A better answer might be one implicit in Robert Temple’s book, *The Genius of China*, a history of Chinese science and technology published in 1998. According to Temple, the Chinese invented the moldboard plow by the third century B.C. Made of cast iron, the plowshare was shaped like a V, with the blade curving into the ground and the two arms arcing away like gull wings. Because the arms were curved, they turned the earth away from the blade, which both reduced friction and more effectively plowed the soil. (The “moldboard” is the curved plowshare; the name comes from *mold*, the Old German word for soil.)

The design of the moldboard plow is so obvious that it seems incredible that Europeans never thought of it. Until the Chinese-style plow was imported in the seventeenth century, farmers in France, Germany, Italy, the Netherlands, and other states labored to shave what amounted to a narrow slab of metal through the earth. “The increased friction meant that huge multiple teams of oxen were required, whereas Chinese plows could make do with a single ox,” Temple explained. The European failure to think up the moldboard, according to science historian Teresi, was “as if Henry Ford designed the car without an accelerator, and you had to put the car in neutral, brake, and go under the hood to change speed. And then we did this for 2,000 years."

European agricultural production exploded after the arrival of the moldboard plow. The prosperity this engendered was one of the cushions on which the Enlightenment floated. “So inefficient, so wasteful of effort, and so utterly exhausting” was the old plow, Temple wrote, “that this deficiency of plowing may rank as mankind’s single greatest waste of time and energy.” Millions of Europeans spent centuries behind the plow, staring at the blade as it ineffectively mired itself in the earth. How could none of them have thought of changing the design to make the plow more useful?

The complexity of a society’s technology has little to do with its level of social complexity—something that we, in our era of rapidly changing, seemingly overwhelming technology, have trouble grasping. Every society, big or little, misses out on “obvious” technologies. The lacunae have enormous impact on people’s lives—imagine Europe with efficient plows or the Maya with iron tools—but not much effect on the scale of a civilization’s endeavors, as shown by both European and Maya history. The corollary is that widespread and open trade in ideas is the best way to make up for the lacunae. Alas, Mesoamerica was limited in this respect. Like Europe, it was an extraordinarily diverse place with a shared cultural foundation. But where Europe had the profoundly different civilizations of China and Islam to steal from, Mesoamerica was alone in the world.

Or seemed to be, anyway.

About a hundred miles north of the Peru-Chile border, the coastal highway passes by an uninhabited beach ringed by a tall chain-link fence. The fence has an entrance with a gigantic, stylized statue of a woman with huge earrings. By the statue hangs a faded banner: *Bolivia Mar.*

When Bolivia declared its independence it had a territorial pseudo-polit that extended southwest from its Andean heartland through the Atacama Desert to the sea. The land was useless for agriculture but had four plausible seaports and huge underground deposits of prehistoric guano, which Chilean companies mined and shipped to Europe for fertilizer. (Bolivia, then as now impoverished, didn’t have the capital for this industry.) In 1879, Hilarion Daza, the illegitimate son of an Italian acrobat, seized power in Bolivia. Immediately he raised taxes on the Chilean-owned guano mines, which the previous Bolivian government had promised not to do. Outraged, Chile rolled its army into the area. In vain did Bolivia counterattack with its ally, Peru; Chile simply repelled their incompetently led forces and took over the entire territory, as well as a chunk of southern Peru. Ejected in an outburst of popular anger, Daza fled to Europe, taking most of Bolivia’s treasury with him.

Chile finally returned most of Peru’s territory in 1929 but never gave back any land to Bolivia—an outcome that nation has never accepted. To this day, Bolivia’s parliament has a representative from the lost maritime province. The Miss Bolivia contest always includes a contestant ostensibly from the coast. Maps are sold in which the conquered land is still part of Bolivia.

In a gesture to its longtime, long-suffering ally, Peru symbolically
gave two miles of its shoreline to Bolivia in 1992. Bolivia Mar—Bolivia-by-the-Sea—is a little island of Bolivia entirely surrounded by Peru. It has no facilities of any kind, so far as I could tell when I passed by. Private enterprise was supposed to build an industrial duty-free port in Bolivia Mar. Thus far the free market has not accepted the challenge. Every now and then parties of Bolivians drive down to Bolivia Mar to swim—a political gesture.

The main highway from Bolivia Mar to Bolivia itself follows the Osmore Valley, cutting a perfect sectional slice through Peru on the way. For the first fifteen miles the road climbs through a desert landscape almost devoid of settlement and prone to fog. Then the road hits a plateau and the fog dissipates. The landscape that comes into view is so dry that in most years the Osmore River simply disappears into the desert.

Around the small city of Moquegua the river hoves back into view and the highway abruptly pitches into the Cordillera Negra. The windshield fills with enough canyons, bluffs, mesas, and cliffs for a dozen Road Runner cartoons. Standing higher than its neighbors, at an altitude of about eight thousand feet, is a wide pillar of rock with a rounded, convoluted top that vaguely resembles the rounded, convoluted top of a human brain. The pillar is called Cerro Baúl. For about two hundred years, it was the sole meeting ground of two of the Americas’ largest societies—societies similar in scale to, say, the Maya realm, but much less well known.

The two states, Wari and Tiwanaku, were probably the greatest of the Inka’s forerunners, and certainly the predecessors from whom they took the most. In their separate ways, both were children of Norte Chico. They worshipped figures in Staff God poses, lived in networks of vertical exchange, and had public architecture with designs based on templates from the coast. But in other ways they were as different from each other as Sicily and Scandinavia. Of the two, Wari was the more conventional, centralized state. Based east of Lima in the Andes heights, it first became prominent in the sixth century A.D.—a bad time to be launching a nation on the Pacific side of South America. At about that time, Andean societies were assailed by the first of several decades-long droughts, paradoxically interrupted by El Niño–induced floods. Some polities may have disintegrated beneath the climatic assault, but Wari thrived. The principal reason for its success was its innovative techniques of terracing and irrigation, the latter being used to implement the former. Surprisingly, Peru has more arable land above nine thousand feet than below. By diverting snowmelt from the ever-present Andes icecaps to high farm terraces, Wari was able literally to rise above the drought and flooding of lower elevations.

The staple crop of the highlands was the potato, which unlike maize regularly grows at altitudes of 14,000 feet; the tubers, cultivated in hundreds of varieties, can be left in the ground for as long as a year (as long as the soil stays above 27°F), to be dug up and cooked when needed. Even frozen potatoes could be used. After letting freezing night temperatures break down the tubers’ cell walls, Andean farmers stomped out the water content to make dried chuño, a nigh-indestructible foodstuff that could be stored for years. (The potato’s cold toler-
ance spurred its embrace by European peasants. Not only did potatoes grow in places where other crops could not, the plant was an ally in smallholders' ceaseless struggle against the economic and political elite. A farmer's barnful of wheat, ry, or barley was a fat target for greedy landlords and marauding armies; buried in the soil, a crop of potatoes could not be easily seized.) Maize, though, was what people wanted, the grain of choice for the elite—it was what you made chicha from. Its prestige was another reason for Wari's success. Because terraces soak up more sunlight than steep slopes, maize can be grown at higher than usual altitudes on them; irrigation similarly increases the area available for maize farming.

In a process that Michael Moseley has likened to "patenting and marketing a major invention," the Wari passed on their reclamation techniques to their neighbors, bringing a thousand-mile-long swath of the Peruvian Andes under their cultural sway. A sign of their influence was the spread of the Wari religion, in which the figure archaeologists call Staff God was dominant—though the Wari transformed the staff, as if to remind others of their agricultural beneficence, into a stalk of maize. By the end of the first millennium A.D., Wari techniques had reclaimed more than a million acres of cropland from mountainsides that almost anywhere else would have been regarded as impossibly dry, steep, and cold. Today three-quarters of the terraces are abandoned, and the alpine landscape has not regained the productivity it had a thousand years ago. But until the Spanish conquest Andean valleys were so thoroughly punctuated by Wari-inspired terraces that to the Jesuit Bernabé Cobo they looked "as if they were covered with flights of stairs."

Wari's capital city, also named Wari, occupied an alpine plateau near the modern city of Ayacucho. Construction began in the first few centuries A.D. The city ultimately spread across two square miles, an array of two- and three-story buildings in compounds behind massive walls. Both peasant homes and great palaces were built in similar styles, according to William H. Isbell, an anthropologist at the State University of New York at Binghamton, and Alexei Vranich, an archaeologist at the University of Pennsylvania Museum of Archaeology and Anthropology. Everything was enclosed behind high, white walls, in what the two researchers described in 2004 as a hive of "repetitive, modular cells organized in high-walled geometric blocks."

There were no standout public buildings, no great public spaces, no spectacular vistas—only a thicket of walls and narrow streets strewn with garbage (archaeologists have turned up so few clean floors and surfaces, Isbell and Vranich wrote, "that it is apparent that Wari people experienced domestic refuse as benign and unthreatening"). Apparently the walls ringing and crisscrossing the city were intended for privacy, not protection; Wari was not located in an easily defended spot. Along the spine of the Andes the empire set up a string of a dozen administrative centers that were like smaller versions of the capital. These were not built with defense in mind, either. Indeed, there is little record of Wari warfare. Its supremacy was commercial and intellectual; it was based less on infantry troops than on innovative technology. All of which may explain some of its behavior in Cerro Baúl.

Wari emissaries arrived in Moquegua around 600 A.D., according to Patrick Ryan Williams and Donna V. Nash, Field Museum archaeologists who have been working there since the early 1990s. A simpler culture had already staked out the best farmland in the area. The Wari neither aggressively threw them out nor withdrew in dismay. Guided, one imagines, by instructions from headquarters, they quickly set up living quarters on Cerro Baúl itself. The big mesa is to this day regarded as an apa, an ancient spirit transfigured into rock. Thus putting a city directly on top of it was an arresting statement: Here we are.

On a practical level, living on a five-hundred-yard-long mesa was a daunting task. To supply water, the Wari carved a fifteen-mile canal through the mountains from the peaks to the bottom of Cerro Baúl, an engineering feat that would be a challenge today. 'And even that got water only to the bottom of the hill,' Williams told me. 'After that, it was bucket brigades.' As I huffed and puffed on the wickedly steep, thirty-minute hike to the summit, he invited me to imagine a continuous line of servants exchanging ceramic jugs (shuffling, brimful ones going up; light, empty ones going down) along the path, working day in and day out to provide water for the priests and princes above.

Small, rudely fashioned models of farmhouses and farmyards covered the top of the butte. Most of the models simply outlined walls, fences, and doors with loose stones, but some were elaborate con-
earth, this encounter would have been fraught with tension. And perhaps if Tiwanaku had been more like Wari there would have been immediate war. But Tiwanaku was so different in so many ways that ordinary expectations rarely apply to it. The celebrated anthropologist Clifford Geertz has half-jokingly suggested that all states can be parceled into four types: pluralist, in which the state is seen by its people as having moral legitimacy; populist, in which government is viewed as an expression of the people's will; "great beast," in which the rulers' power depends on using force to keep the populace cowed; and "great fraud," in which the elite uses smoke and mirrors to convince the people of its inherent authority. Every state is a mix of all of these elements, but in Tiwanaku, the proportion of "great fraud" may have been especially high. Nonetheless, Tiwanaku endured for many centuries.

Tiwanaku's capital, Tiwanaku city, was at the southwest end of Lake Titicaca. Situated at 12,600 feet, it was the highest city in the ancient world. Today visitors from lower altitudes are constantly warned that the area is very cold. "Bring warm clothing," Williams advised me in Cerro Baúl. "You're going to freeze." The warnings puzzled me, because Lake Titicaca, which is big enough to stay at a near-constant 51 degrees Fahrenheit, moderates the local climate (this is one reason why agriculture is possible at such height). On winter nights the average temperature is a degree below freezing—cold, but not any colder than New England, and considerably warmer than one would expect at 12,600 feet. Only when I traveled there did I realize that this was the temperature indoors. The modern town of Tiwanaku is a poor place and few of its buildings have any heating. One night there I attended a performance at a family circus that was touring the Andes. It was so cold inside the tent that for the first few minutes the audience was shrouded in a cloud of its own breath. My host that night was an American archaeologist. When I woke the next morning in her spare bedroom, my host, in parka, hat, and gloves, was melting water on her stove. The cold does not detract from the area's beauty: Tiwanaku sits in the middle of a plain ringed by ice-capped mountains. From the ruin's taller buildings the great lake, almost ten miles to the northwest, is just visible. The wide expanse of water seems to merge into the sky without a welt.

The first important settlement around Titicaca was likely Chiripa, on a little peninsula on the lake's southwest coast. Its ceremonial cen-
ter, which may date to 900 B.C., was built around a Norte Chico-style sunken plaza. Chiripa was one of half a dozen small, competitive centers that emerged around the lake in that time. Most depended on raised-field agriculture, in which farmers grow crops on flat, artificially constructed surfaces created for the same reason that home gardeners grow vegetables on raised beds. (Similar but even larger expanses of raised fields are found in the Beni, the Mexican basin, and many other places.) By the time of Christ’s birth, two of these early polities had become dominant: Pukara on the northern, Peruvian edge of the lake and Tiwanaku on the opposite, Bolivian side. In the third century A.D., Pukara rather abruptly disintegrated politically. People still lived there, but the towns dispersed into the countryside; pottery making, stela carving, and monument building ceased. No one is certain why.

Although Tiwanaku has been occupied since at least 800 B.C., it did not become an important center until about 300 B.C. and did not expand out from southern Titicaca until about two hundred years after Pukara’s decline. But when it did reach out to its south and west, Tiwanaku transformed itself into what Alan Kolata, an archaeologist at the University of Chicago, has called a “predatory state.” It was not the centrally administered military power that term conjures. Instead, it was an archipelago of cities that acknowledged Tiwanaku’s religious preeminence. “State religion and imperial ideology,” Kolata argued, “performed much the same work as military conquest, but at significantly lower cost.” Awed by its magnificence, fearful of the supernatural powers controlled by its priesthood, local rulers subordinated themselves.

Central to this strategy of intimidation was Tiwanaku city. A past wonder of the world, it is badly damaged today. In the last two centuries, people have literally carted away many of its buildings, using the stones for churches, homes, bridges, public buildings, and even landfill. At one point the Bolivian government drove a railroad through the site (recently it laid a road through another part). Hands more enthusiastic than knowledgeable reconstructed many of the remaining buildings. Still, enough remains to get a sense of the ancient city.

Dominating its skyline was a seven-tiered pyramid, Akapana, laid out in a pattern perhaps inspired by the Andean cross. Ubiquitous in highlands art, the Andean cross is a stepped shape that some claim is inspired by the Southern Cross constellation and others believe represents the four quarters of the world. Whatever the case, Akapana’s builders planned with a sense of drama. They constructed its base walls with sandstone blocks, the array interrupted every ten feet by rectangular stone pillars that are easily ten feet tall. So massive are the pillars that the first European to see Tiwanaku, Pedro Cieza de León, later confessed himself unable to “understand or fathom what kind of instruments or tools were used to work them.” Rising from the center of a large moat, Akapana rumbled the surrounding mountains. A precisely engineered drainage system added to the similarity by channeling water from a cistern-like well at the summit down and along the sides, a stylized version of rainwater plashing down the Andes.

Atop an adjacent, somewhat smaller structure, a large, walled enclosure called Kalasasaya, is the so-called Gateway of the Sun, cut from a single block of stone (now broken in two and reassembled). Covered with a fastidiously elaborate frieze, the twelve-foot gateway focuses the visitor’s eye on the image of a single deity whose figure projects from the lintel: the Staff God.

Today the Gateway of the Sun is the postcard emblem of Tiwanaku. During the winter solstice (June, in South America) hundreds of camera-toting European and American tourists wait on Kalasasaya through the entire freezing night for the sunrise, which is supposed to shine through the Gateway on that date alone. Guides in traditional costume explain that the reliefs on the lintel form an intricate astronomical calendar that may have been brought to earth by alien beings. To keep themselves warm during the inevitable longeurs, visitors sing songs of peace and harmony in several languages. Inevitably the spectators are stunned when the first light of sunrise appears well to the side of the Gateway. Only afterward do they discover that the portal is not in its original location, and may have had nothing to do with astronomy or calendars.

If those tourists had come to Tiwanaku at its height, walking
The so-called Gateway of the Sun sits at the present site in the twentieth century. Its strategically advantageous location in the heart of the ancient city served as a gateway for trade and communication across the region. The architectural features of the Gateway reflect the influence of various cultures and civilizations that have passed through this region. The Gateway's design, with its intricate carvings and ornate details, is a testament to the ingenuity and craftsmanship of the time. The Gateway has been preserved and restored to its original state, allowing visitors to witness its grandeur and historical significance. It stands as a symbol of the rich cultural heritage and the enduring legacy of the ancient city.
place for "symbolically concentrating the political and religious authority of the elite." Other Andean cities, Wari among them, shared this quality. But Tiwanaku carried it to an extreme.

Tiwanaku has been excavated for a century, and the more archaeologists delve into it the less there seems to be. To Vranich, the capital's lack of resemblance to European imperial cities extends well beyond the absence of marketplaces. Far from being the powerful administrative center envisioned by earlier researchers, he says, Tiwanaku was a combination of the Vatican and Disneyland, a religious show capital with a relatively small population—almost a staff—that attracted pilgrims by the thousand. Like the tourists at the solstice today, visitors came to this empire of appearances to be dazzled and awed. "In the central city, buildings and monuments went up and down, up and down, at an incredible rate," Vranich told me at Tiwanaku, where he had been working since 1996. "Nothing ever got finished completely, because they were just concerned with the facades. They had to keep changing the exhibits to keep the crowds coming."

The encounter between Tiwanaku and Wari at Cerro Baúl seems to have gone remarkably smoothly. At any rate, a study of more than a thousand Wari and Tiwanaku graves found no evidence of the trauma associated with violence. Instead, the two societies split the region between them. Wari camped atop Cerro Baúl and a neighboring hilllock, Cerro Mejía. Between them was a steep valley with Tiwanaku settlements scattered throughout. Because Wari and Tiwanaku pottery differed, Williams and Nash have been able to map which group lived in which neighborhood by the distribution of ceramic fragments. The Wari canal provided drinking water, but had to pass through Tiwanaku territory at the base of Cerro Baúl. Tiwanaku let the water through, but took enough to irrigate more than seven hundred acres of terraces.

At the same time, Wari and Tiwanaku kept themselves separate. Although they shared resources, there is little evidence that people from one culture visited the other often, or had friendships across the political lines. Wari homes were furnished with Wari goods; Tiwanaku homes, Tiwanaku goods. Despite living next to each other, people continued to speak their different languages and wear their different clothing and look for inspiration and instruction from their different capitals. The social-science word for such intermingling without intermixing is "interdigitization." For two centuries at Cerro Baúl, Wari and Tiwanaku were like people in parallel worlds, sharing the same time and space but implacably separate from each other. It is a small reminder that Indians were neither the peaceful, love-thy-neighbor types envisioned by some apologists or the brutal, ceaselessly aggressive warriors decried by some political critics.

The end came in about 800 A.D., Williams told me. He was part of a Peruvian-American team that in 2005 reconstructed Cerro Baúl's last days. As many as twenty-eight high-ranking nobles and priests gathered in the Wari colony's biggest palace for a final feast at a great reception hall, thirty feet on a side, each wall lined with a stone-faced bench. The chamber opened onto what the archaeologists believed "was likely the chief executive's office for conducting statecraft," the Andean equivalent of the Oval Office in the White House. To judge by the scattered food remains, the goodbye party was a Rabelaisian affair, with platters of llama, alpaca, vizcacha (Andean hare), and seven types of fish, all washed down with fresh chicha, this last being served in huge ceremonial mugs, many heraldically decorated, that held up to half a gallon apiece of brew. At the end the drunken crew staggered through the palace, smashing the crockery and setting the whole place afire. "It looks like they had a really wild time of it," Williams said. Last to go was the chicha brewery with its elite female staff. The lords torched the thatched milling room and then threw their great mugs into the flames. "Later, when the embers had cooled," archaeologists wrote, "six necklaces of shell and stone were placed atop the ashes in a final act of reverence."

The retreat was part of a general fall. Tiwanaku may have declined first, leading Wari to shut down its embassy in Cerro Baúl. Or perhaps Wari was pulling back for its own internal reasons. Both declines have been laid to drought, but this is contested. For one thing, Wari had already survived drought. As for Tiwanaku, Vranich said, "How much would drought matter to Disneyland?" Its ability to retain its audience would be far more important.

The successors to both Wari and Tiwanaku combined the former's organizational skills and the latter's sense of design and razzle-dazzle. First came Chimor, then the greatest empire ever seen in Peru. Spread at its greatest extent over seven hundred miles of the coastline, Chi-
mor was an ambitious state that grew maize and cotton by irrigating almost fifty thousand acres around the Moche River (all of modern Peru only reached that figure in 1960). A destructive El Niño episode in about 1100 A.D. made irrigation impossible for a while. In response, the government forced gangs of captive laborers to build a fifty-three-mile, masonry-lined canal to channel water from the Chicama River, in the next valley to the north, to farmland in the Moche Valley. The canal was a flop: some parts ran uphill, apparently because of incompetent engineering, and the rest lost nine-tenths of its water to evaporation and seepage. Some archaeologists believe that the canal was never meant to function. It was a PR exercise, they say, a Potemkin demonstration by the Chimor government that it was actively fighting El Niño.

When the bad weather ended, Chimor looked outside its borders. Armies went out and returned victorious to Chan Chan, the Chimor capital, a seaside metropolis with a dense center that covered four square miles. Dominated by nine high-walled imperial palace-tombs and five cathedral-like ceremonial complexes, the city was both exemplary in its grandeur and oddly empty, because its streets were restricted to the elite. Commoners were barred, except for a few specialized technicians and craftworkers. Each palace was hundreds of feet on a side and many were three stories tall. They were filled with storage space—living quarters were almost an afterthought. Their great beams adorned with splendidly worked gold and silver, the huge structures were jammed together around the center of town like people huddling in the shelter of an awning.

Chan Chan suffered a palace surfeit because dead rulers were regarded as divine figures. As with the Inka, the kings' mummified bodies continued to live opulently in their own homes and could not be displaced; indeed, the mummies were necessary presences at important state occasions. As a result, each new ruler had to build his own palace and acquire the riches necessary to maintain it till the end of time. The system almost guaranteed imperial ambitions and exuberant construction plans.

The biggest of Chan Chan's surviving palaces may have belonged to Minchaçaitem—the eleventh king in the Chimor dynasty, according to one Spanish account—who reputedly conquered much of the coastline. Minchaçaitem was a powerful figure who could have taken over even more land than he did. Unfortunately for him, he lived at the same time that a previously little-known group, the Inka, acquired a new ruler, Pachakuti. In about 1450 the Inka army, led by Qhapaq Yupanqui, Pachakuti's brother, besieged the city-state of Cajamarca, in the foothills east of Chimor. Cajamarca's leader had allied himself with Minchaçaitem, who rushed to his aid with an army. He does not seem to have known what he was in for, possibly because he viewed the Inka as a gang of rustic thugs. Qhapaq Yupanqui awaited him in an
ambush. Minchaçaman and his army were forced to flee as Cajamarca fell to the Inka. Qhapaq Yapanki covered himself with so much glory that when he returned home to Qosqo his brother, sensing future trouble, promptly executed him.

A decade or so later—in 1463, if Spanish chronicles are correct—the emperor sent out another army led by his son and designated successor, Thupa Inka Yupanki. By that time nobody thought of the Inkas as hicks. Thupa Inka descended the Moche River and paralyzed Chimor's defenses by the simple expedient of threatening to destroy its water supply. Minchaçaman was captured, taken to Qosqo, and forced to watch Thupa Inka's victory celebration. Chimor's conquerors were quick studies. Liking the courtly magnificence of Chan Chan, they hauled away what they could and, more important, forced the city's gold, silver, and gem workers to accompany them to Qosqo. They were instructed to transform the city into a new Chan Chan, only more impressive. Seven decades later, when Pizarro held his victory celebration in Qosqo, it was equal in grandeur to any city in Europe.

MAKING THE WAK' A

Jonathan Haas and Winifred Creamer took me to Caballete, a narrow, dusty bowl, perhaps half a mile long and a quarter mile wide, a few miles up the Fortaleza River from the Peruvian coast. At the mouth of the bowl were three mounds in a rough semicircle that faced a fourth mound. In front of one mound, like a one-eighth scale model of Stonehenge, was a ragged circle of wak'a: sacred stones. Not far from the wak'a looters had dug up an ancient graveyard, pulling out the bodies and unwinding them from their sheets in a search for gold and jewels. When they didn't find any, they threw the bones down in disgust. In a square perhaps fifty yards on a side the ground was carpeted with broken human bones and scraps of thousand-year-old fabric.

We walked a little further and were greeted by a curious sight: skulls from the cemetery, gathered into several small piles. Around them were beer cans, cigarette butts, patent-medicine bottles, half-burned photographs, and candles shaped like naked women. These last had voodoo pins stuck in their heads and vaginas. Local people came to these places at night and either dug for treasure or practiced witchcraft, Haas said. In the harsh afternoon light they seemed to me tacky and sad. I imagined that the families of the people who had been buried at Caballete so long ago would have been outraged if they could have known what would happen to the bodies of their loved ones.

But then it occurred to me that my views may not have been shared by either the present or the past inhabitants of Norte Chico. I had no idea what people in Wari or Chimor would have thought of the scene before me. So far in this section, I have mainly described the economic and political history of Andean Indians. But people live also
in the realm of the affective and aesthetic—that's why they bury bodies and sometimes dig them up and pour love potions on them. Despite all the knowledge gained by scientists in the last few decades, this emotional realm remains much harder to reach.

An obvious example on the southern coast is the Nazca, famous for the huge patterns they set into the ground. Figures of animals and plants, almost a thousand geometric symbols, arrow-straight lines many miles long—what were they for? Peruvian anthropologist Toribio Mejía Xesspe first brought these famous drawings to the attention of the outside world in 1927. Four decades later, the Swiss writer Erich von Däniken set off an international furor by claiming that the Nazca Indians could not have made these symbols, because they were too big for such “primitive” people to construct, and because they are visible only from the air. Instead, he said, the giant figures were landing signals for space travelers; the whole plain was a sort of gigantic extraterrestrial airport. Expanded in a series of best-selling books, this notion turned the lines into a major tourist attraction. Exasperated scientists pointed out that a) small groups could have constructed the images by moving the dark surface stone to expose the lighter-colored earth beneath, and b) the Nazca did not have to see the figures to experience them, for they can be understood by walking the lines, which it is believed the Indians did. The prevailing theory today is that the straight lines mapped out the area’s many underground faults, which channel water. But nobody knows why the Nazca made the animal and plant figures, which seem less likely to have a direct function. What were the Nazca thinking as they created them? How did they feel when they walked them? To this day, the answers remain frustratingly far away.

Or consider the Moche, leaders of a military state that overran much of the northern coast, submerging the identities of its victims in its own. Huaca del Sol, the Moche capital, contains the largest adobe structure in the Andes, still hauntingly evocative despite centuries of systematic looting. (Unwilling to laboriously dig their way through the palace’s tombs, the Spaniards diverted the Moche River through it, washing out the riches in orthodox Augean-stable style; contemporary thieves have contented themselves with picks and shovels.) After about 300 A.D., Moche artists confined themselves to perhaps half a dozen subjects, painting stories of supernatural figures on pottery and murals with ever more naturalistic technique. Actors reenacted the same stories in grand pageants and ritual celebrations. Individual combat is a common theme; losers were formally stripped of their garments and forced to parade naked. Another oft-repeated tale involves the death and burial of a regal figure. Many of the people in the paintings are sharply individuated. Great effort has gone into studying the Moche, but as Moseley says, their identities and motives often remain “elusive.” The Moche polity broke up around 800 A.D., taking with it our chance to understand.

One of the few moments when I imagined I could encompass something of the inner lives of these long-ago people occurred in Chavin de Huantar, a city of several thousand people that existed between about 800 B.C. and 200 A.D. Its most important feature, a ceremonial temple shaped in a Norte Chico-style U, was a masterpiece of architectural intimidation. Using a network of concealed vents and channels, priests piped loud, roaring sounds at those who entered the temple. Visitors walked up three flights of stairs, grows echoing around them, and into a long, windowless passageway. At the end of the corridor, in a cross-shaped room that flickered with torchlight, was a fifteen-foot-high stone figure with a catlike face, taloned fingers, fierce tusks, and Medusa hair. Nobody today is sure of the god’s identity. Immediately above it, hidden from visitors’ eyes, sat a priestly functionary, who provided the god’s voice. After the long, torchlit approach, walking straight into the gaze of the snarling deity, mysterious bellows reverberating off the stone, the oracular declamation from above must have been spine-chilling.

Most of the complex is open to tourists. Many of the sculptures have been put into museums; others presumably have been looted. Yet walking into the temple still felt to me like entering a mountain of solid rock. Over and over again, Andean stories tell of spirits embodied in stones and giants transformed into natural features. The landscape has an intricate numinous geography; it is charged with meaning that must be respected and heeded. The earth, in this view, is not something to be left alone; the wak’a that litter Peruvian archaeological sites are often partly sculpted, as if they had needed some human attention to manifest their sacred qualities. Thus the human-made tunnels into the temple were part of what made it embody the power of a mountain. As I walked down the dimly lighted corridor
toward where the torchlit deity had stood, my fingers ran along the walls created by Chavin craftworkers. They were fit beautifully into place and as cold and hard as the mountains they came from. But they did not gain their power without my hand to close the circuit. The natural world is incomplete without the human touch.

PART THREE

Landscape with Figures