. By transferring land to the Hopi, who lived far away from the stripmining, Navajo residents would become trespassers on the newly designated Hopi land, and the cost of removing them would be borne by the government. To frame the issue for Congress, Boyden hired a public relations firm that created a largely fictional range war between the cattle-ranching Hopi and the sheepherding Navajo.

In 1974, Congress, somewhat distracted by Watergate, passed Boydens bill and granted the Hopi 900,000 acres. The law also provided for the physical removal of the Navajo (by the Indian Relocation Commission), but the problem, of course, was that there was nowhere for the Navajo to go.

Congress had no plans for alternative lands, no provisions for housing or health care or social services to acclimate the Navajo to an urban environment. Suicide and alcoholism became endemic among the displaced Navajo, but by the 1980s, when the Navajo and their supporters came to Congress to protest their situation, they had a hard time finding listeners. Peabody Coal had a new parent, a private holding company which included Bechtel. And by then, Bechtel was entrenched in government: Bechtels former president George Schultz was Secretary of State; its former legal counsel, Caspar Weinberger, was Secretary of Defense; and former director of Bechtel Nuclear, Ken Davis, was Assistant Secretary of Energy. The president of Peabody Coal served on Reagan's Energy Advisory Board.

The Navajo Generating Station at Page

While the Mohave Generating Station is a model of bad technology in the service of terrible land use, the Navajo Generating Station, at the Arizona- Utah border, is a case study of a political process out of control. As soon as the Mohave plant was completed, Bechtel moved its construction crews to the tiny town of Page, Arizona, overlooking the scenic Glen Canyon Dam, to begin construction on a second electrical generating station—another giant at 2,250 megawatts, the second largest utility station in the U.S. Somebody named it the Navajo Generating Station, a name rich in irony, since fewer than half of Navajo families have electricity. The U.S. government was the single largest owner. The Department of the Interior needed the electricity to run a federal water project, the Central Arizona Project (see map), locally known as CAP. CAP is a concrete highway for water—infrastructure that lifts the waters of the Colorado River over three mountain ranges in order to carry it to Phoenix and Tucson. This engineering feat involves siphons, tunnels, dams, reservoirs, and fifteen electrically powered pumping stations. "With enough money, anything is possible," an engineer told me when I asked about the economic rationale for growing crops by means of the most expensive subsidized water in the world. The power to run the fifteen pumping stations comes, of course, from Black Mesa coal.

The political issues raised by the Navajo Generating Station are unique. The majority owner of the plant is the Bureau of Reclamation in the Department of the Interior. Within the same interior department is the Bureau of Indian Affairs, the agency legally entrusted with safeguarding Indian lands and resources. Questions immediately arise: How can the U.S. government exercise its trusteeship responsibility toward Indians when one of its agencies is benefiting directly from the coal leases that it encouraged the Indians to sign, negotiated by lawyers that it had appointed? Did the BIA exercise its fiduciary responsibility in negotiating the leases on Black Mesa? Who reviews conflicts of interest within the government?

In an era of transnational corporations operating all over the globe, the methods of separating indigenous peoples from their lands and natural resources have outstripped the capacity of any agency or nongovernmental organization to monitor or regulate. In what forum can we debate and redirect such dealings, which have such profound effects on life itself?

THE LINE ON THE MAP that runs from Lake Havasu south to Tucson represent 335 miles of the most expensive water in the world. Phoenix and Tucson are located in the Sonoran desert, the hottest desert in North America, and the day I toured the control room of the Central Arizona Project, in August 1991, was a typical summer Phoenix day—113 degrees in the shade. I chatted with the operations manager, a retired Navy man who told me how they had built special bridges for wildlife crossings, fenced the aqueduct so that animals wouldn't drown, and implemented other engineering feats of environmental sensitivity. Looking at the pulsing computer screens and the operators who, with a few key strokes, could release millions of gallons of water from the Colorado River into grapefruit orchards and cotton fields hundreds of miles away, I wondered if it wouldn't be more sensible to farm in regions with a better water supply—like rain.

The Line That Isn't There

The line that isn't on the map is formed by a barbed wire fence: the new boundary of the Hopi reservation follows no known topographical feature. Shaped a bit like a thumb, it was drawn by John Boyden in 1974, the

same year that the Navajo Generating Station came on line and the same year that his little-noticed bill passed Congress. The Hopi Land Settlement Act divided Chester Arthur's 1882 reservation between the Hopi and Navajo.

Boyden drew the line so that it gave approximately nine hundred thousand acres to the Hopi, who did not live over the coal, and relocated, at taxpayer expense, the twelve thousand Navajos (and sixty Hopi) who did. The Hopi Land Settlement Act also renamed the newly delineated land as the Hopi Navajo Joint Use Area, Hopi Partition Land, and Navajo Partition Land. The final version was introduced by Utah Congressman Wayne Owens (who, when defeated in reelection, became a partner in Boyden's law firm).

In Los Angeles, air conditioners hummed. Las Vegas embarked on an enormous building spree to make gambling a family vacation. Phoenix and Tucson metastasized out into the desert—building golf courses and vast retirement developments with swimming pools and fountains. Few realize that much of the energy that makes the desert "bloom" comes from the Black Mesa strip mines on an Indian reservation. Even fewer know the true costs of such development.

The Syncline and Roberta Blackgoat

Over thousands of years the Black Mesa coal field was subjected to tectonic pressures and extrusions of molten rock hundreds of feet below the surface that caused the coal bed to fold and curve. Geologists call the curvature that comes close to the surface a syncline. (On the map, a syncline is indicated by a wavy line with a slash through it.) Roberta Blackgoat lives over a syncline. A Navajo who has lived on Black Mesa all her life, Roberta's cosmology tells her that she is inseparable from the land that surrounds her. When each of her children was born she buried his or her umbilical cord in her sheep corral to connect them to the land from which they come and the sheep who support them. (With sheep, the older Navajos say, "you've always got food on the table and clothes on your back")

When I visited her in February of 1991 I asked about the new boundary line and her view of the forces that dictated her relocation from land her family had lived on since the 1860s. "The coal," she answered with a shrug. She was sitting at her loom in the back of her hogan weaving. I sat on a sheepskin spread over a dirt floor. I had placed my tape recorder next to her loom. As we talked she repeatedly referred to the altar. Finally I asked, But where is the altar? Here, she answered impatiently. Eventually I understood that the altar was the spot where she was sitting, the hogan itself.

When I looked at the frame, I saw large logs, all placed in the direction they grew and in relationship to the sacred mountains of Dinetah, the land of the Navajo. A hogan, Roberta explained, is sung into place. Is there also a carpenter? I wanted to know. She shook her head. No carpenter. Songs. A ceremony brings a hogan into being. As we talked, I began to understand that a hogan replicates the Navajo universe in miniature, and that all human activity is directed towards remaining in balance with the earth and universal forces. Many Navajo people who move into the city often build a hogan in their backyards as a place to reestablish spiritual connection with the earth and to bring their lives into balance.

Roberta, whose grandmotherly appearance belies her forceful, astute leadership of the Big Mountain resistance, described to me a paradigm in which the earth is a sacred and living organism, in which human beings and the earth exist in a reciprocal relationship. This reciprocity is the foundation for her life. We are the people of the earths surface, she told me, and no more important than the winged creatures or four-legged beings. The day before, as we rode to Keams Canyon, she tried to translate this concept into Anglo terms. The church is everywhere, she said. Land is the repository for religion, economics, sociology, history, science. And that is why she couldn't leave her land. And what about the coal, I asked, in the hogan. The shuttle stopped. Roberta spoke very clearly. "The coal is the liver of the earth," she said. "When you take it out, she dies."

It was my turn to sit in silence. Separated by only five feet of space, we were occupying two different models of reality. I had been taught that land was a kind of primal flooring for human beings, of value only when prodded into productive use. Roberta was describing the earth as the living host for all life. She was talking about earths sustaining properties in a way that we, educated in the world of Western science, have only recently begun to call the biosphere.

How does one calculate the true costs of extinguishing such a complex culture?

True Costs and New Stories

Divide and conquer has a long history in America as a technique of removing Indians from their lands, a situation that is being replicated by transnational corporations throughout the world. As former United Nations Secretary General Boutros Boutros Ghali observed about the struggles of indigenous peoples, "Cultures which do not have powerful media are threatened with extinction. The instruments of mass communication remain in the service of a handful." Over the past twenty-five years over twelve thousand Americans have been removed from their lands. Over a billion dollars of taxpayers' money has been spent to accomplish this human rights abuse.

Yet this story has never made it onto the six o'clock news. Today's news must be presented simply, and dramatically— with plot, character, scene, motivation. A complex story that blends economics, politics, anthropology, history is hard to tell in our free press. And a story that examines fundamental corporate activities is hard to tell in a corporate-owned media. As recently as 1996, The New York Times called the struggle between the Hopi and Navajo "a centuries-old tribal dispute." In April 1997, The Boston Globe devoted thirty- three column inches to a story on the Hopi and Navajo boundary issue without once mentioning the word "coal" or stating that the largest strip mine in the United States operated on those same lands. In February 1998, The Los Angeles Times presented a new spin: it is better to keep polluting than to deprive the Indian tribes of their coal royalty checks. Cleaning up the Mohave plant (actually it is the Navajo plant that is the prime polluter) "pits the interests of the environment against the economic needs of some of the nation's poorest citizens—the Native Americans of the Southwest."The implications of that debate, as the Los Angeles Department of Water and Power general manager told us, provide "a sneak preview of the dilemmas to come as we try to grapple with the implications of global warming and air pollution in developing nations that depend on the energy industry."

Hopefully, that false syllogism will be refuted when the real story of how the Mohave plant was developed finds a public. To date, the news of events at Black Mesa has been shaped into the preferred narratives of corporate America—stories of corporate might grappling with economic progress, technological innovation, entrepreneurial capitalism, the settling of the American West, making the desert bloom. In the age of global capitalism in which corporations have bought the media, it is not surprising we see few stories about effective political resistance. Journalists look for a smoking gun in the corporate energy development on Black Mesa and, finding none, abandon the story. It is difficult to tell a story of legal theft, a story in which corporations have the political power to pass laws. But as the Navajo and Hopi have tried to explain, Black Mesa, once destroyed, will not come back. And we are all impoverished by the forces operating at Black Mesa, which degrade both culture and nature, and offer us instead a pseudoreality—a version of events that prevents clear analysis and creative thinking. We need new tools, new narratives, new stories—including stories about an economics that involves morality, an economics that helps us create the world we want to inhabit.

A YEAR AGO a delegation of Hopis and Navajos traveled from Arizona to the London stockholders meeting of Hanson's Ltd. (which had purchased Peabody in 1991) to protest the company's role in the devastation of Black Mesa lands and water. Lord Hanson called his security guards to throw the visitors out, but not before The Daily Telegraph reported their presence and took a photograph of Roberta Blackgoat offering a prayer. The prayer, she said, was crucial.

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