

Stanton

Before Columbus

COMBINED, NORTH AMERICA and South America cover an area of 16,000,000 square miles, more than a quarter of the land surface of the globe. To its first human inhabitants, tens of thousands of years ago, this enormous domain they had discovered was literally a world unto itself: a world of miles-high mountains and vast fertile prairies, of desert shrublands and dense tropical rain forests, of frigid arctic tundra and hot murky swamps, of deep and fecund river valleys, of sparkling-water lakes, of canopied woodlands, of savannahs and steppes—and thousands upon thousands of miles of magnificent ocean coast. There were places where it almost never rained, and places where it virtually never stopped; there were places where the temperature reached 130 degrees Fahrenheit, and places where it dropped to 80 degrees below zero. But in all these places, under all these conditions, eventually some native people made their homes.

By the time ancient Greece was falling under the control of Rome, in North America the Adena Culture already had been flourishing for a thousand years. As many as 500 Adena living sites have been uncovered by modern archaeologists. Centered in present-day Ohio, they radiate out as far as Vermont, New York, New Jersey, Pennsylvania, Maryland, and West Virginia. We will never know how many hundreds more such sites are buried beneath the modern cities and suburbs of the northeastern United States, but we do know that these early sedentary peoples lived in towns with houses that were circular in design and that ranged from single-family dwellings as small as twenty feet in diameter to multi-family units up to eighty feet across. These residences commonly were built in close proximity to large public enclosures of 300 feet and more in diameter that mod-

ern archaeologists have come to refer to as "sacred circles" because of their presumed use for religious ceremonial purposes. The buildings they constructed for the living, however, were minuscule compared with the receptacles they built for their dead: massive tombs, such as that at Grave Creek in West Virginia, that spread out hundreds of feet across and reached seven stories in height—and that were commonplace structures throughout Adena territory as early as 500 B.C.¹

In addition to the subsistence support of hunting and fishing, and gathering the natural fruit and vegetable bounty growing all around them, the ancient Adena people imported gourds and squash from Mexico and cultivated them along with early strains of maize, tubers, sunflowers, and other plant domesticates. Another import from the south—from South America—was tobacco, which they smoked through pipes in rituals of celebration and remembrance. From neighboring residents of the area that we now know as the Carolinas they imported sheets of mica, while from Lake Superior and beyond to the north they acquired copper, which they hammered and cut and worked into bracelets and rings and other bodily adornments.

Overlapping chronologically with the Adena was the Hopewell Culture that grew in time to cover an area stretching in one direction from the northern Great Lakes to the Gulf of Mexico, in the other direction from Kansas to New York. The Hopewell people, who as a group were physiologically as well culturally distinguishable from the Adena, lived in permanent communities based on intensive horticulture, communities marked by enormous earthen monuments, similar to those of the Adena, that the citizenry built as religious shrines and to house the remains of their dead.² Literally tens of thousands of these towering earthen mounds once covered the American landscape from the Great Plains to the eastern woodlands, many of them precise, geometrically shaped, massive structures of a thousand feet in diameter and several stories high; others—such as the famous quarter-mile long coiled snake at Serpent Mound, Ohio—were imaginatively designed symbolic temples.

No society that had not achieved a large population and an exceptionally high level of political and social refinement, as well as a sophisticated control of resources, could possibly have had the time or inclination or talent to design and construct such edifices. In addition, the Hopewell people had trade networks extending to Florida in one direction and Wyoming and North Dakota in the other, through which they acquired from different nations of indigenous peoples the copper, gold, silver, crystal, quartz, shell, bone, obsidian, pearl, and other raw materials that their artisans worked into elaborately embossed and decorative metal foil, carved jewelry, earrings, pendants, charms, breastplates, and other objets d'art, as well as axes, adzes, awls, and more. Indeed, so extensive were the Hopewell trading relationships with other societies throughout the continent

that archaeologists have recovered from the centers of Hopewell culture in Ohio more materials originating from outside than from within the region.³

To the west of the Hopewell there emerged in time the innumerable villages of the seemingly endless plains—large, usually permanent communities of substantial, multi-family homes and common buildings, the villages themselves often fortified with stockades and dry, surrounding moats. These were the progenitors of the people—the Mandan, the Cree, the Blood, the Blackfoot, the Crow, the Piegan, the Hidatsa, the Arikara, the Cheyenne, the Omaha, the Pawnee, the Arapaho, the Kansa, the Iowa, the Osage, the Kiowa, the Wichita, the Comanche, the Plains Cree, various separate nations of Sioux, and others, including the Ute and Shoshoni to the west—who became the classic nomads on horseback that often serve as the popular American model for all Indian societies. But even they did not resort to that pattern of life until they were driven to it by invading armies of displaced Europeans.

Indeed, although the modern horse originated in the Americas, by 10,000 B.C. or so it had become extinct there as well. The only survivors from then until their reintroduction by the Spanish were the Old World breeds that long ago had moved across Beringia in the opposite direction from that of the human migrants, that is, from east to west and into Asia. Thus, there could not have been a nomadic life on horseback for the Indians of the plains prior to European contact, because there were no horses in North America to accommodate them. On the contrary, most of the people who lived in this region were successful hunters and farmers, well established in settled communities that were centered—as are most of today's mid-western towns—in conjunction with the rivers and adjoining fertile valleys of the Great Plains. Others did relocate their towns and villages on cyclical schedules dictated by the drastically changing seasons of this area, disassembling and reassembling their portable homes known as *tipis*. These dwellings were far different from the image most modern Americans have of them, however; when one of the earliest European explorers of the southwestern plains first came upon an Indian village containing scores of carefully arranged *tipis* "made of tanned hides, very bright red and white in color and bell-shaped . . . so large that in the most ordinary house, four different mattresses and beds are easily accommodated," he marveled at their comfort and extraordinary resistance to the elements, adding that "they are built as skillfully as any house in Italy."⁴

Since the land area supporting the people of the plains included about a million square miles of earth—that is, more than twice the area of formerly Soviet Central Asia—all generalizations about the societies and culture that occupied the land are invariably rife with exceptions. Roughly speaking, however, the Indian peoples of the western plains thrived well post-Columbian era on the enormous herds of bison—along with

elk, deer, bears, and other game—that these descendants of ancient woolly mammoth hunters had used as their primary means of sustenance for thousands of years. The same generally was true on the southern plains. But these varied peoples also were very active traders, principally with the other, more densely settled cultures of the plains to the north and to the east who raised advanced strains of maize and beans and other lesser-known plant crops, such as the unprepossessing but widely grown prairie turnip—which has three times the protein content of the potato and nearly the same level of vitamin C as most citrus fruits.⁵

Far to the north of the plains settlements, from Baffin and Ellesmere islands, off the coast of Greenland in the east, to the Yukon and beyond in the west, lay the enormous Arctic and Subarctic areas, inhabited by the Iglulik, the Nelsilik, and other Eskimo peoples, as well as the Aleut, the Koyukon, the Ingalik, the Tanana, the Kulchin, the Han, the Nabesna, the Tagish, the Hare, the Tahltan, the Kaska, the Tsetsaut, the Sekani, the Dogrib, the Salteaux, the Naskapi, the Beothuk, and others. If it were a country unto itself, this dominion today would be the seventh largest nation on earth in land area, just behind the entire continent of Australia, but larger than all of India including Kashmir.

The first people to migrate here had moved into what one archaeologist has called “the coldest, darkest, and most barren regions ever inhabited by man.” But they were a hardy and tenacious lot whose varied and ingenious dwellings ranged from the well known *iglu* snow house (usually about 30 feet in diameter and often connected by domed passageways to clusters of other *iglus* as well as to large common rooms for feasting and dancing) to the huge semi-subterranean *barabara* structures of the Aleutian Islands, each of them up to 200 feet long and 50 feet wide, and housing more than 100 people. The residents of these northernmost regions survived the rigorous tests of the natural environment, and they flourished; as that same archaeologist who had described this area in terms of its cold, dark, and barren harshness later acknowledged, the early inhabitants of the Arctic and Subarctic possessed all the tools “that gave them an abundant and secure economy [and] they developed a way of life that was probably as rich as any other in the nonagricultural and nonindustrial world.”⁶ For subsistence, along with the fish that they caught, and the birds that sometimes flocked so thickly overhead that they threatened to cover the sky, the people of this land hunted polar bears, arctic fox, musk oxen, caribou, and narwhals, seals, and walrus.

Forbidding though this place may seem to residents of the rest of the world, to its native people there was nothing, apart from one another, that they treasured so much. Observes anthropologist Richard K. Nelson, writing of the Koyukon, a people still living there today:

To most outsiders, the vast expanse of forest, tundra, and mountains in the Koyukon homeland constitute a wilderness in the absolute sense of the word.

But in fact the Koyukon homeland is not a wilderness, nor has it been for millennia. This apparently untrodden forest and tundra country is thoroughly known by a people whose entire lives and cultural ancestry are inextricably associated with it. The lakes, hills, river bends, sloughs, and creeks are named and imbued with personal or cultural meanings. Indeed, to the Koyukon these lands are no more a wilderness than are farmlands to a farmer or streets to a city dweller.⁷

Nelson's point is affectingly well illustrated in a story told by environmental author Barry Lopez about “a native woman [of this region], alone and melancholy in a hospital room, [who] told another interviewer she would sometimes raise her hands before her eyes to stare at them: ‘Right in my hand, I could see the shorelines, beaches, lakes, mountains, and hills I had been to. I could see the seals, birds, and game. . .’”⁸

From the panhandle of Alaska south through the upper northwest and on down to the California border lived so many different cultural communities, densely settled and thickly populated, that we have no hope of ever recovering anything close to a complete record of their vibrant pasts. The Makah, the Strait, the Quileute, the Nitinat, the Nooksack, the Che-makum, the Halkomelem, the Squamish, the Quinault, the Pentlatch, the Sechelt, the Twana, and the Luchootseet are a baker's dozen of linguistically and culturally separate peoples whose communities were confined to the relatively small area that today is bounded by Vancouver to the north and Seattle to the south, a distance of less than 150 miles. Overall, however, the native peoples of the northwest coast made their homes along more than 2000 miles of coastline. Compared with other regions, archaeological research has been minimal in the northwest. As a result, while traditional estimates of the population prior to European contact rarely exceed a third of a million people, many more than that probably lived along this strip of land that is more extensive than the coastline of Peru—an area that supported about 6,500,000 people in a much harsher environment during pre-Columbian times. Indeed, one recent study has put the population of British Columbia alone at over 1,000,000 prior to Western contact.⁹ In addition to the coastal settlements, moreover, even as late as the nineteenth century, after many years of wholesale devastation, more than 100 tribes representing fifteen different language groups lived on in British Columbia, Washington, Oregon, and Idaho—including the Chelan, the Yakima, the Palouse, the Walla Walla, the Nez Perce, the Umatilla, the Cayuse, the Flathead, the Coeur D'Alene, the Kalispel, the Colville, the Kootenay, the Sanpoil, the Wenatchee, the Methow, the Okanagan, the Ntlakypamuk, the Nicola, the Lillooet, the Shuswap, and more.

Similarly, from the northern California border down to today's Golden Gate Bridge in the west and Yosemite National Park in the east, an area barely 250 miles by 200 miles, there lived the Tolowa, the Yurok, the

Chilula, the Karok, the Shasta, the Wiyot, the Whilkut, the Hupa, the Mattole, the Chimariko, the Yana, the Nongatl, the Wintu, the Nomlaki, the Lassik, the Wailaki, the Sinkyone, the Yuki, the Cahto, the Modoc, the Achumawi, the Atsugewi, the Maidu, the Nisenan, the Washo, the Konkow, the Patwin, the Wappo, the Lake Miwok, the Coast Miwok, the Pomo, and a branch of the Northern Paiute—to name but some of the Indian nations of this region, again, all culturally and linguistically distinct peoples, a diversity in an area of that size that probably has never been equaled anywhere else in the world. And we have not even mentioned the scores of other independent native communities and cultures that once filled the land along the entire western seaboard of Oregon and central and southern California, thick populations of people living off a cornucopia of earth and marine resources.

As in so much of ancient America, the social and political systems of the west coast cultures varied dramatically from one locale to the next. Much of the northwest, for example, was inhabited by permanent settlements of fishing and intensive foraging peoples who lived in large wooden-planked houses that often were elaborately decorated with abstract designs and stylized animal faces; many of these houses and public buildings had an image of an animal's or bird's mouth framing their entryways, sometimes with huge molded wooden “beaks” attached that when open served as entrance and exit ramps. Northwest coast peoples are perhaps best known, however, for their rich and demonstrative ceremonial lives and their steeply hierarchical political systems. Thus, the most common symbolic associations we make with these cultures involve their intricately carved totem poles and ritual masks, as well as their great status-proclaiming feasts known as potlatches. Indeed, from the time of first European contact on down to contemporary ethnohistorical investigation, to outsiders the single most compelling aspect of these peoples' lives has always been their flamboyant display of wealth and their material extravagance. Given the natural riches of their surrounding environment—including lush and game-filled evergreen forests, salmon-thick rivers, and ocean waters warmed by the Japanese current—such festivals of conspicuous consumption are easily understood.

The peoples of resource rich California also were known for their complicated coastal-inland trade networks and for their large multi-cultural fiestas which apparently functioned in part to maintain and expand trade relationships.¹⁰ But in addition—and in contrast to their neighbors to the north—the California peoples were noteworthy for their remarkably egalitarian and democratically ordered societies. As anthropologists long ago demonstrated, native California peoples such as the Wintu found it difficult even to express personal domination and coercion in their language, so foreign were those concepts to their ways of life.¹¹ And for most of California's Indian peoples those ways of life were directly tied to the great

bounty nature had given them. Although many of them were, in a technical sense, hunter-gatherer societies, so rich in foodstuffs were the areas in which they settled that they had to move about very little in order to live well. Writing of the Ohlone peoples—a general name for forty or so independent tribes and many thousands of people who inhabited the coastal area between present-day San Francisco and Monterey—Malcolm Margolin has put it well:

With such a wealth of resources, the Ohlones did not depend upon a single staple. If the salmon failed to run, the people moved into the marshes to hunt ducks and geese. If the waterfowl population was diminished by a drought, the people could head for the coast where a beached whale or a run of smelts might help them through their troubles. And if all else failed, there were always shellfish: mussels, clams, and oysters, high in nutrients and theirs for the collecting. . . . All around the Ohlones were virtually inexhaustible resources; and for century after century the people went about their daily life secure in the knowledge that they lived in a generous land, a land that would always support them.¹²

“In short,” as Margolin writes, “the Ohlones did not practice agriculture or develop a rich material culture, not because they failed, but because they succeeded so well in the most ancient of all ways of life.”¹³

Other California peoples did practice agriculture, however, and the very earliest European explorers found it and the numbers of people living in the region awe-inspiring. Describing his voyage along the southern California coast in 1542 and 1543, Juan Rodriguez Cabrillo repeatedly noted in his journal comments on the large houses he observed; the “very fine valleys [with] much maize and abundant food”; the “many savannahs and groves” and “magnificent valleys” that were “densely populated”—as was, he added, “the whole coastline.” Again and again, wherever he went, he marveled at the “many pueblos,” the “dense population,” and the “thickly settled” coasts and plains. Even the small and subsequently uninhabited Santa Barbara islands, lying 25 to 70 miles off the coast—San Miguel, Santa Rosa, Santa Cruz, Santa Catalina, San Clemente, Santa Barbara, San Nicholas—were populated by “a great number of Indians” who greeted the Spanish ships in friendship and traded with them in ceremonies of peace. In all, from the islands to the coasts to the valleys and the plains that he observed, Cabrillo wrote, this “densely populated . . . country appears to be very fine.”¹⁴

Just what the population of California was at this time is unknown. The most commonly cited estimate is something in excess of 300,000—while other calculations have put it at 700,000 and more.¹⁵ Although the larger figure is regarded by many scholars as excessive, both it and the lower number represent estimates for California's Indian population only in 1769, the time of the founding of the Franciscan mission—that is, more

than two centuries after initial Spanish incursions into the region. Even at the time of Cabrillo's voyage in 1542, however, the Indians reported to him the presence of other Spaniards in the area who, he wrote, "were killing many natives." And there is clear evidence that European diseases had a serious impact on California's native peoples throughout the sixteenth and seventeenth centuries.¹⁶ Since, as we shall see in a later chapter, during those same two centuries the native population of Florida was reduced by more than 95 percent, primarily by Spanish-introduced diseases but also by Spanish violence, it is likely that the indigenous population of California also was vastly larger in the early sixteenth century than it was in 1769. A population of 300,000 for all of California, after all, works out to a population density somewhere between that of the Western Sahara and Mongolia today—hardly suggestive of Cabrillo's "thickly settled" and "densely populated" environs. Indeed, 700,000—rather than being excessive—will in time likely turn out to have been an excessively conservative estimate.

To the east of California lay the vast, dry spaces of the southwest, what is now southern Utah and Colorado, parts of northwestern Mexico, southern Nevada, west Texas, and all of Arizona and New Mexico. The Papago, the Pima, the Yuma, the Mojave, the Yavapai, the Havasupai, the Hualapai, the Paiute, the Zuni, the Tewa, the Navajo, the Hopi, the Towa, the Cocopa, the Tiwa, the Keres, the Piro, the Suma, the Coahuiltec, and various Apache peoples (the Aravaipa, the Coyotera, the Chiricahua, the Mimbreno, the Jicarella, the Mescalero, the Lipan) are just some of the major extant cultures of the southwest. And all these large cultural designations contain within them numerous smaller, but distinctive, indigenous communities. Thus, for example, the Coahuiltecs of the Texas-Mexico borderlands actually are more than 100 different independent peoples who are grouped together only because they speak the Coahuiltec language.¹⁷

The major ancient cultural traditions of this region were those of the Anasazi, the Hohokam, and the Mogollon. Together, these cultures influenced the lives of peoples living, from east to west, across the virtual entirety of modern-day Arizona and New Mexico, and from middle Utah and Colorado in the north to Mexico's Sonora and Chihuahua deserts in the south. This area has supported human populations for millennia, populations that were growing maize and squash more than 3000 years ago.¹⁸ Indeed, agriculture in the pre-Columbian era attained a higher level of development among the people of the southwest than among any other group north of Mesoamerica. Beginning 1700 years ago, the Hohokam, for example, built a huge and elaborate network of canals to irrigate their crops; just one of these canals alone was 8 feet deep, 30 feet wide, 8 miles long, and was able to bring precious life to 8000 acres of arid desert land. Other canals carried water over distances of more than 20 miles.¹⁹ The general lingering fame of these societies, however, rests predominantly on

their extraordinary artistry, craftsmanship, and architectural engineering—from fine and delicate jewelry and pottery to massive housing complexes.

Among the numerous outstanding examples of southwest architectural achievement are the Chacoan communities of the San Juan Basin in Colorado and New Mexico, within the Anasazi culture area. Chaco Canyon is near the middle of the San Juan Basin, and here, more than a thousand years ago, there existed the metropolitan hub of hundreds of villages and at least nine large towns constructed around enormous multi-storied building complexes. Pueblo Bonito is an example of one of these: a single, four-story building with large high-ceilinged rooms and balconies, it contained 800 rooms, including private residences for more than 1200 people and dozens of circular common rooms up to 60 feet in diameter. No single structure in what later became the United States housed this many people until the largest apartment buildings of New York City were constructed in the nineteenth century. But in its time Pueblo Bonito was far from unique. Poseuinge, near present-day Ojo Caliente, is another example among many: a complex of several adjoining three-story residential buildings, Poseuinge (or Posi) contained more than 2000 rooms.²⁰

In the dry surrounding countryside the people of this region—not only the ancient Hohokam—constructed intricate canals and ditches, with diversion dams, floodgates, and other runoff control systems, alongside which they planted gardens.²¹ So successful were these water management systems that, as Peter Nabokov and Robert Easton have observed, "virtually all of the water that fell in the immediate vicinity was channeled down spillways and troughs to feed their gardens and replenish their reservoirs."²² And in recent decades aerial photography has revealed the presence of great ancient roadways up to 30 feet wide that linked the hundreds of Chaco Canyon communities with at least fifty so-called outlier population centers up to 100 miles away, each of which contained its own complex of large, masonry pueblos. In all, it appears that these roads connected together communities spread out over more than 26,000 square miles of land, an area the size of Belgium and the Netherlands combined—although recent studies have begun to suggest that the Chaco region was even larger than the largest previous estimates have surmised. Indeed, as an indication of how much remains to be learned about these ancient peoples and societies, in the Grand Canyon alone more than 2000 indigenous habitation sites have thus far been identified, of which only three have been excavated and studied intensively—while almost half of the canyon's 1,200,000 acres of land area has never even been seen at close range by an archaeologist or a historian.²³

Despite the enormous amount of organized labor that was necessary to construct their carefully planned communities, the native people of the southwest have always been known for their political egalitarianism and their respect for personal autonomy. The earliest Spanish visitors to the

southwest—including Francisco Vázquez de Coronado in 1540 and Diego Pérez de Luxán in 1582—frequently commented on the widespread equality and codes of reciprocity they observed among such Pueblo peoples as the Hopi and the Zuni; the only significant class distinctions that could be discerned were those that granted power and prestige (but not excessive wealth) to the most elderly women and men.²⁴ Observing the descendants of these same peoples 400 years later, twentieth-century anthropologists continue to reach similar conclusions: it is "fundamentally indecent," anthropologist Clyde Kluckhohn once wrote of the Navajo, "for a single individual to make decisions for the group."²⁵ That was far from the case, however, for the Indians of the southeast who were encountered by Hernando de Soto in the early sixteenth century during his trek north through Florida in search of gold. Here, much more hierarchical political and personal arrangements prevailed.

At one location during his travels in the southeast de Soto was met by the female leader of the Cofitachequi nation who was carried in a sedan chair, was wrapped in long pearl necklaces, and rode in a cushion-filled and awning-covered boat. She commanded a large area of agriculturally productive land, once settled with dense clusters of towns and filled with impressively constructed ceremonial and burial sites. In plundering those sites de Soto's men found elegantly carved chests and art objects, pearl inlaid and copper-tipped weapons, and other valuables (including as many as 50,000 bows and quivers) that at least one of the conquistadors compared favorably with anything he had seen in fabulously prosperous Mexico or Peru. It was an apt comparison, not only because the jewelry and pottery from this area is distinctly similar in many respects to that of Mesoamerica and the Andes, but because large and dense city-like settlements, built in stockade fashion and surrounded by intensely cultivated agricultural plantations were common here, as were state and quasi-state organizations in the political realm. Major cultural centers here include those of the Caddo peoples, the Hasinai, the Bidai, the Atakapa, the Tunica, the Chickasaw, the Tuskegee, the Natchez, the Houma, the Choctaw, the Creek, the Tohome, the Pensacola, the Apalachee, the Seminole, the Yamasee, the Cusabo, the Waccamaw, the Catawba, the Woccon—and again, as in other regions, many more. No other part of North America outside of Mesoamerica had such complex and differentiated societies, and no other area outside of the northwest coast and California was so linguistically diverse—much more diverse, in fact, than Western Europe is today.²⁶

Pottery developed in this region at least 4000 years ago and true agriculture followed about 1000 years later. Although the people of the southeast did hunt and fish, they lived primarily in sedentary communities distinguished by clusters of towering temple mounds, large public buildings that each held scores and sometimes hundreds of assigned seats for politi-

cal and religious gatherings, and assemblages of individual family houses that spread out over as many as fifteen to twenty miles. The people living in these state-like communities largely were nourished by enormous fields of corn, beans, and other produce that they harvested in two or even three crops each year and stored in corn cribs and granaries. They were superb basket-makers, carpenters, potters, weavers, tanners, and fishermen. Some, like the Calusa, fished from large canoes in the open ocean, while they and others also gathered clams and oysters from the coasts and used weirs and basket traps and spears and stupefying herbs to catch fish in rivers and in streams.²⁷

The Calusa, in fact, are especially intriguing in that they defy conventional rules of political anthropology by having been a complex of hunting, fishing, and gathering societies that also were sedentary and highly stratified, with politically powerful and centralized governments. Paramount chiefs, who commanded standing armies of warriors who had no other work obligations, ruled directly over dozens of towns in their districts, while controlling dozens more through systems of tribute. Class rankings included nobles, commoners, and servants (who were military captives), while there were specialized roles for wood carvers, painters, engravers, navigators, healers, and the scores of dancers and singers who performed on ceremonial occasions. And such festivities were both frequent and major affairs: one European account from the sixteenth century describes a paramount chief's house as large enough to accommodate 2000 people "without being very crowded." Moreover, such buildings were not especially large by southeastern coast standards. As J. Leitch Wright, Jr., notes: "similar structures in Apalachee, Timucua, and Guale (coastal Georgia) held considerably more."²⁸

Elaborate social and cultural characteristics of this nature are not supposed to exist among non-agricultural or non-industrial peoples, but like many of the hunting and gathering societies of the northwest, the Calusa lived in an environment so rich in easily accessible natural resources that agriculture was not needed to maintain large, stable, politically complex settlements. One measure of the great size of these communities can be seen in the middens—the refuse collections studied by archaeologists—that the Calusa left behind. Throughout the world, among the largest shellfish middens known to exist are those at Ertebølle in Denmark, where they range up to 30 acres in size and almost 10 feet in height. In comparison, shell middens from Calusa areas throughout southwest Florida have been found covering up to 80 acres of land and reaching to heights of 20 feet—that is, many times the cubic volume of the largest Ertebølle middens. And yet, enormous as these deposits are—testifying to extraordinary concentrations of population—ethnohistorical and archaeological evidence indicates that shellfish were not a major component of the Calusa diet.²⁹

Far to the north of the Calusa and the hundreds of other cultural cen-

ters in what today are Florida, Georgia, Mississippi, Louisiana, Arkansas, Kentucky, South Carolina, North Carolina, Tennessee, and Virginia, resided the Tuscarora, the Pamlico, the Secotan, the Nottaway, the Weapomeoc, the Meherrin, the Powhatan, the Susquehannock, and the Delaware—to just begin a list that could be multiplied many times over. Beyond them, of course, were the great Northern Iroquoian nations—the Seneca, the Oneida, the Mohawk, the Onondaga, the Cayuga, the Wenro, the Erie, the Petun, the Neutral, the Huron, and the St. Lawrence Iroquois. And the New England Indian nations—the Pennacook, the Nipmuk, the Massachusetts, the Wampanoag, the Niantic, the Nauset, the Pequot, the Mahican, the Narraganset, the Wappinger, the Mohegan, and more. Traditionally these native peoples were thought to have lived in very thinly populated settlements, but recent re-analyses of their population histories suggest that such separate nations as the Mohawk, the Munsee, the Massachusetts, the Mohegan-Pequot, and others filled their territorial areas with as many or more residents per square mile as inhabit most western regions in the present-day United States. Overall, according to one estimate, the Atlantic coastal plain from Florida to Massachusetts supported more than 2,000,000 people before the arrival of the first Europeans.³⁰

Probably the most common association that is made with the congregations of northeastern cultures concerns their sophisticated domestic political systems and their formal networks of international alliances, such as the Five Nation confederacy of the Iroquois League, founded in the middle of the fifteenth century and composed of the independent Mohawk, Oneida, Onondaga, Cayuga, and Seneca peoples. Many writers, both historians and anthropologists, have argued that the League was a model for the United States Constitution, although much controversy continues to surround that assertion. The debate focuses largely on the *extent* of Iroquois influence on Euro-American political thought, however, since no one denies there was some influence.³¹ Indeed, as numerous historians have shown, overall American Indian political and social organization had a powerful impact on European social thought, particularly in seventeenth- and eighteenth-century France.³² In any case, however the controversy over Iroquois influence on the U.S. Constitution eventually is decided, it will not minimize the Iroquois achievement, since—as one of the originators of the notion of a connection between the League and the Constitution, J.N.B. Hewitt of the Smithsonian Institution, admitted when he first propounded the hypothesis more than fifty years ago:

Some of the ideas incorporated in the League of the Five Nations were far too radical even for the most advanced of the framers of the American Constitution. Nearly a century and a half was to elapse before the white men could reconcile themselves to woman suffrage, which was fundamental in the Indian government. They have not yet arrived at the point of abolishing capital punishment, which the Iroquois had accomplished by a very simple

legal device. And child welfare legislation, prominent in the Iroquois scheme of things, had to wait for a century or more before the white men were ready to adopt it.³³

To limit a description of female power among the Iroquois to the achievement of “woman suffrage,” however, is to not even begin to convey the reality of women’s role in Iroquois society. As the Constitution of the Five Nations firmly declared: “The lineal descent of the people of the Five Nations shall run in the female line. Women shall be considered the progenitors of the Nation. They shall own the land and the soil. Men and women shall follow the status of the mother.”³⁴ In her survey and analysis of the origins of sexual inequality among the major cultures of the world, this is how anthropologist Peggy Reeves Sanday describes the exception of the Iroquois:

In the symbolic, economic, and familial spheres the Iroquois were matriarchal, that is, female dominated. Iroquoian women headed the family longhouse, and much of the economic and ceremonial life centered on the agricultural activities of women. Men were responsible for hunting, war, and intertribal affairs. Although women appointed men to League positions and could veto their decisions, men dominated League deliberations. This tension between male and female spheres, in which females dominated village life and left intertribal life to men, suggests that the sexes were separate but equal, at least during the confederacy. Before the confederacy, when the individual nations stood alone and consisted of a set of loosely organized villages subsisting on the horticultural produce of women, females may have overshadowed the importance of males.³⁵

Perhaps this is why, as Sanday later remarks: “Archaeological excavations of pre-Iroquoian village sites show that they were unfortified, suggesting that if there was an emphasis on warfare, it lacked major economic motivation, and conquest was an unknown objective.”³⁶ And perhaps this also helps account for the unusually strong egalitarianism even among later Iroquois people—as among other native peoples of the northeast—on which early European visitors invariably remarked. The Jesuit Pierre de Charlevoix, for instance, traveled throughout what today is New York, Michigan, and eastern Canada and marveled at the early age at which Indian children were encouraged, with success, in seemingly contradictory directions—toward both prideful independence and cooperative, communal socialization. Moreover, he noted, the parents accomplished this goal by using the gentlest and subtlest of techniques. While “fathers and mothers neglect nothing, in order to inspire their children with certain principles of honour which they preserve their whole lives,” he wrote, “they take care always to communicate their instructions on this head, in an indirect manner.” An emphasis on pride and honor—and thus on the avoidance of shame—was the primary means of adult guidance. For example, notes

Charlevoix: “A mother on seeing her daughter behave ill bursts into tears; and upon the other’s asking her the cause of it, all the answer she makes is, Thou dishonourest me. It seldom happens that this sort of reproof fails of being efficacious.” Some of the Indians, he adds, do “begin to chastise their children, but this happens only among those that are Christians, or such as are settled in the colony.”³⁷ The most violent act of disapprobation that a parent might use on a misbehaving child, Charlevoix and other visitors observed, was the tossing of a little water in the child’s face, a gesture obviously intended more to embarrass than to harm.

Children, not surprisingly, learned to turn the tables on their parents. Thus, Charlevoix found children threatening to do damage to themselves, or even kill themselves, for what he regarded as the slightest parental correction: “You shall not have a daughter long to use so,” he cites as a typical tearful reaction from a chastised young girl. If this has a familiar ring to some late twentieth-century readers, so too might the Jesuit’s concern about the Indians’ permissive methods of child rearing: “It would seem,” he says, “that a childhood so ill instructed should be followed by a very dissolute and turbulent state of youth.” But that, in fact, is not what happened, he notes, because “on the one hand the Indians are naturally quiet and betimes masters of themselves, and are likewise more under the guidance of reason than other men; and on the other hand, their natural disposition, especially in the northern nations, does not incline them to debauchery.”³⁸

The Indians’ fairness and dignity and self-control that are commented on by so many early European visitors manifested themselves in adult life in various ways, but none more visibly than in the natives’ governing councils. This is evident, for example, in a report on the Huron’s councils by Jean de Brebeuf during the summer of 1636. One of the most “remarkable things” about the Indian leaders’ behavior at these meetings, he wrote, “is their great prudence and moderation of speech; I would not dare to say they always use this self-restraint, for I know that sometimes they sting each other,—but yet you always remark a singular gentleness and discretion. . . . [E]very time I have been invited [to their councils] I have come out from them astonished at this feature.”³⁹ Added Charlevoix on this same matter:

It must be acknowledged, that proceedings are carried on in these assemblies with a wisdom and a coolness, and a knowledge of affairs, and I may add generally with a probity, which would have done honour to the areopagus of Athens, or to the Senate of Rome, in the most glorious days of those republics: the reason of this is, that nothing is resolved upon with precipitation; and that those violent passions, which have so much disgraced the politics even of Christians, have never prevailed amongst the Indians over the public good.⁴⁰

Similar observations were made of other Indian societies up and down the eastern seaboard.⁴¹ In addition, most natives of this region, stretching from the densely settled southern shores of the Great Lakes (with a pre-Columbian population that has been estimated at close to 4,000,000) across to northern Maine on down to the Tidewater area of Virginia and over to the Cumberland River in Tennessee, displayed to their neighbors, and to strangers as well, a remarkable ethic of generosity. As the Jesuit Joseph François Lafitau, who lived among the Indians for six years, observed: “If a cabin of hungry people meets another whose provisions are not entirely exhausted, the latter share with the newcomers the little which remains to them without waiting to be asked, although they expose themselves thereby to the same danger of perishing as those whom they help at their own expense so humanely and with such greatness of soul. In Europe we should find few [people] disposed, in like cases, to a liberality so noble and magnificent.”⁴²

As with our earlier enumerations and comments on native peoples across the length and breadth of the continent, these examples of eastern indigenous cultures are only superficial and suggestive—touching here on aspects of the political realm, there on intimate life, and elsewhere on material achievement, in an effort to point a few small spotlights into corners that conventionally are ignored by historians of America’s past. Untold hundreds of other culturally and politically independent Indian nations and tribes that we have not even tried to survey filled the valleys and plains and woodlands and deserts and coastlines of what are now Canada and the United States. So many more, in fact, that to name the relative few that we have, this tiny percentage of the whole, risks minimizing rather than illustrating their numbers. Perhaps the best way to convey some sense of these multitudes and varieties of culture is simply to note that a recent listing of the extant Indian peoples of North America produced a compilation of nearly 800 separate nations—about half of which are formally recognized by the United States as semi-sovereign political entities—but then cautioned that the list “is not exhaustive with regard to their subdivisions or alternate names. There are thousands more of both.”⁴³

In the same way that in the villages and towns and nations of other continents—of Asia and Africa and Europe—the social structures and political networks and resource production systems of different communities varied greatly from place to place and from time to time, so too was there astounding diversity and multifariousness among North America’s aboriginal peoples. As on those other continents, both in the past and in the present, some communities were small, isolated, provincial, and poor, barely scraping subsistence from the soil. Others were huge urban and commercial centers where large numbers of people, entirely freed from the necessity of subsistence work, carried out other tasks of artistry, engineering, construction, religion, and trade. And, between these extremes, there was a rich

variety of cultural organization, a great diversity of social design. But in all these communities, regardless of size or organizational complexity, human beings lived out the joys and sorrows, the mischief, the humor, the high seriousness and tragedy, the loves, fears, hatreds, jealousies, kindnesses, and possessed all the other passions and concerns, weaknesses and strengths, that human flesh throughout the world is heir to.

Over time (again as in the histories of the other continents), cultures and empires in North America rose and fell, only to be replaced by other peoples whose material and political successes also waxed and waned while the long centuries and millennia inexorably unfolded. Not all the cultures surveyed in the preceding pages were contemporaneous with one another; certain of them ascended or declined centuries apart. Some of the societies that we have mentioned here, and some that went unmentioned, have long since disappeared almost without a trace. Others continue on. Some have had their remains so badly plundered that virtually nothing of them any longer exists—such as the once-massive Spiro Mound, a monument of an eastern Oklahoma people, that was looted of its treasures in the 1930s by the farmer who owned the land on which it stood. Literally tons of shell, pearl, and other precious objects were hauled out in wheelbarrows and sold by the side of the road. And then, for good measure, once the mound was emptied, the farmer had it dynamited into rubble.⁴⁴

In contrast, other large communities have left immense and permanent reminders of their past glories—such as the huge earthen mound at Cahokia, Illinois. At the center of a large community that sprawled down the banks of the Illinois River for a distance as great as that from one end of San Francisco to the other today, with houses spread out over more than 2000 acres of land, stood a gigantic man-made structure extending ten stories into the air and containing 22,000,000 cubic feet of earth. At its base this monument, which was larger than the Great Pyramid of Egypt, covered 16 acres of land. About 120 other temple and burial mounds rose up in and around Cahokia which acted as the urban core for more than fifty surrounding towns and villages in the Mississippi Valley, and which by itself probably had a population of well over 40,000 people. In size and social complexity Cahokia has been compared favorably with some of the more advanced Maya city-states of ancient Mesoamerica.⁴⁵ And it was fully flourishing almost 2000 years ago.

These, then, are just some examples of the great multitudes of permanently settled societies that constituted what commonly and incorrectly are thought of today as the small and wandering bands of nomads who inhabited North America's "virgin land" before it was discovered by Europeans. In fact, quite to the contrary of that popular image, as the eminent geographer Carl O. Sauer once pointed out:

For the most part, the geographic limits of agriculture have not been greatly advanced by the coming of the white man. In many places we have not

passed the limits of Indian farming at all. . . . In general, it may be said that the plant domesticates of the New World far exceeded in range and efficiency the crops that were available to Europeans at the time of the discovery of the New World. . . . The ancient Indian plant breeders had done their work well. In the genial climates, there was an excellent, high yielding plant for every need of food, drink, seasoning, or fiber. On the climatic extremes of cold and drought, there still were a remarkable number of plant inventions that stretched the limits of agriculture about as far as plant growth permitted. One needs only to dip into the accounts of the early explorers and colonists, especially Spanish, to know the amazement with which the Europeans learned the quality and variety of crop plants of Indian husbandry.⁴⁶

Still, wildly inaccurate though the popular historical perception of Indian America as an underpopulated virgin land clearly is, on one level—a comparative level—the myth does contain at least a shred of truth. For despite the large, prolific, sophisticated, permanently settled, and culturally varied populations of people who inhabited the Americas north of Mexico prior to the coming of Columbus, their numbers probably did not constitute more than 10 to 15 percent of the entire population of the Western Hemisphere at that time.

II

The number of people living north of Mexico in 1492 is now generally estimated to have been somewhere between what one scholar describes as "a conservative total" of more than 7,000,000 and another's calculation of about 18,000,000.⁴⁷ These figures are ten to twenty times higher than the estimates of scholars half a century ago, but even the largest of them is dwarfed by the population of central Mexico alone on the eve of European contact. As noted earlier, probably about 25,000,000 people, or about seven times the number living in all of England, were residing in and around the great Valley of Mexico at the time of Columbus's arrival in the New World.

But the Aztec empire, with its astonishing white city of Tenochtitlán, was at the end of the fifteenth century only the most recent in a long line of magnificent and highly complex cultures that had evolved in Mesoamerica—where more than 200 separate languages once were spoken—over the course of nearly three thousand years.

Some time around 2500 B.C. villages were being established in the Valley of Oaxaca, each of them containing probably no more than a dozen or so houses surrounding a plaza that served as the community's ceremonial center. After about 1000 years of increasing sophistication in the techniques of growing and storing foodstuffs, by 1500 B.C., around the time of Amenhotep I in Egypt and a thousand years before the birth of Pericles in Athens, these people had begun to merge into the Olmec Empire that

was then forming in the lowlands off the southernmost point of the Gulf coast in Mexico. Very little detail is known about Olmec culture or social structure, nor about everyday life in the other complex societies that had begun to emerge in northwest Central America at an even earlier time. But there is no doubt that in both regions, between 1500 B.C. and 2000 B.C., there existed civilizations that provided rich cultural lives for their inhabitants and that produced exquisite works of art.⁴⁸

The core of the Olmec population was situated in a river-laced crescent of land that stretched out across the Isthmus of Tehuantepec on Mexico's southern Gulf coast. At first glance this appears to be an inhospitable area for the founding of a major population center and civilization, but periodic flooding of the region's rivers created a marshy environment and the richest agricultural lands in Mexico—land that often has been compared to the Nile delta in Egypt. From about 1200 B.C. to 900 B.C. the center of Olmec culture was located in what is now known as San Lorenzo, after which it was moved to La Venta. Here, in the symbolic shadow of their Great Pyramid—about 3,500,000 cubic feet in volume, a construction project that is estimated to have taken the equivalent of more than 2000 worker-years to complete—the Olmecs farmed extensively, worshiped their gods, enjoyed athletic contests involving ball games and other sports, and produced art works ranging from tiny, meticulously carved, jade figurines to enormous basalt sculpted heads more than ten feet tall.

Neither the jade nor the basalt used for these carvings was indigenous to the areas immediately surrounding either of the Olmec capitals. The jade apparently was brought in, along with other items, through a complicated trade network that spread out across the region at least as far as Guatemala, Honduras, Nicaragua, and Costa Rica. The basalt, on the other hand, was available from quarries in the Tuxtla Mountains, a little more than fifty miles away. From here in the mountains, writes archaeologist Michael Coe, in all probability the stones designated to become the huge carvings "were dragged down to navigable streams and loaded on great balsa rafts, then floated first down to the coast of the Gulf of Mexico, then up the Coatzacoalcos River, from whence they would have to be dragged, probably with rollers, up the San Lorenzo plateau." Coe observes that "the amount of labor which must have been involved staggers the imagination," as indeed it does, considering that the finished sculptures formed from these enormous boulders themselves often weighed in excess of twenty tons.⁴⁹

Before the dawn of the West's Christian era another great city was forming well north of the Olmec region and to the east of the Lake of the Moon—Teotihuacan. Built atop an enormous underground lava tube that the people of the area had expanded into a giant cave with stairways and large multi-chambered rooms of worship, this metropolis reached its pinnacle by the end of the second century A.D., about the time that, half a

world away in each direction, the Roman Empire and the Han dynasty in China were teetering on the brink of ultimate collapse. Teotihuacan was divided into quarters, bisected from north to south and east to west by two wide, four-mile long boulevards. Constructed around a nine-square-mile urban core of almost wall-to-wall buildings made from white stucco that was brightly painted with religious and mythological motifs, the overall alignment of the city—with everything consistently oriented to 15 degrees 25 minutes east of true north—evidently had religio-astronomical meaning that has yet to be deciphered.⁵⁰ At its peak, the city and its surroundings probably contained a population of about a quarter of a million people, making it at the time one of the largest cities in the world. The density of population in the city itself far exceeded that of all but the very largest American metropolises today.

Teotihuacan too had its great pyramids—the huge, twenty-story-high Pyramid of the Sun and slightly smaller Pyramid of the Moon. In addition, the city contained numerous magnificent palace compounds. Typical of these was the Palace of Xolalpan, with 45 large rooms and seven forecourts arranged around a sunken central courtyard that was open to the sky. Smaller sunken courts existed in many of the surrounding rooms as well, with light and air admitted through openings in the high column-supported ceilings, a design reminiscent of Roman *atria*.⁵¹ Those not fortunate enough to live in one of Teotihuacan's palaces apparently lived in large apartment complexes, such as one that has been unearthed in the ruins on the eastern side of the city, containing at least 175 rooms, five courtyards, and more than twenty *atria*-like forecourts. So splendid and influential was the architecture and artwork of this immense urban center that a smaller, contemporary reproduction of it, a town that Michael Coe says is "in all respects a miniature copy of Teotihuacan," has been found in the highlands of Guatemala—650 miles away.⁵²

Many other cultures were flourishing in Mesoamerica while Teotihuacan was in its ascendancy, some in areas of lush farming potential, others in regions where complex irrigation techniques were devised to coax life from agriculturally marginal land. The Zapotec civilization in a previously almost uninhabited part of the Valley of Oaxaca is a prime example of this latter situation. And in the heart of Zapotec country another major city emerged—Monte Albán—an urban center that may have been unique in all the world as a politically neutral capital (a so-called disembedded capital) for a confederation of semi-independent and historically adversarial political states.⁵³ Politically neutral or not, however, Monte Albán clearly was an important ceremonial community, spread out over fifteen square miles of land, and containing public plazas, temple platforms, and public buildings, including the Palace of Los Danzantes, constructed around three towering central pyramids.

The city's many residents, for the most part, lived in homes built on

more than 2000 terraces that they had carved into the hillsides from which Monte Albán later took its European name. Monte Albán's population usually is estimated to have been somewhat in excess of 30,000 (about what New York City's population was at the beginning of the nineteenth century), but a recent analysis of the agricultural potential of adjacent farmland has raised some questions about that number that have yet to be addressed: it shows the 30,000 figure to be less than 10 percent of the population that could have been supported by available foodstuffs.⁵⁴

All of this, and much more, pre-dates by centuries the rise of classic Maya civilization during the time of what traditionally has been known in Europe as the Dark Ages. Indeed, with every passing year new discoveries are made suggesting that we have hardly even begun to recognize or understand the rich cultural intricacies of pre-Columbian Mesoamerican life. A recent example was the discovery in 1987 of a huge, four-ton basalt monument in a riverbed near the tiny Mexican village of La Mojarra. What made this find so confounding was that the monument is covered with a finely carved inscription of more than 500 hieroglyphic characters, surrounding an elaborate etching of a king—hieroglyphics of a type no modern scholar had ever seen, and dating back almost two centuries before the earliest previously known script in the Americas, that of the Maya. It has long been recognized that several less complex writing traditions existed in Mesoamerica as early as 700 B.C. (and simpler Olmec symbolic motifs date back to 1000 B.C. and earlier), but the monument found in La Mojarra is a complete writing system as sophisticated as that of the Maya, yet so different that epigraphers, who study and analyze hieroglyphics, don't know where to begin in trying to decipher it.

Whoever created the monument—and whatever other examples may exist of this unknown, but highly literate culture that otherwise has disappeared without a trace—was able to employ a complicated array of very stylized syllabic letters and other geometric symbols that acted as punctuation throughout the text. But as well as the task of attempting to decipher the writing, the concerns of archaeologists have quickly focused on the site itself. After all, La Mojarra today is but a small, remote village and has always been considered a fairly insignificant archaeological site. "Yet," says archaeologist Richard Diehl, "here we have this wonderful monument and incredible text. What happened at La Mojarra?" And how many other La Mojarras were there? For, as the initial published report on the La Mojarra discovery observes, at the very least "it has added another interesting piece to what has become a very complex mosaic. . . . [in that] scholars now suspect there must have been many sophisticated local writing traditions before the Maya."⁵⁵

Until—if ever—questions like these are answered, however, popular interest in early Mesoamerican society will continue to focus on the Maya. And for good reason. The Maya, after all, created what has to be one of

the most extraordinary civilizations the world has ever known, a civilization that governed fifty or more independent states and that lasted in excess of 1000 years.

The Maya empire stretched out over a vast land area of more than 100,000 square miles, beginning in the Yucatán region of southern Mexico, across and down through present-day Belize and Guatemala toward the borders of Honduras and El Salvador. No one knows how large the Maya population was at its zenith, but scholarly estimates have ranged as high as eight to ten to thirteen million for just the Yucatán portion of the empire, an area covering only one-third of Maya territory.⁵⁶ Scores of major cities, all of them filled with monumental works of art and architecture, blanketed the lands of the Maya. Cities such as Kaminaljuyú, the key center for the growth of early Maya culture; Yaxchilán, a vibrant arts community; Palenque, with its extraordinary palatial architecture; Copán, with its Acropolis and its elegant and serene statuary, totally absent of any martial imagery; Uxmal, with its majestic Quadrangle and mysterious Pyramid of the Magician; and the great Toltec-Maya cities like Tula and the grandly opulent Chichén Itzá—to name just some of the more magnificent of such urban complexes.

Maya cities were geographically larger and less densely populated than were other Mesoamerican urban centers, particularly those of central Mexico. Thus, for instance, the wondrous city of Tikal, in the middle of the luxuriant Peten rain forest, seems to have contained more than three times the land area of Teotihuacan (more than six times by one recent estimate), and also had a huge population, but a population less concentrated than Teotihuacan's because most of its buildings and residential compounds were separated by carefully laid out gardens and wooded groves. Current research also is demonstrating that Tikal's population—now estimated at between 90,000 and 100,000 people—was sustained by an elaborate system of immense catchment reservoirs that may have been constructed in other lowland urban areas as well. Combined with advanced agricultural techniques that allowed Tikal's farmers to coax enormous crop yields out of raised wetland gardens, the reservoir systems probably enabled population densities in rural Maya communities to exceed 500 people per square mile—that is, as high as the most intensively farmed parts of rural China (and the metropolitan areas of modern-day Albany, Atlanta, Dallas, and San Diego)—while urban core areas attained densities as high as 5000 persons per square mile, more than half the density of the high-rise city of Detroit today.⁵⁷

It was with the support of this sort of extraordinary agricultural foundation that Maya populations fanned out well beyond the outer boundaries of their cities, filling thousands of square miles with non-urban peoples, in some cases virtually from the portals of one major city to the gates of the next. To use Tikal as an example once again, a detailed recent

archaeological-demographic analysis has shown that at least 425,000 people—four to five times the population of the city itself, and a much higher number than ever before supposed—were under the city's direct control throughout the surrounding countryside.⁵⁸

Many thick volumes have been written on the wonders of Maya culture and civilization—its economic organization and trade networks, its fabulous artworks, its religion and literature, its complex calendrical and astrological systems, and more. This is not the place to try to review any of this work, but it is important at least to point out how little we still know of these people. Their involved writing system, combining elements of both phonetic and ideographic script, for example, appears to have been fully expressive of the most intricate and abstract thinking and has been compared favorably to Japanese, Sumerian, and Egyptian—but it continues to defy complete translation.

Similarly, for many years the absence of a gridwork layout to streets, plazas, and buildings in Maya cities puzzled scholars. Right angles weren't where they logically should have been, buildings skewed off oddly and failed to line up in the expected cardinal directions; everything seemed to twist away from an otherwise generally northward presentation. Apparently, said some archaeologists, Maya builders were incompetent and couldn't construct simple right angles. Given the exquisite and precise alignments of every other aspect of Maya architecture, however, others thought this to be at best a hasty criticism. And now it is beginning to become evident that these seeming eccentricities of engineering had nothing to do with incompetence.

On the contrary, a complicated and original architectural pattern had always been present—the same pattern, some began to notice, in city after city—but its conceptual framework was so foreign to conventional Western perception and thought that it remained effectively invisible. Recently, the "code," as it were, of Maya engineering and construction has begun to be deciphered, and the story it reveals is mind-boggling. So precise were the Maya calendrical measurements and astronomical observations—and so central were these cosmic environmental calculations to their ritual and everyday lives—that the Maya constructed their cities in such a way that everything lined up exactly with specific celestial movements and patterns, particularly as they concerned the appearance and disappearance of the planet Venus in the evening sky.⁵⁹ We will never understand deeply the world of the ancient Maya. Too much has already been lost. But, in addition to what is known about their exceptional achievements in creating a vast and complex empire of trade, commerce, politics, urban planning, architecture, art, and literature, what anthropologist and astronomer Anthony Aveni has said about the life of the mind among the Maya surely is correct:

Their cosmology lacks the kind of fatalism present in our existential way of knowing the universe, one in which the purposeful role of human beings seems diminished. These people did not react to the flow of natural events by struggling to harness and control them. Nor did they conceive of themselves as totally passive observers in the essentially neutral world of nature. Instead, they believed they were active participants and intermediaries in a great cosmic drama. The people had a stake in all temporal enactments. By participating in the rituals, they helped the gods of nature to carry their burdens along their arduous course, for they believed firmly that the rituals served formally to close time's cycles. Without their life's work the universe could not function properly. Here was an enviable balance, a harmony in the partnership between humanity and nature, each with a purposeful role to play.⁶⁰

If we were fully to follow the course of Mesoamerican culture and civilization after the Maya, we next would have to discuss the great Toltec state, and then the Mixtecs (some of whose history is recorded in those of their bark-paper and deerskin-covered books and codices that survived the fires of the Spanish conquest), and finally the Aztecs—builders of the great cities like Tenochtitlán, with which the previous chapter began. Of course, the empire of the Aztecs was much more extensive than that described earlier, centered on the Lake of the Moon. At its peak the empire reached well over 700 miles to the south of Tenochtitlán, across the Valley of Oaxaca, past the Isthmus of Tehuantepec, and into the piedmont and rich coastal plain of the province of Xoconochco on the border of modern-day Guatemala. Some provinces were completely subservient to the empire's might, while others, such as large and powerful Tlaxcallan to the east retained its nation-within-an-empire independence. Still others warded off Aztec control entirely, such as the immense Tarascan Kingdom to the north, about which little yet is known, but which once stretched out over 1000 miles across all of Mexico from the Gulf on one side to the Pacific Ocean on the other.

And then in Central America—beyond the reach of Maya or later Aztec influence—there were the culturally and linguistically independent Lenca peoples, the Jicaque, the Paya, the Sumu, and the Chorotega of present-day Honduras. In pre-Columbian times Honduras may easily have had a population in excess of 1,400,000 people—almost a third of what it contains even today.⁶¹ Further to the south, Nicaragua's indigenous population probably reached at least 1,600,000 before the arrival of the Spanish—a little less than half of what the country's population is at present.⁶² In all, current estimates of the size of pre-Columbian Central America's population (Guatemala, Honduras, Belize, El Salvador, Nicaragua, Costa Rica, and Panama) range from a low of about 5,650,000 to a high of more than 13,500,000.⁶³ The latter figure represents nearly half the 1990 pop-

ulation (around 29,000,000) of these turbulent and rapidly growing nations. And still we have not yet begun to discuss the entire continent of South America, by itself almost twice the size of China, larger than all of Europe and Australia combined.

A glance at the South American civilizations might begin with the cluster of independent chiefdoms that once dominated the northern Andes, where Ecuador and Colombia are today. These are commonly overlooked cultures in modern history texts, but they were not ignored by the first Europeans in the New World, who were drawn to them because of the fantastic wealth in gold and gems that they promised.

One story that the conquistadors had heard—and one that turned out to be true—concerned the Muisca people who lived in the vicinity of Lake Guatavita, a lake formed in the distant past by the impact of a falling meteor, high in the mountains of Colombia. Whenever a new leader of the Muisca acceded to power the coronation ritual involved his being anointed with a sticky gum or clay to which gold dust would adhere when sprayed on his body, apparently through tubes of cane stalk. Once thus transformed into a living statue of gold, the new leader stepped onto a raft that was laden down with gold and emerald jewelry. Specially garbed priests aboard the raft then directed it to the center of the lake. At the same time, the entire Muisca population surrounded the lake, playing musical instruments and holding many more gold and emerald implements in their hands. At an appointed moment, possibly as dawn broke and the lake's waters and the new leader's gilded body gleamed in the morning sun, he dove into the center of the lake, washing away the gold dust as his people threw their precious offerings into the sacred water-filled meteor crater.

A small fragment of the Muisca gold that survived the earliest Spanish depredations, along with some gold from other peoples of the region, is now housed in the Museo del Oro of the Banco de la República in Bogotá. It consists of about 10,000 golden artifacts, everything from small animal carvings and masks to spoons and nose rings. As one writer describes the experience of viewing this treasure house, unwittingly donated by a people about whom most of us have never heard:

You walk down a corridor lined on both sides with display cases, each case packed with these opulent creations. You turn right, walk down another corridor past more of the same. Then more. And more. Finally, instead of going out, you are led into a dark room. After you have been there awhile the lights begin rising so gradually that you expect to hear violins, and you find yourself absolutely surrounded by gold. If all of Tut's gold were added to this accumulation, together with everything Schliemann plucked from Mycenae and Hissarlik, you could scarcely tell the difference.⁶⁴

Turning from the northernmost parts of the Andes to the immediate south we encounter the region where, at the time of Columbus, the single

most extensive empire on earth was located—the land of the Inca, stretching down the mountainous western spine of South America over a distance equivalent to that now separating New York and Los Angeles. This is a land with an ancient history. More than four thousand years before the flowering of the Incas, other cultures had existed in this region, some of which were built entirely on intricate systems of trade. The earliest of these seem to have been in the Andean highlands, communities—such as La Galgada, Huaricoto, Huacaloma, and others—characterized by large populations and extraordinary multi-storied works of monumental architecture. Many of these sites, just being uncovered and analyzed today, are causing excitement in archaeological circles because, as one scholar points out: Mesoamerica, long thought to be the precocious child of the Americas, was still confined to the Mesoamerican village during the time we are talking about, and monumental architecture in Peru was a thousand years old when the Olmecs began their enterprise.⁶⁵ For the sake of world cultural context, this also means that Peruvian monumental architecture was in place by the time the Painted Pottery culture of neolithic northern China emerged, that it existed before England's Stonehenge was created, and that it was already about a thousand years old when Tutankhamen's body was being embalmed in Egypt.

These were societies, as noted, that developed in the Andean highlands. Others, also of ancient origin, emerged in coastal areas. One example, still being excavated by archaeologists today, is a complex of enormous stone structures known as El Paraíso that is located on the central Peruvian coast. Here, around 3800 years ago, there stood a large urban center that drew sustenance from fishing and the cultivation of some edible plants, such as beans and peppers, but whose dominant agricultural product was cotton. The inhabitants of El Paraíso used their cotton plantations to produce raw materials for the manufacture of fishing nets and clothing, which they traded with other coastal and highland communities to complement their limited variety of foodstuffs. Of especial interest to political historians is the fact that this large and complex society—whose residential and ceremonial buildings had required the quarrying of at least 100,000 tons of rock from the surrounding hillsides—apparently existed for centuries without a centralized political power structure; all the archaeological evidence uncovered thus far indicates that the people of El Paraíso built their huge stone structures and carried out their highly organized monocrop agriculture and trade while living under remarkably egalitarian political conditions.⁶⁶

In contrast, during its relatively brief reign 3000 years later, the Inca empire was directed by a highly structured elite whose powers encompassed and governed, either directly or indirectly, nearly a hundred entirely different linguistic, ethnic, and political communities.⁶⁷ These included the people who built the splendid, cloud-enveloped, and almost otherworldly Andean city of Machu Picchu high in the remote forested mountains—so

high and so remote that once Machu Picchu was deserted it was not found again (at least by non-Indians) until the twentieth century. And then there were and are the Nazca people, whose culture was flourishing 2000 years ago. These are the people who created on the barren desert floor south of present-day Lima enormous etchings of various living things—hummingbirds, condors, dogs, plants, spiders, sharks, whales, and monkeys—as well as spiritual figures, domestic designs (such as a huge ball of yarn and a needle), and precisely aligned geometric patterns, including trapezoids, triangles, zigzags, and spirals. Because of their great size (a single line of a geometric figure may run straight as a ruler for more than half a mile) the full patterns of these perfectly drafted images can only be seen from the air or from very high ground. As a result, outlandish modern theories of origin have circulated widely, betraying once again our unthinking disparagement of the native peoples of this region who, it intuitively is thought, could not possibly have created anything so monumental and precise. Interestingly (and conveniently overlooked by those who believe these great projects to be the work of outsiders), many of the same designs from the desert floor are found decorating ancient Nazca ceramics as well, and additional oversize animal representations and other designs, less famous and smaller in scale, have also been found in North American deserts, 3000 miles away.⁶⁸

Compared with Mesoamerican cities, those of the Incas were almost austere. Even the fabulous city of Cuzco at first seemed most brilliant in its superb surface simplicity, its streets laid out on a cruciform plan, its houses mostly single-story affairs with steeply pitched roofs to fend off the heavy rains of the Andes. Apart from its gold, the first Europeans were most impressed with Cuzco's exceptional cleanliness, perhaps exemplified by the clear-water rivers and streams from the mountains that flowed through the center of the Inca capital. Before entering the city these waters' upstream pools and rivulets provided bathing and recreation for Cuzco's inhabitants; for years after the Spanish conquest, wrote one conquistador, it was common to find there "small gold ornaments or pins which [Inca women] forgot or dropped while bathing."⁶⁹ As the waters ran through Cuzco, however, they were captured and diverted into perfectly engineered stone gutters that followed the routes of the city's many streets, helping to wash away debris and keep the roadways clean.

At the center of Cuzco was an enormous plaza, large enough to accommodate 100,000 people wrote the Spanish friar Martín de Murúa, and here any sense of the city's austerity ended. When the pleasure-loving people of this metropolis held their frequent dances and festivals in the square, it was roped off with a fine cable of gold, immensely long and fringed at both ends with bright red wool. Around the ceremonial square stood Cuzco's palaces, each built by an Inca ruler during his reign. Here lay the dead leaders' mummified remains, along with all their furniture and treasures.

There were no locks or keys and nothing in the palaces was hidden: as John Hemming puts it, "the Incas were too confident of the security of their empire and the honesty of its citizens to hide their dead rulers' possessions."⁷⁰

All the Inca palaces were different—made of various types of marble, rare woods, and precious metal—but each had at least one common characteristic: enormous halls and ballrooms capable of holding up to 4000 people for banquets and dances when the weather prevented such festivities from being held outdoors. One such hall, which "served on rainy days as a plaza for [Inca] festivals and dances . . . was so large," wrote Garcilaso de la Vega, "that sixty horsemen could very easily play *cañas* inside it." More exquisite even than the palaces, however, was the famed temple of the sun, Coricancha. A magnificent masonry structure with precisely curved and angled walls, Coricancha's majesty was crowned with an eight-inch-wide band of solid gold that encircled the entire building below the roof line. Along with all the other treasure that it held, at the temple's center was a ceremonial font and a massive altar of gold, surrounded by gold and silver images of the moon, of stars, of thunder—and the great *Pinchao*, a massive golden sun, expertly crafted and encrusted with precious jewels. Of all this, though, it was the garden within its walls that most amazed the chroniclers who wrote about Coricancha: a simple garden of maize—but an artificial garden—with the stem and leaves of each perfect plant delicately fashioned in silver, while each crowning ear of corn was carved in gold.⁷¹

Cuzco's population in pre-Columbian times probably was somewhere between 150,000 and 200,000; beyond the city itself, many more people, living and working on vast maize plantations, filled the surrounding valleys. Although some Mesoamerican cities, such as Tenochtitlán, were larger, few cities in Europe at the time even approached the size of Cuzco. Nor would any of them have been able to compete with Cuzco in terms of the treasures it contained or the care with which it was laid out. For we now know that Cuzco was built following a detailed clay-model master plan, and that—as can be seen from the air—the outline of its perimeter was designed to form the shape of a puma with the famed temple-fortress of *Sacsahuaman* at its head.⁷²

But if Cuzco was unique within Peru for the lavishness of its appointments, it was far from alone in the large number of its inhabitants. Other cities in other Andean locales were also huge; some are famous today, others are not. Among this latter group was the provincial city of Jauja. Here is a short description of it by Miguel de Estete, one of the earliest Spaniards to set eyes on it:

The town of Jauja is very large and lies in a beautiful valley. A great river passes near it, and its climate is most temperate. The land is fertile. Jauja is

built in the Spanish manner with regular streets, and has several subject villages within sight of it. The population of the town and the surrounding countryside was so great that, by the Spaniards' reckoning, a hundred thousand people collected in the main square every day. The markets and streets were so full that every single person seemed to be there.⁷³

A hundred thousand people gathered in the marketplace of a single provincial city each day? Many historians intuitively have supposed this to be an exaggeration, but after conducting the most detailed and exhaustive of Peru's population histories to date, Noble David Cook has concluded that the number "does not appear extravagant."⁷⁴

To feed a population as enormous as this, and a population spread out over such a vast area, the Incas cut miles upon miles of intricate and precisely aligned canals and irrigated agricultural terraces from the steep Andean hillsides in their mountain home; and to move those foodstuffs and other supplies from one area to another they constructed more than 25,000 miles of wide highways and connecting roads. Both engineering feats astonished the Spaniards when they first beheld them. And for good reason: modern archaeologists and hydrologists are just as amazed, having discovered that most of these grand public works projects were planned, engineered, and constructed to within a degree or two of slope and angle that computer analyses of the terrain now regard as perfect. At the time of European contact, the thickly populated Andean valleys were criss-crossed with irrigation canals in such abundance, wrote one conquistador, that it was difficult, even upon seeing, to believe. They were found "both in upland and low-lying regions and on the sides of the hills and the foothills descending to the valleys, and these were connected to others, running in different directions. All this makes it a pleasure to cross these valleys," he added, "because it is as though one were walking amidst gardens and cool groves. . . . There is always verdure along these ditches, and grass grows beside many of them, where the horses graze, and among the trees and bushes there is a multitude of birds, doves, wild turkey, pheasants, partridge, and also deer. Vermin, snakes, reptiles, wolves—there are none."⁷⁵

Describing the Incas' "grand and beautiful highway" that ran along the coast and across the plains was something in which all the early chroniclers delighted. From fifteen to twenty-four feet in width, and "bordered by a mighty wall more than a fathom high," this "carefully tended" roadway "ran beneath trees, and in many spots the fruit laden boughs hung over the road," recalled Pedro de Cieza de León, "and all the trees were alive with many kinds of birds and parrots and other winged creatures."⁷⁶ The great highway and other roads dipped through steep coastal valleys, hugged the edges of precipitous cliffs, tunneled through rock, and climbed in stepladder fashion up sheer stone walls.

Encountering rivers and lakes in the paths of their roadways, the peo-

ple of the Andes built large ferries or had engineers design floating pontoon bridges: stretching thick, intertwined cables across the water over distances the length of a modern football field, secured on each side to underground foundations, workmen layered huge bundles of reeds with still more taut cables on top of the original bridge platforms, thus creating secure floating highways usually about fifteen feet in width and riding three feet or so above the water's surface. Even after the Spanish conquest these bridges remained in use, carrying men, horses, and supplies—as did the hundreds of suspension bridges that the Incas had strung across gorges and high mountain passes throughout the Andes. "Such magnificent roads could be seen nowhere in Christendom in country [as] rough as this," wrote Hernando Pizarro, a judgment echoed by modern scholars and engineers who have had an opportunity to study them.⁷⁷

Inca roads and bridges were not built for horse traffic, however, but for men and women on foot, sometimes accompanied by trains of llamas. Thus, the ambivalent reactions of many conquistadors—ranging from admiration for Inca ingenuity to terror in the face of their environment—when they had to travel these roads in their quests for riches and power. After crossing a river, wrote one such Spaniard,

we had to climb another stupendous mountainside. Looking up at it from below, it seemed impossible for birds to scale it by flying through the air, let alone men on horseback climbing by land. But the road was made less exhausting by climbing in zigzags rather than in a straight line. Most of it consisted of large stone steps that greatly wearied the horses and wore down and hurt their hooves, even though they were being led by their bridles.⁷⁸

Under such exhausting conditions, the Spanish and other latter day intruders no doubt appreciated the more than one thousand large lodging houses and hostels and storehouses—some of them multi-storied, some built into hillside terraces—that had been provided for travelers along the Inca roadways. Like most Inca buildings, these generally were constructed by masons working with large, finely worked stones, carefully honed and finished to such a degree of smoothness that even when not secured by mortar the thinnest blade could not pass between them. "In all Spain I have seen nothing that can compare with these walls and the laying of their stone," wrote Cieza de León; they "were so extraordinary," added Bernabé Cobo, "that it would be difficult for anyone who has not actually seen them to appreciate their excellence."⁷⁹ So massive and stable were the Inca walls built in this way that many of them remain in place as the foundations for buildings throughout modern-day Peru. In Cuzco, after the conquest, the Spanish symbolically built their church of Santo Domingo atop the walls of the ruined Coricancha—and for centuries since, while earthquakes repeatedly have destroyed the church, the supporting walls of the great temple of the sun have never budged.

Although, as we shall see, the early Europeans appreciated the people of the Andes a good deal less than they did those people's engineering accomplishments, later visitors came to agree with the Spanish historian José de Acosta who, after spending many years in Peru, wrote in 1590: "Surely the Greeks and the Romans, if they had known the Republics of the Mexicans and the Incas, would have greatly esteemed their laws and governments." The more "profound and diligent" among the Europeans who have lived in this country, wrote Acosta, have now come to "marvel at the order and reason that existed among [the native peoples]."⁸⁰

The life of the mind in the Inca-controlled Andes is beyond the scope or range of this brief survey, but like all the thousands of pre-Columbian cultures in the Americas it was deeply embedded both in the wonders and the cyclical rhythms of the surrounding natural world and in cultural affection for the unending string of genealogical forebears and descendants who had lived and who would live on indefinitely (or so it was thought) in these marvelous mountains and valleys and plains. As one recent analysis of Inca thought and philosophy puts it:

The relationships Andeans perceived between life and death, and between humankind and the natural environment, were . . . profoundly different from Spanish and Christian equivalents. The land surrounding one told the story of one's first ancestors as much as it told one's own story and the story of those yet to come. It was right that the familiar dead were seen walking through the fields they had once cultivated, thus sharing them with both the living and with the original ancestors who had raised the first crops in the very same fields. Death was thus the great leveler not because, as in Christian thought, it reduced all human beings to equality in relation to each other and before God. Rather, death was a leveler because by means of it humans were reintegrated into a network of parents and offspring that embraced the entire natural order.⁸¹

To the east of the Inca homeland, down from the majestic peaks of the Andes, are the dense jungles of the Amazon, followed by the Brazilian highlands, and then the pampas of present-day Argentina—together, well over four million square miles of earth, an area larger than that of the United States today. Within this land the world's largest river rushes through the world's greatest forest—and within that forest lived peoples so numerous and so exotic to the first Western visitors that the Europeans seemed unable to decide whether they had stumbled onto the legendary Terrestrial Paradise or an evil confederacy of demons, or maybe both.

Disappointed that there were no great cities in this boundless part of their New World, the earliest travelers let their imaginations run riot. There was evidence, some of them claimed, that the Apostle Saint Thomas had visited Brazil and preached to the natives a millennium and a half ago; if you looked carefully enough, it was said, you still could see his footprints.

Impressed into rock alongside various river banks. Apparently his preaching was successful, since the natives of this region were so generous and kind, the Jesuit missionary Father Manuel Nobrega reported, that "there are no people in all the world more disposed to receive the holy faith and the sweet yoke of the evangel than these," adding that "you can paint on the heart of this people at your pleasure as on a clean sheet of paper."⁸²

Others thought they found evidence of somewhat stranger things. As one historian summarizes some of the first European reports:

There were men with eight toes; the Mutayus whose feet pointed backwards so that pursuers tracked them in the wrong direction; men born with white hair that turned black in old age; others with dogs' heads, or one cyclopean eye, or heads between their shoulders, or one leg on which they ran very fast. . . . Then there was Upupiara, half man and half fish, the product of fish impregnated by the sperm of drowned men. . . . Brazil was also thought to contain giants and pygmies.⁸³

And, of course, there were said to be Amazons, from which the great river derived its name. In fact, however, apart from the sheer mystery of this fabulous and seemingly primeval world, perhaps the thing that most amazed and unnerved the Europeans had nothing to do with fairy tales. It had to do with the fact that this land was covered with innumerable independent tribes and nations of people who seemed inordinately happy and content, and who lived lives of apparent total liberty: "They have neither kings nor princes," wrote the Calvinist missionary Jean de Léry in 1550, "and consequently each is more or less as much a great lord as the other."⁸⁴

Many of the people of this vast region—including such linguistically distinct cultures as the Tupian, the Cariban, the Jívaroan, the Nambiquaran, the Arawakan, the Tucanoan, the Makuan, the Tupi-Guaraní, and others—lived in cedar planked houses, slept in hammocks or on large palm leaf mats, wore feather cloaks and painted cotton clothing, and played a variety of musical instruments. Very recent and continuing archaeological work in the Amazon lowlands indicates that the people living there have been making pottery for at least 7000 to 8000 years—that is, from about the same time that pottery also was first being made in ancient Iraq and Iran, and around 3000 years earlier than current evidence suggests it was being made in the Andes or in Mesoamerica. Some ancient Amazonian peoples hunted and fished and gathered, others farmed. But there is no doubt that organized communities lived in this locale at least 12,000 years ago, evolving into large agricultural chiefdoms and—more than 1000 years ago—into very populous and sophisticated proto-urban communities, such as Santarém, which, in the words of one recent study, "was a center for complex societies with large, nucleated settlements" in which "people made elaborate pottery vessels and statues, groundstone tools and ornaments of nephrite jade."⁸⁵

Because the Amazon climate and land is not conducive to the preservation of the materials of village life, archaeological work is very difficult, and thus retrospective estimates of pre-Columbian population levels are quite controversial here. No one doubts, however, that the population was large—probably at least 5,000,000 to 7,000,000 people in just the Amazon basin within Brazil, which is only one part of tropical South America, although arguments have been made for individual tribes (such as Pierre Clastres's estimate of 1,500,000 for the Guaraní) that, if correct, would greatly enlarge that regional figure.⁸⁶

One of the things that has most intrigued some modern anthropologists—Clastres in particular—about the people of the Amazon was their ability to sustain such large populations without resorting to steeply hierarchical political systems, something conventional political theory claims is impossible. In most respects, in fact, these people who appointed chiefs from among their ranks, but made sure that their leaders remained essentially powerless, were the classic exemplars of anthropologist Marshall Sahlins's "original affluent society," where people had relatively few material possessions, but also few material desires, and where there was no poverty, no hunger, no privation—where each person's fullest material wants were satisfied with the expenditure of about fifteen to twenty hours of work each week.⁸⁷

Life was far more difficult for the natives of Tierra del Fuego, the cold and blustery islands off the southern tip of South America, between the Strait of Magellan and Cape Horn, and as close to the Antarctic Circle as Ketchikan, Alaska, is to the Arctic. Population densities had to be much thinner in this rugged environment, where the people lived largely off hunted marine mammals, fish, and shellfish that they pried loose from rocky headlands. Unlike the inhabitants of the Amazon, the residents of Tierra del Fuego—the Yahgan, the Alacaluf, the Ona, and the Haüsh—had to struggle constantly to sustain life. Indeed, so important were their sturdy, migratory canoes to them as they made their way through the icy waters, that they maintained permanent fires in beds of clay on board while they searched for the animal life on which they fed their families.

Harsh as life was for these peoples, the land and the water were their home. And, though we know little about them as they lived in pre-Columbian times, it is not difficult to imagine that they revered their homeland much as their relatives all over the hemisphere did, including those in the even more icy world of the far north. The people of Tierra del Fuego, after all, had lived in this region for at least 10,000 years before they were first visited by the wandering Europeans.⁸⁸

Tierra del Fuego, along with Patagonia, its immediate mainland neighbor to the north, was the geographic end of the line for the great hemispheric migrations that had begun so many tens of thousands of years earlier. No one in human history has ever lived in permanent settlements

further south on the planet than this. But those countless migrations did not invariably follow a north-to-south pathway. At various times (again, we must recall, over the course of tens of thousands of years) some groups decided to branch off and head east or west, or double back to the north. There is linguistic evidence, for example, seeming to suggest that during one historical epoch the Timucuan peoples of present-day Florida may gradually have migrated from the south (in Venezuela) across the island Caribbean to their new North American homeland. That also is what a people we have come to call the Arawak (they did not use the name themselves) decided to do a few thousand years ago, although, unlike the hypothesis regarding the Timucuans, they did not carry their travels as far as the northern mainland.⁸⁹

Arawak is the general, post-Columbian name given to various peoples who made a long, slow series of migrations from the coast of Venezuela to Trinidad, then across open ocean perhaps first to Tobago, then Grenada, and on up the chain of islands that constitute the Antilles—St. Vincent, Barbados, St. Lucia, Martinique, Dominica, Guadeloupe, Montserrat, Antigua, Barbuda, St. Kitts, Anguilla, St. Croix, the Virgin Islands, Puerto Rico, Hispaniola, Jamaica, Cuba—then finally off to the Bahamas, leaving behind at each stop populations that grew and flourished and evolved culturally in their own distinctive ways. To use a comparison once made by Irving Rouse, the people of these islands who came to be known as Arawaks are analogous to those, in another part of the world, who came to be known as English: "The present inhabitants of southern Great Britain call themselves 'English,' and recognize that their ethnic group, the English people, is the product of a series of migrations from the continent of Europe into the British Isles, beginning with various prehistoric peoples and continuing with the Celts, Angles, Saxons, Vikings, and Normans of protohistoric time."⁹⁰

Similarly, Arawak (sometimes "Taino," but that is a misnomer, as it properly applies only to a particular social and cultural group) is the name now given to the melange of peoples who, over the course of many centuries, carried out those migrations across the Caribbean, probably terminating with the Saladoid people sometime around two thousand years ago. By the time of their encounter with Columbus and his crews, the islands had come to be governed by chiefs or *caciques* (there were at least five paramount chiefdoms on Hispaniola alone, and others throughout the region) and the people lived in numerous densely populated villages both inland and along all the coasts. The houses in most of these villages were similar to those described by the Spanish priest Bartolomé de Las Casas:

The inhabitants of this island . . . and elsewhere built their houses of wood and thatch in the form of a bell. These were very high and roomy so that in each there might be ten or more households. . . . On the inside designs and

symbols and patterns like paintings were fashioned by using wood and bark that had been dyed black along with other wood peeled so as to stay white, thus appearing as though made of some other attractive painted stuff. Others they adorned with very white stripped reeds that are a kind of thin and delicate cane. Of these they made graceful figures and designs that gave the interior of the houses the appearance of having been painted. On the outside the houses were covered with a fine and sweet-smelling grass.⁹¹

These large buildings conventionally were arranged to face the great house that was inhabited by the local *cacique*, and all of them in turn faced an open field or court where dances and ball games and other festivities and ceremonies were held. In larger communities, several such fields were placed at strategic locations among the residential compounds.

The people of these climate-blessed islands supported themselves with a highly developed level of agriculture—especially on Cuba and Hispaniola, which are among the largest islands on earth; Cuba, after all, is larger than South Korea (which today contains more than 42,000,000 people) and Hispaniola is nearly twice the size of Switzerland. In the infrequent areas where agricultural engineering was necessary, the people of the Indies created irrigation systems that were equal in sophistication to those existing in sixteenth-century Spain.⁹² Their staple food was cassava bread, made from the manioc plant *yuca*, which they cultivated in great abundance. But also, through so many long generations in the same benign tropical environment, the Arawaks had devised an array of unique methods for more than satisfying their subsistence needs—such as the following technique which they used to catch green sea turtles weighing hundreds of pounds, large fish, and other marine life, including manatees:

Noting that the remora or suckerfish, *Echeneis naucrates*, attached itself to the body of a shark or other larger fish by means of a suction disc in its head, the Arawaks caught, fed, and tamed the remora, training it to tolerate a light cord fastened to its tail and gill frame. When a turtle was sighted the remora was released. Immediately it swam to the turtle, attaching its suction disc to the under side of the carapace. The canoe followed the turtle, the Arawak angler holding a firm line on the remora which, in turn, held tightly to its quarry until the turtle could be gaffed or tied to the canoe.⁹³

In addition to this technique, smaller fish were harvested by the use of plant derivatives that stupefied them, allowing the natives simply to scoop up large numbers as though gathering plants in a field. Water birds were taken by floating on the water's surface large calabashes which concealed swimmers who would seize individual birds, one at a time, without disturbing the larger flock. And large aquaculture ponds were created and walled in to maintain and actually cultivate enormous stocks of fish and turtles for human consumption. A single one of these numerous reed ma-

rine corrals held as many as 1000 large sea turtles. This yielded a quantity of meat equal to that of 100 head of cattle, and a supply that was rapidly replenished: a fertile female turtle would lay about 500 eggs each season. Still, the Arawaks were careful not to disturb the natural balance of these and other creatures; the evidence for this is that for millennia they sustained in perpetuity their long-term supply of such natural foodstuffs. It was only after the coming of the Spanish—and, in particular, their release of dogs and pigs that turned feral and ran wild—that the wildlife ecology of the islands found itself in serious trouble.⁹⁴

In sum, as Caribbean expert Carl Sauer once put it, "the tropical idyll of the accounts of Columbus and Peter Martyr was largely true" regarding the Arawak. "The people suffered no want. They took care of their plantings, were dextrous at fishing and were bold canoeists and swimmers. They designed attractive houses and kept them clean. They found aesthetic expression in woodworking. They had leisure to enjoy diversion in ball games, dances, and music. They lived in peace and amity."⁹⁵

III

Much the same thing that Sauer says about the Arawak can be said for many of the other peoples we have surveyed here, and for countless others we had neither the time nor the space to mention. Certainly not all of them, however. And again, this is what would be expected on any large body of land containing such remarkable geographic and cultural diversity. Some of the native peoples of the Americas did indeed suffer from want, at least from time to time, and some lived hard and difficult lives. Some had little time or talent for great art or architecture, or for elaborate games or music or dance. Others lived in societies that, far from being characterized by peace and amity, frequently were at odds with their neighbors.

There is no benefit to be gained from efforts to counter the anti-Indian propaganda that dominates our textbooks with pro-Indian propaganda of equally dubious veracity. For the very plain fact is that the many tens of millions of people who lived in the Americas prior to 1492 were human—neither subhuman, nor superhuman—just human. Some of the social practices of selected groups of them we would find abhorrent to our cultural tastes and attitudes at present, in the same way that we would find loathsome certain social practices of earlier European and Asian cultures. Thus, for example, few of us today would countenance the practice of human sacrifice as a way of propitiating an angry god, as was done by a few of the highest urban cultures in Mesoamerica during the fifteenth- and early sixteenth-century. However, neither would many of us support the grisly torture and killing of thousands of heretics or the burning of tens of thousands of men and women as witches, in a similar effort to mollify a jealous

deity, as was being done in Europe, with theocratic approval, at precisely the same time that the Aztecs were sacrificing enemy warriors.

Conversely, other social practices of certain native Americans in the pre-Columbian era—from methods of child rearing and codes of friendship and loyalty, to worshiping and caring for the natural environment—appear far more enlightened than do many of the dominant ideas that we ourselves live with today. (Even in the sixteenth century the conquering Spanish wrote “with undisguised admiration” of Aztec childrearing customs, notes historian J.H. Elliott. “Nothing has impressed me more,” commented the Jesuit José de Acosta, “or seemed to me more worthy of praise and remembrance, than the care and order shown by the Mexicans in the upbringing of their children.”)⁹⁶ If these attitudes and behaviors varied in emphasis from one native group to another, one characteristic of America’s indigenous peoples that does seem almost universal, transcending the great diversity of other cultural traits, was an extraordinary capacity for hospitality. We have noted this in our discussion of the Iroquois and the Indians of California, but in fact, the native peoples’ affectionate and fearless cordiality in greeting strangers was mentioned by almost all the earliest European explorers, from Vespucci in South America in 1502, where the Indians “swam out to receive us . . . with as much confidence as if we had been friends for years,” to Cartier in Canada in 1535, where the Indians “as freely and familiarly came to our boats without any fear, as if we had ever been brought up together.”⁹⁷

And these were more than ceremonial, more than passing generousities. Indeed, without the assistance of the Indians in everything from donated food supplies to instruction in the ways of hunting and fishing and farming, the earliest European settlements, particularly in North America, could not have taken root. As Edmund S. Morgan has shown, with regard to Roanoke in the 1580s:

Wingina [the local chief] welcomed the visitors, and the Indians gave freely of their supplies to the English, who had lost most of their own when the *Tyger* [their ship] grounded. By the time the colonists were settled, it was too late to plant corn, and they seem to have been helpless when it came to living off the land. They did not know the herbs and roots and berries of the country. They could not or would not catch fish in any quantity, because they did not know how to make weirs. And when the Indians showed them, they were slow learners: they were unable even to repair those that the Indians made for them. Nor did they show any disposition for agriculture. Hariot admired the yields that the Indians got in growing maize; but the English, for lack of seed, lack of skill, or lack of will, grew nothing for themselves, even when the new planting season came round again. Superior English technology appeared, for the moment at least, to be no technology at all, as far as food production was concerned.⁹⁸

type not associated with pulmonary disease, as well as a relatively benign nonvenereal (that is, not sexually transmitted) treponemal infection that was related to syphilis.¹⁰² However, there is no evidence that either disease (whatever it may have been) was at all widespread in either North or South America. And the most detailed recent studies of large-scale sedentary societies in the Americas—where such diseases would have taken hold if they were to do so anywhere—have found no evidence of either tuberculosis or syphilis (or anything like them) as causing significant damage prior to European contact.¹⁰³ Similarly, ancient small-scale migratory societies, even in such harsh environments as those of the frigid northwestern plains, produced people who, in the words of the most recent and extensive study of the subject, “appear to have lived very long lives without significant infectious conditions, or even much serious injury.”¹⁰⁴ Moreover, the limited range of potentially serious diseases that did exist among the Americas’ indigenous peoples (primarily gastrointestinal disease and various minor infections) had long since been mitigated by millennia of exposure to them, as well as by generally beneficent living environments and more than adequate nutrition.¹⁰⁵

All that was to change, however, with shocking and deadly suddenness, once those first three Spanish ships bobbed into view on the rim of the Caribbean horizon. For it was then only a matter of months before there would begin the worst series of human disease disasters, combined with the most extensive and most violent programs of human eradication, that this world has ever seen.

Indeed, Morgan later notes, “the Indians . . . could have done the English in simply by deserting them.”⁹⁹ They did not desert them, however, and in that act they sealed their fate. The same was true throughout the Americas: the cultural traits and the material achievements of the native people were turned against them once the European invasion began. Indian openness and generosity were met with European stealth and greed. Ritualized Indian warfare, in which few people died in battle, was met with the European belief in devastating holy war. Vast stores of grain and other food supplies that Indian peoples had lain aside became the fuel that drove the Europeans forward. And in that drive they traveled quickly, as they could not otherwise have done, on native trails and roadways from the northeast and northwest coasts to the dizzying heights of the Andes in Peru.

Some who have written on these matters—such as one historian who recently has shown how the Spanish conquest of Mexico was literally fed by the agricultural abundance that the Aztecs had created—have commented on the irony of native achievement being turned against itself.¹⁰⁰ Perhaps the greatest and most tragic irony of all, however, was that the extraordinary good health of the native people throughout the Americas prior to the coming of the Europeans would become a key ingredient in their disastrous undoing. For in their tens of thousands of years of isolation from the rest of the earth’s human populations, the indigenous peoples of the Americas were spared from contact with the cataclysms of disease that had wreaked such havoc on the Old World, from China to the Middle East, from the provinces of ancient Rome to the alleyways of medieval Paris.

This is not to say that there were no diseases in the pre-Columbian Americas. There were, and people died from them. But the great plagues that arose in the Old World and that brought entire Asian, African, and European societies to their knees—smallpox, measles, bubonic plague, diphtheria, influenza, malaria, yellow fever, typhoid, and more—never emerged on their own among the Western Hemisphere’s native peoples and did not spread to them across the oceans’ barriers until 1492. Thus, when smallpox was introduced among Cree Indians in Canada as late as the eighteenth century, one native witnessing the horrifying epidemic that was destroying his people exclaimed that “we had no belief that one man could give it to another, any more than a wounded man could give his wound to another.”¹⁰¹ Such devastating contagion was simply unknown in the histories of the Cree or other indigenous peoples of the Americas.

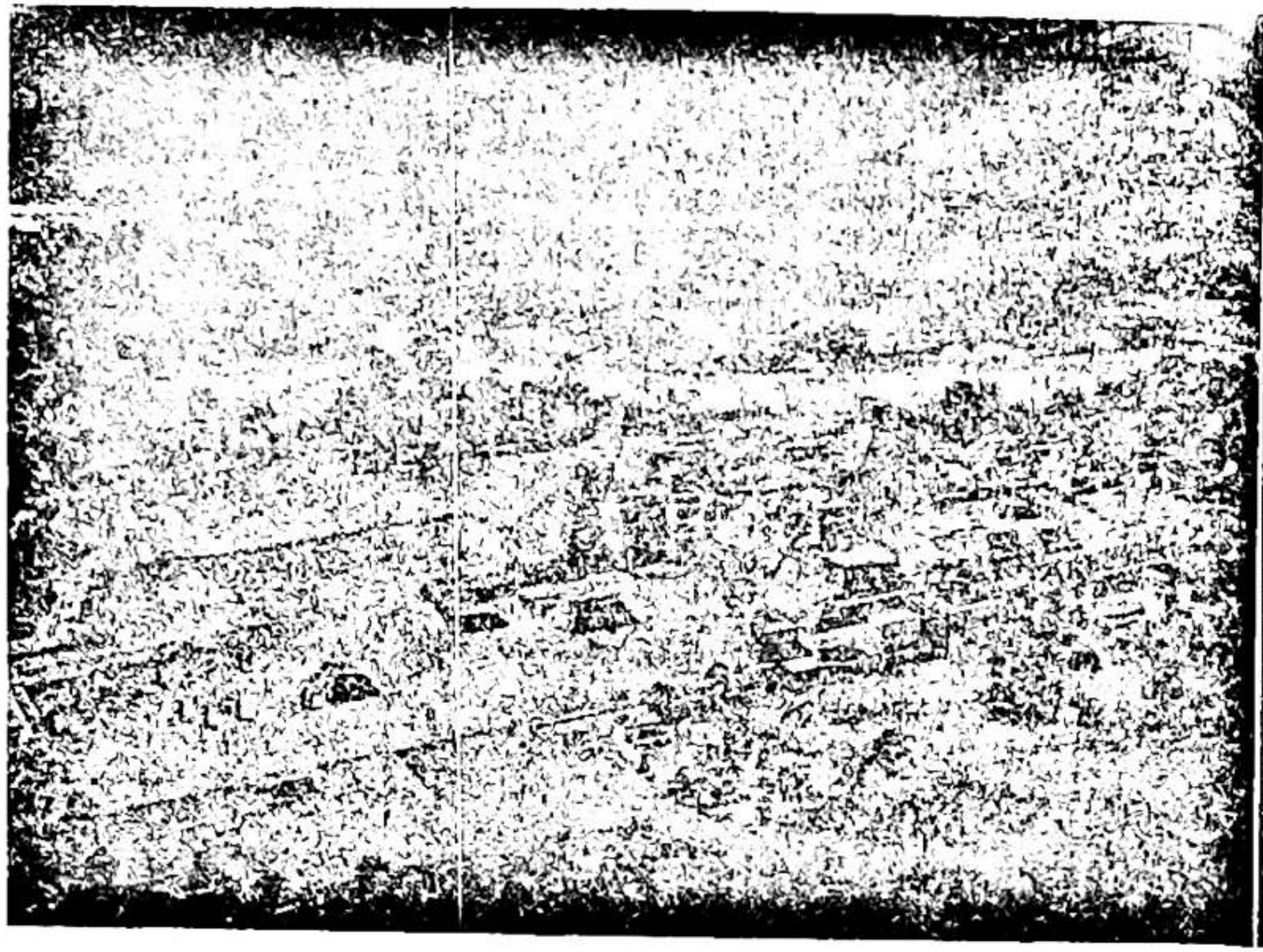
Debate continues as to the existence or extent of tuberculosis and syphilis among native peoples in the pre-Columbian era, with most recent research suggesting that at least some sort of “tuberculosis-like pathology” was present in some parts of the New World prior to 1492, though of a

NATIVE PEOPLES

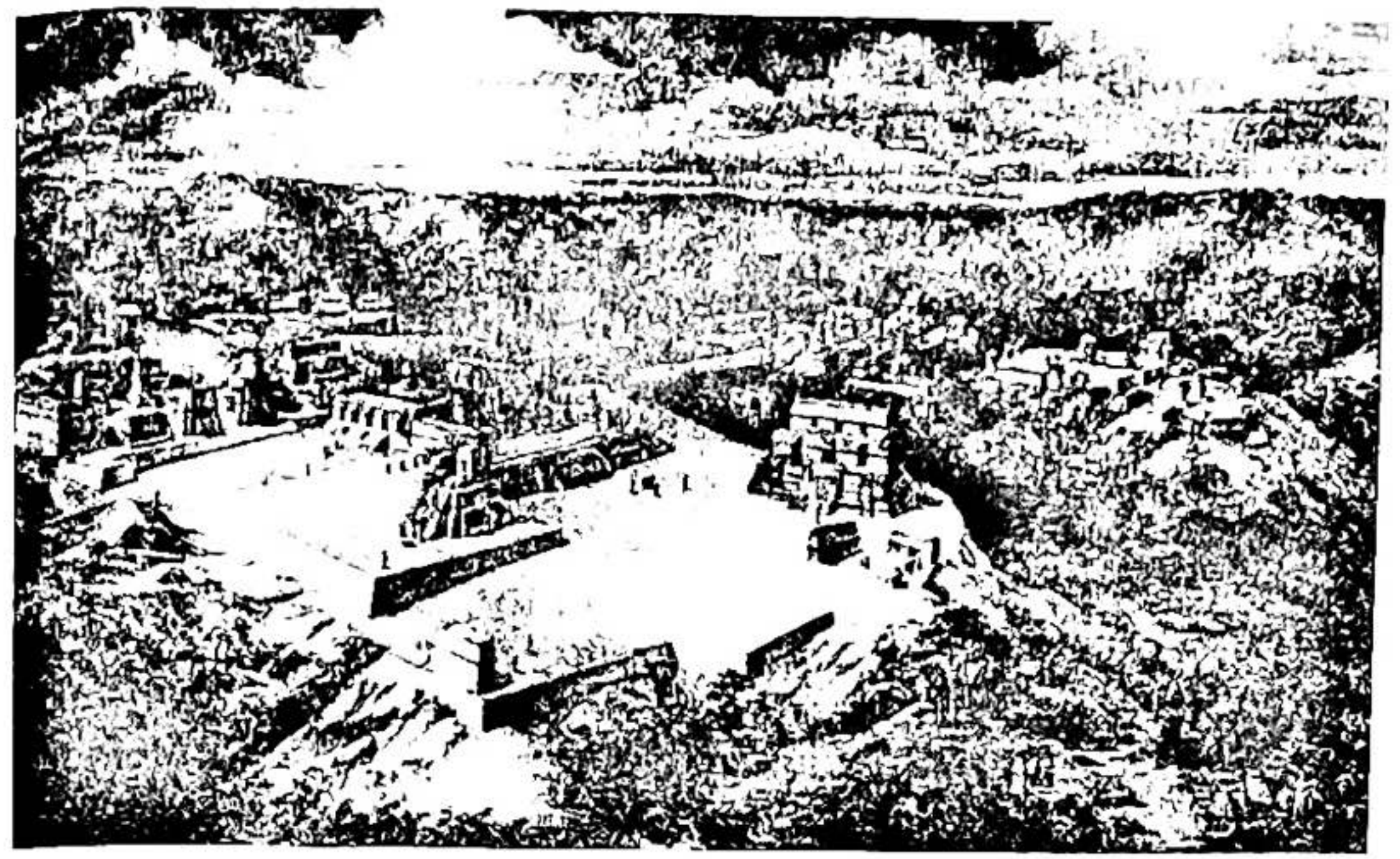
For 40,000 years, hundreds of millions of the Americas’ native peoples have built their homes and their societies on a land mass equal to one-fourth of the earth’s ground surface. Consistent with the great diversity of their natural environments, some of these original inhabitants of the Western Hemisphere lived in relatively small communities that touched only lightly on the land, while others resided in cities that were among the largest and most sophisticated to be found anywhere in the world. So numerous, varied, ancient, and far-flung were these peoples that at one time they spoke as many as two thousand distinct and mutually unintelligible languages.

Only a few of the societies that once existed in the New World are illustrated on the following pages. Thousands of others filled North and South and Central America’s 16,000,000 square miles of land, most of them as distinctive and different from one another as were the peoples represented here. By the end of the nineteenth century, photographers had become interested in preserving images of what they erroneously thought were the soon-to-be-extinct native peoples of North America. The photographs reproduced at the end of this section are from that era.

The drawings of Maya cities were done by Tatiana Proskouriakoff in collaboration with archaeologists who excavated the sites. They are reprinted here with the permission of the Peabody Museum of Archaeology and Ethnology at Harvard University. Theodor de Bry’s engravings of Florida’s and Virginia’s native peoples, based on first-hand paintings by Jacques Le Moyne and John White, appeared in de Bry’s multi-volume *Great and Small Voyages* (1590–1634), from which the illustrations and quoted portions of captions printed here are taken. The photographs following the de Bry illustrations are all from the Smithsonian Institution, with the exception of the last one, which is from the Library of Congress.

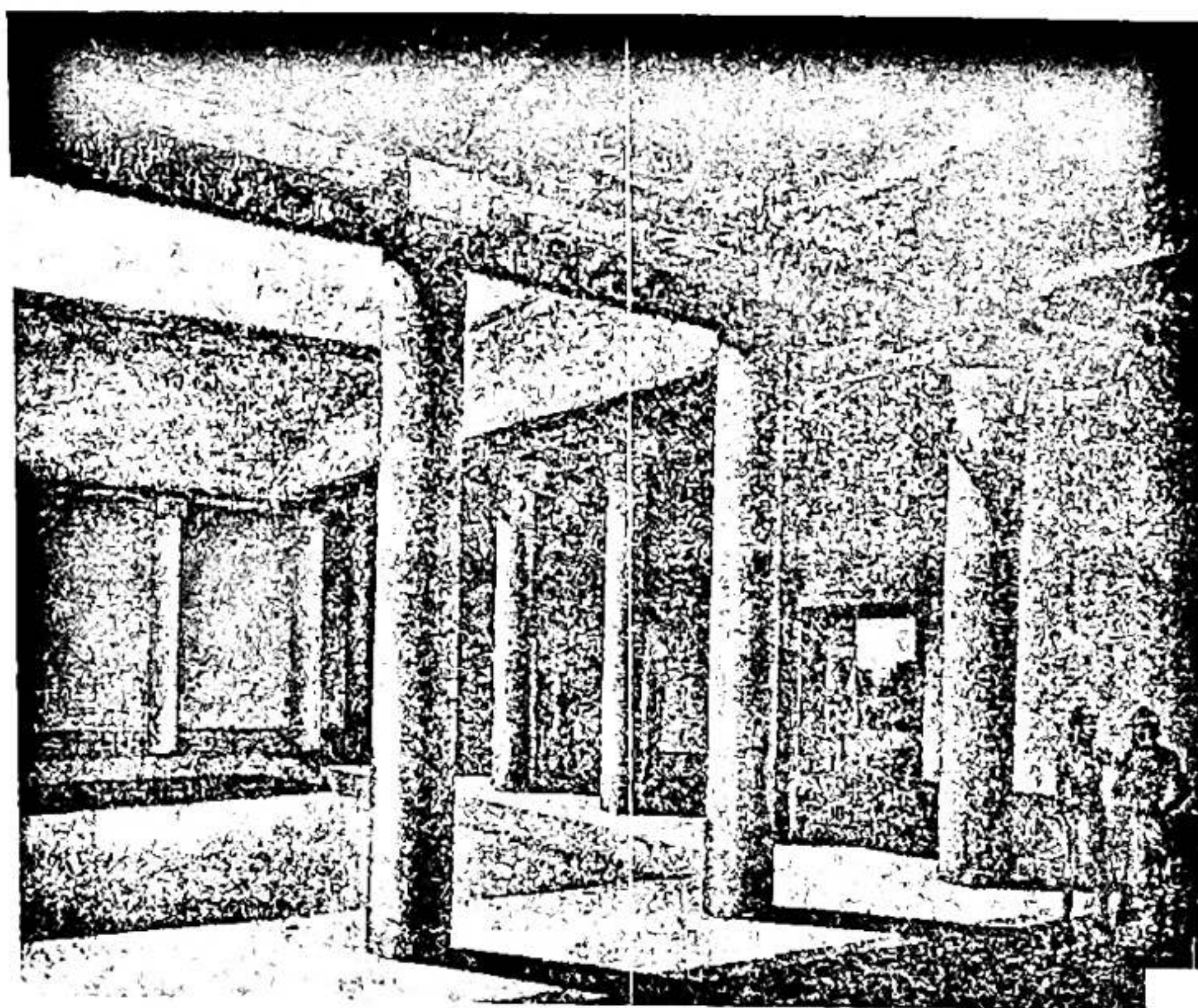
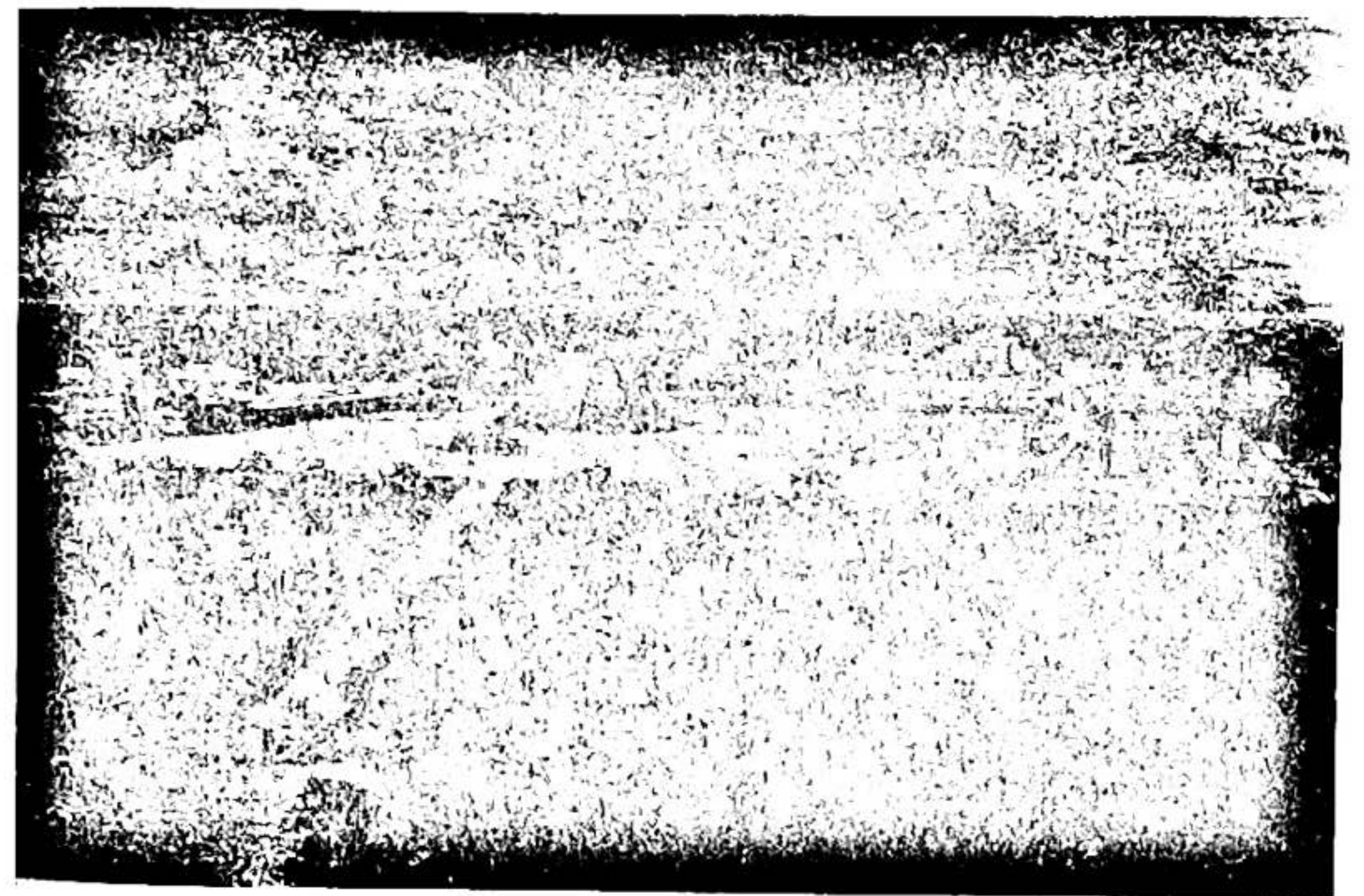


The Acropolis at Copán, Honduras. Constructed at a bend of the Copán River, the city's enormous rectangular plazas were surrounded by pyramids with steps on which the populace sat in review of ceremonies and to witness athletic events. Although the countryside outside Copán was thick with other towns and villages, the city contained no military fortifications and its elaborate art and architecture carried no hint of martial imagery.

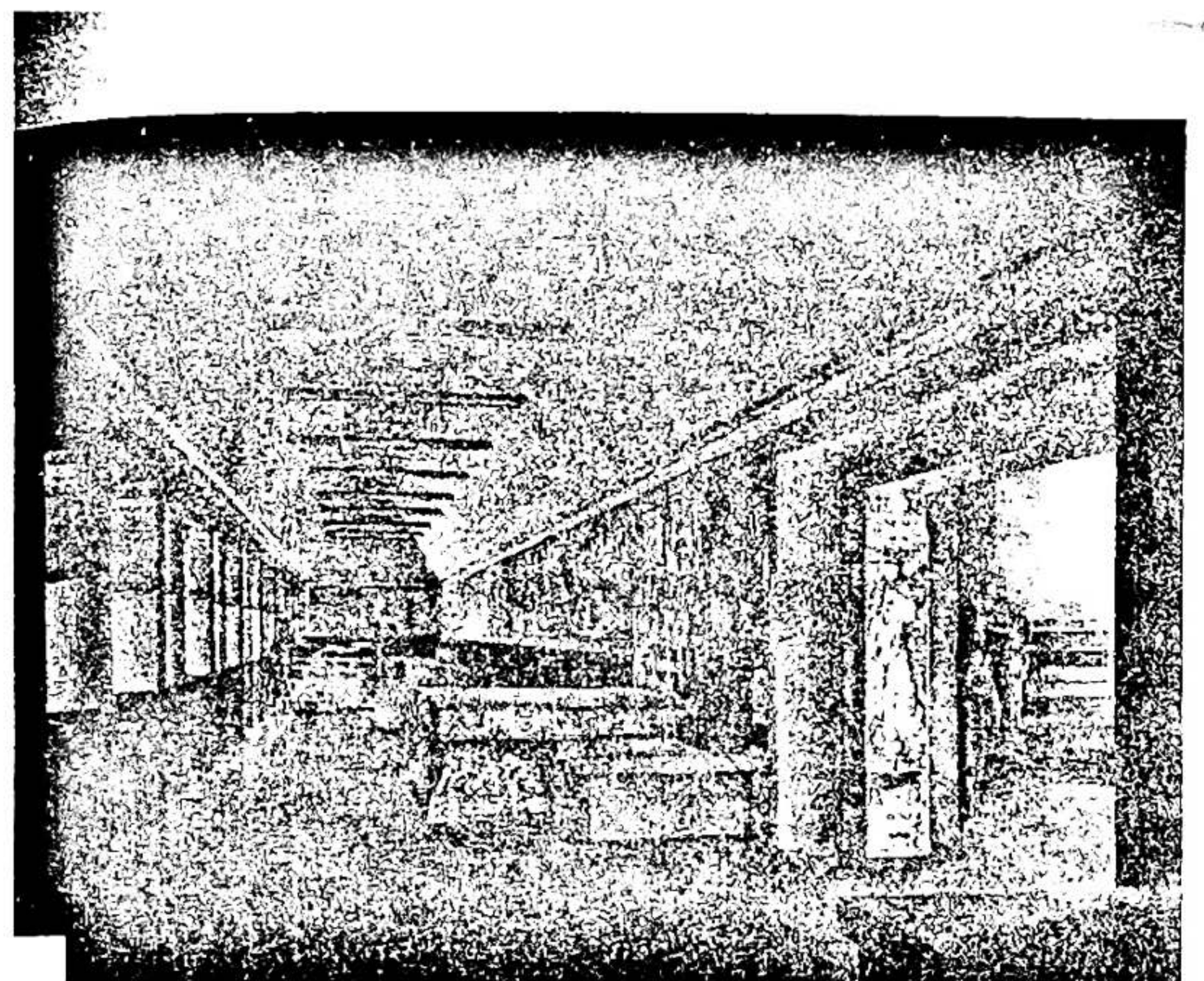


Temple Group at Uaxactun, Guatemala. The temple clusters of this city were built on eight hilltops, which were leveled in some places and fortified in others to support large monuments and plazas. Paved roadways, raised to the heights of the hilltops, connected the temple groups, while residential areas and minor courts and plazas were placed on adjacent hillsides and low ground.

Chichén Itzá, Yucatán: View from the North. A paved boulevard led from the sacred well of the city in the north (lower left of the drawing) to the four-sided, eight-story-high Temple of Kukulcan in the center. To the east, the Group of the Thousand Columns, made up of plazas and temples and colonnades, once was a busy marketplace. To the west lay a huge ballcourt and athletic compound.



The Patio of the Mercado, Chichén Itzá. The Mercado was the marketplace of the city, and this small patio, surrounding a recessed interior court, was at the rear of one of the Mercado's main buildings. Masonry walls and plaster-covered columns, set into a plaster-and-flagstone floor, supported wooden rafters and a steeply pitched roof, designed to resist the high winds and heavy rains of the re-



The Gallery of the Mercado, Chichén Itzá. This building directly faced the large quadrangle that held the numerous kiosks and stalls of Chichén Itzá's busy marketplace. The building itself apparently served as something of a courthouse where commercial disputes were settled by presiding judges. The façade of the gallery was a colonnade of alternating round columns and rectangular piers, each painted with bands of brightly contrasting colors. Interior walls and doorways



37.

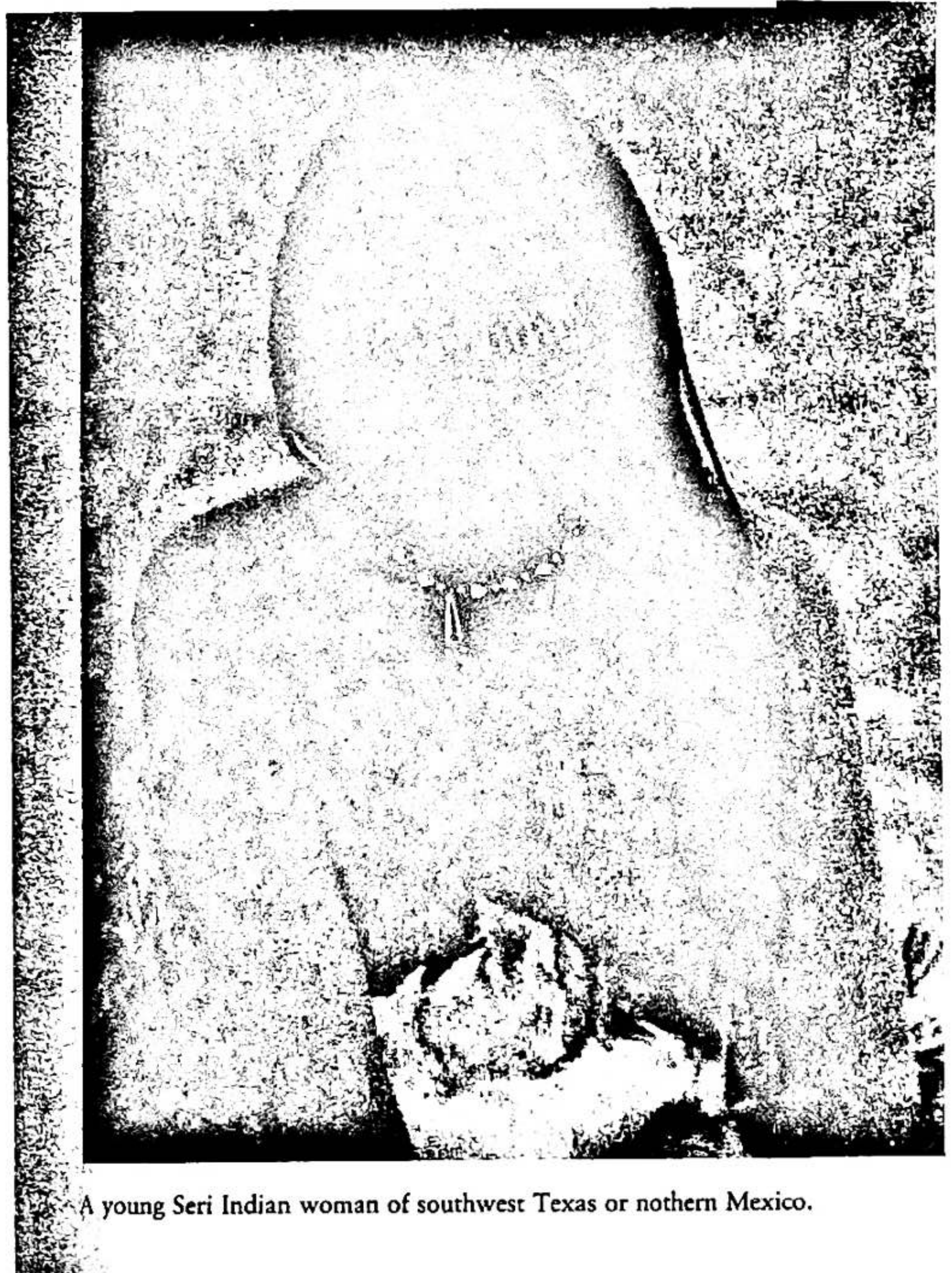
"When the king is ready to take a wife," says the sixteenth-century caption for this illustration from Florida, "he gives orders that from among the daughters of his principal men the tallest and most beautiful shall be chosen. The newly selected queen is brought to him on a litter covered with the skin of some rare animal and fitted with a canopy of boughs to shade her head." Some early European explorers in this region favorably compared the precious jewelry and artwork of these peoples to those of the fabulously wealthy societies of Mexico and Peru.



"While hunting with some of my comrades in the forest, I once saw Chief Saturiba and his queen taking an evening walk. He was clad in a deerskin so exquisitely prepared and painted with so many colors that I have never seen anything more lovely. Two young men walked by his side carrying fans, while a third one, with little gold and silver balls hanging at his belt, followed close behind him holding up his train. The queen and her maidens were adorned with belts worn either at the shoulder or at the waist, made of a kind of moss that grows on the trees. This moss is woven into slender threads of a bluish-green color and is so delicate in texture as to be mistaken for filaments of silk."



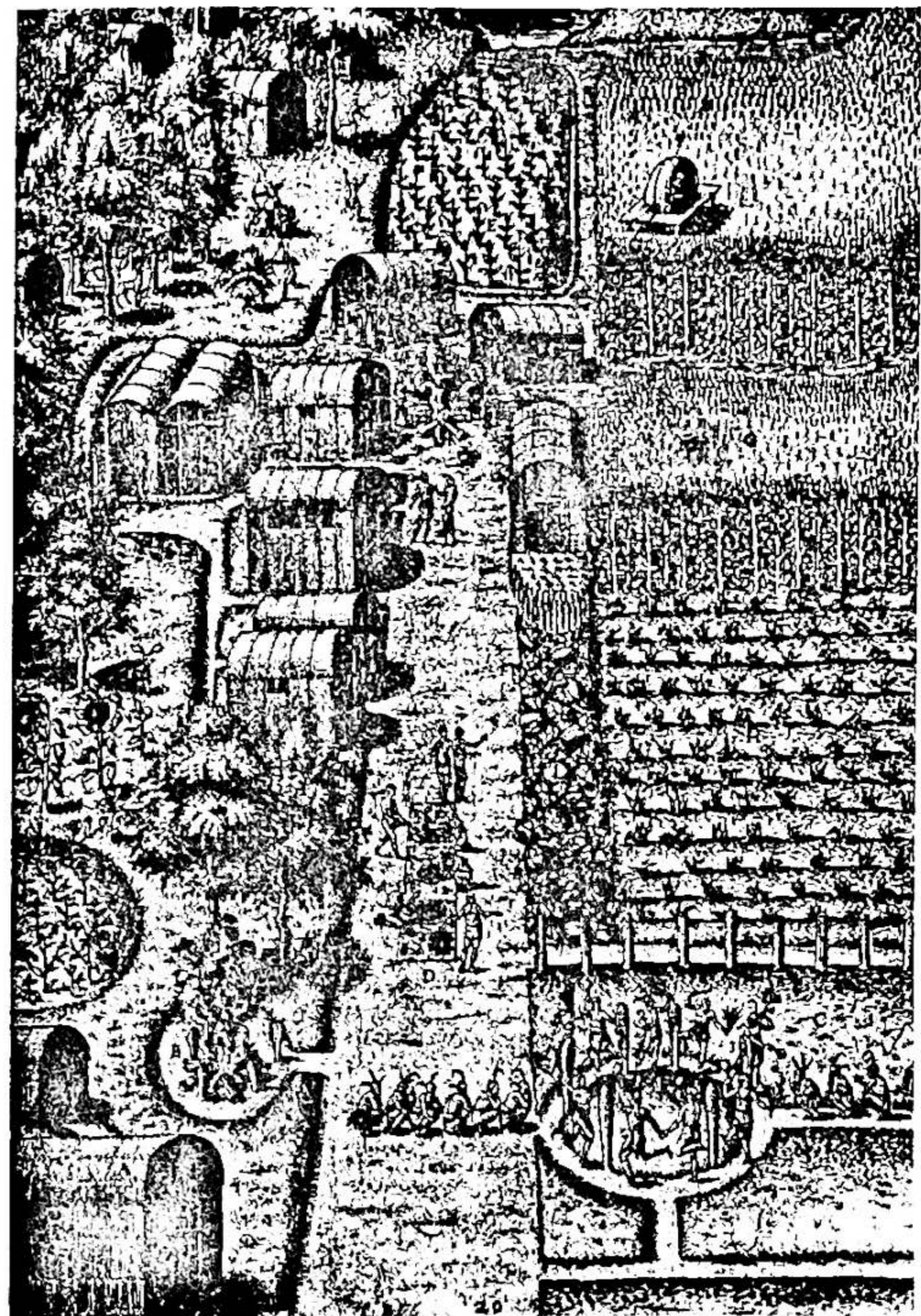
like Secotan, the Virginia town of Pomeioc was enclosed and guarded, of about two dozen longhouses. This stylized engraving, entitled "An n in His Winter Clothes," shows Pomeioc in the background surrounded by cornfields and groves of fruit trees. The accompanying text says: "The country round Pomeiock is far more fruitful than England."



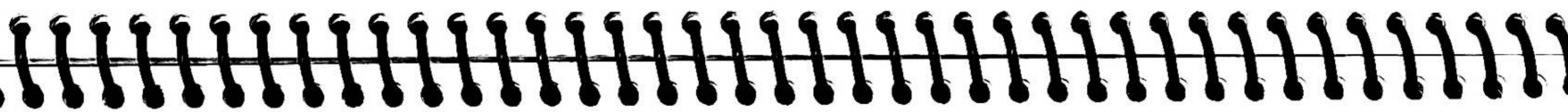
A young Seri Indian woman of southwest Texas or northern Mexico.



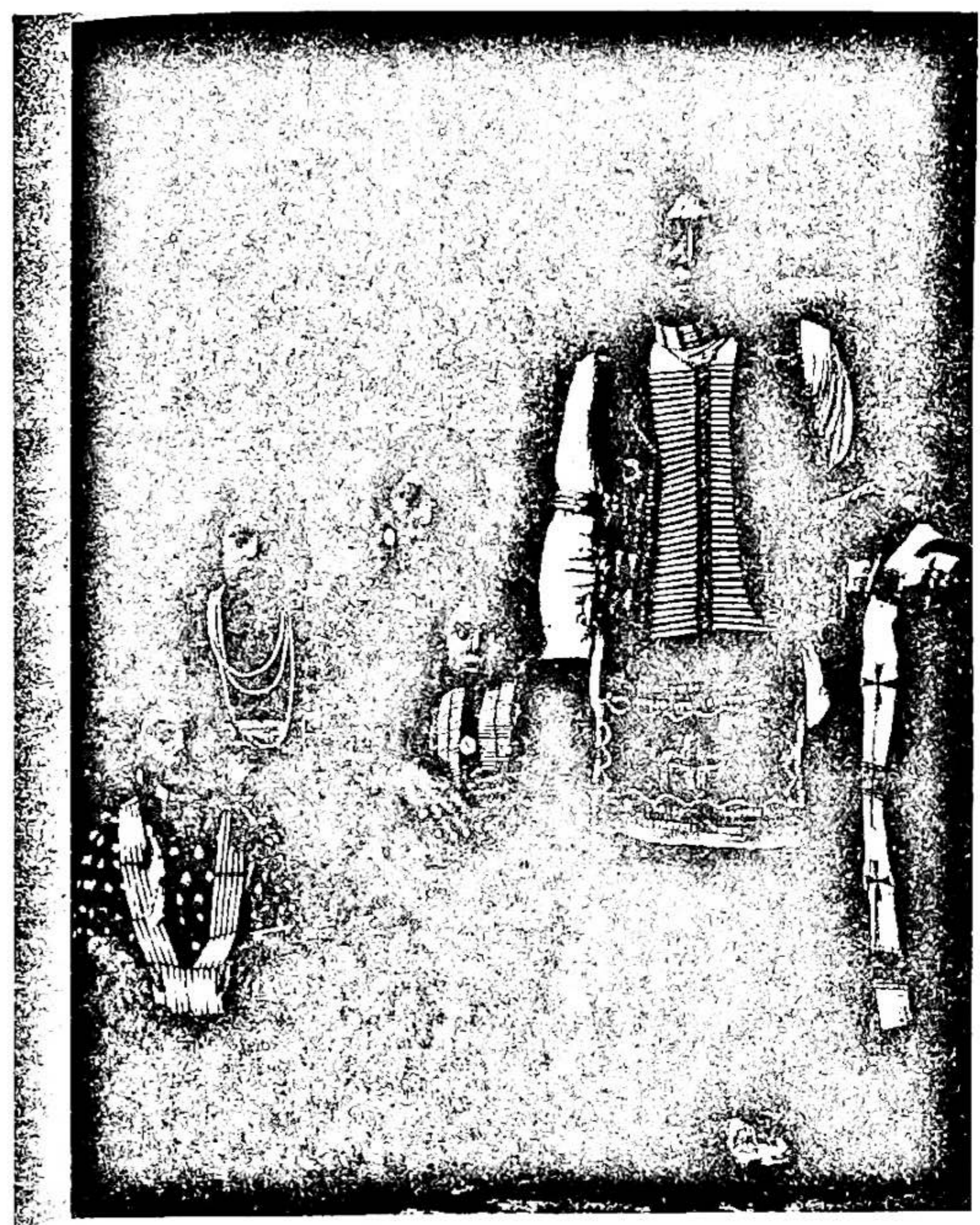
"Many of the islands produce an abundance of fruits. These are gathered two year, carried home in canoes, and stored in low and roomy granaries, built o stone and earth and thickly roofed with palm branches and a kind of soft ea . . . There the Indians store everything they wish to preserve, and there they for supplies whenever they need anything—no one fears being cheated. Indee would be good if among Christians there were as little greed to torment men minds and hearts."



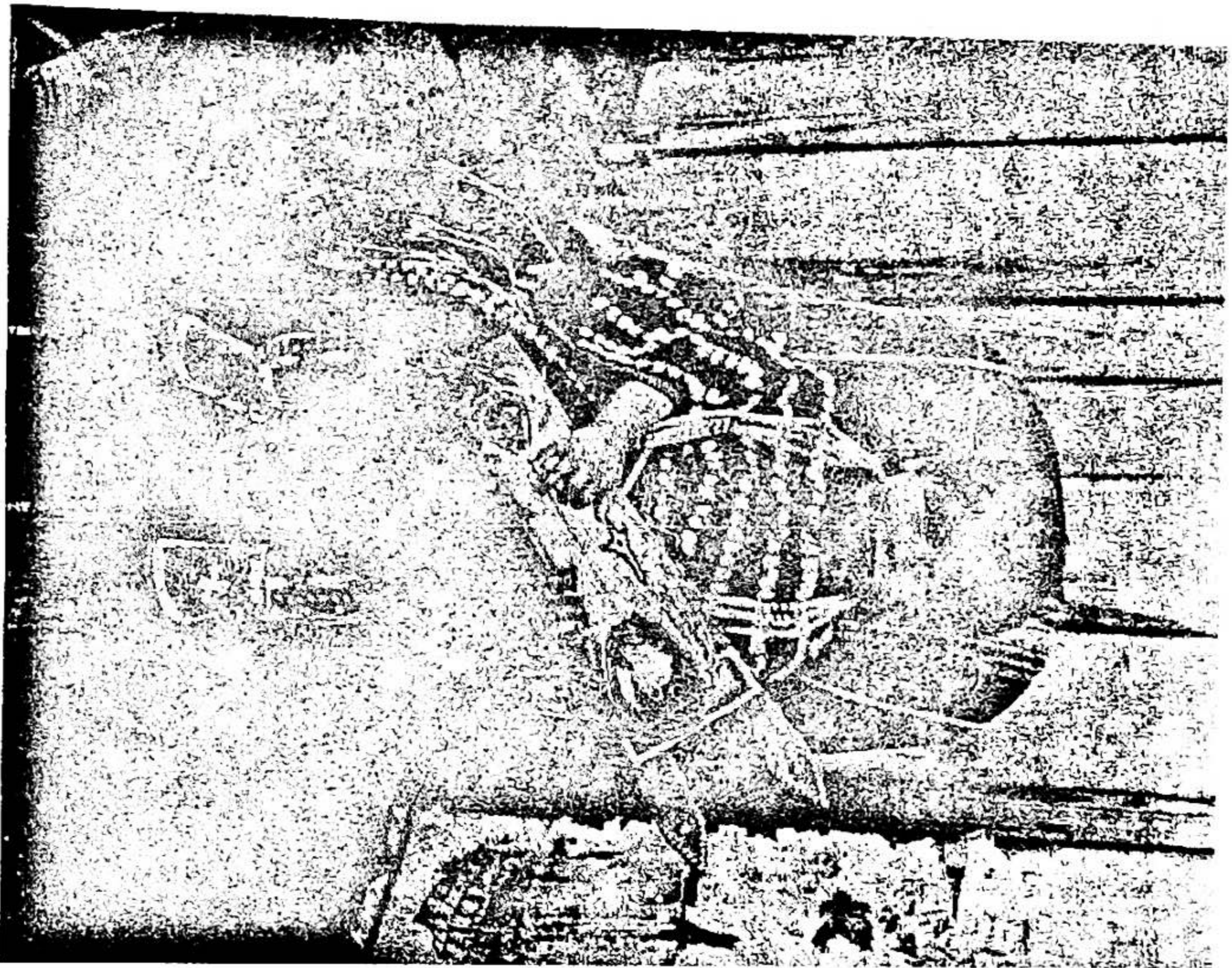
The town of Secotan in Virginia, where "the people live happily together without envy or greed." De Bry's engraving, following John White's painting, artificially reduces the number and size of buildings and compresses the many activities and features of village life here—from fields of corn and squash and pumpkins, to patches of tobacco and sunflowers; from a firelit nighttime dance ceremony near the bottom of the illustration, to hunting in the cleared and canopied forest at the upper left. The accompanying text describes such villages as usually containing from ten to thirty houses, ranging in size from about forty feet long and twenty feet wide to roughly seventy-five feet long and thirty-five feet wide.



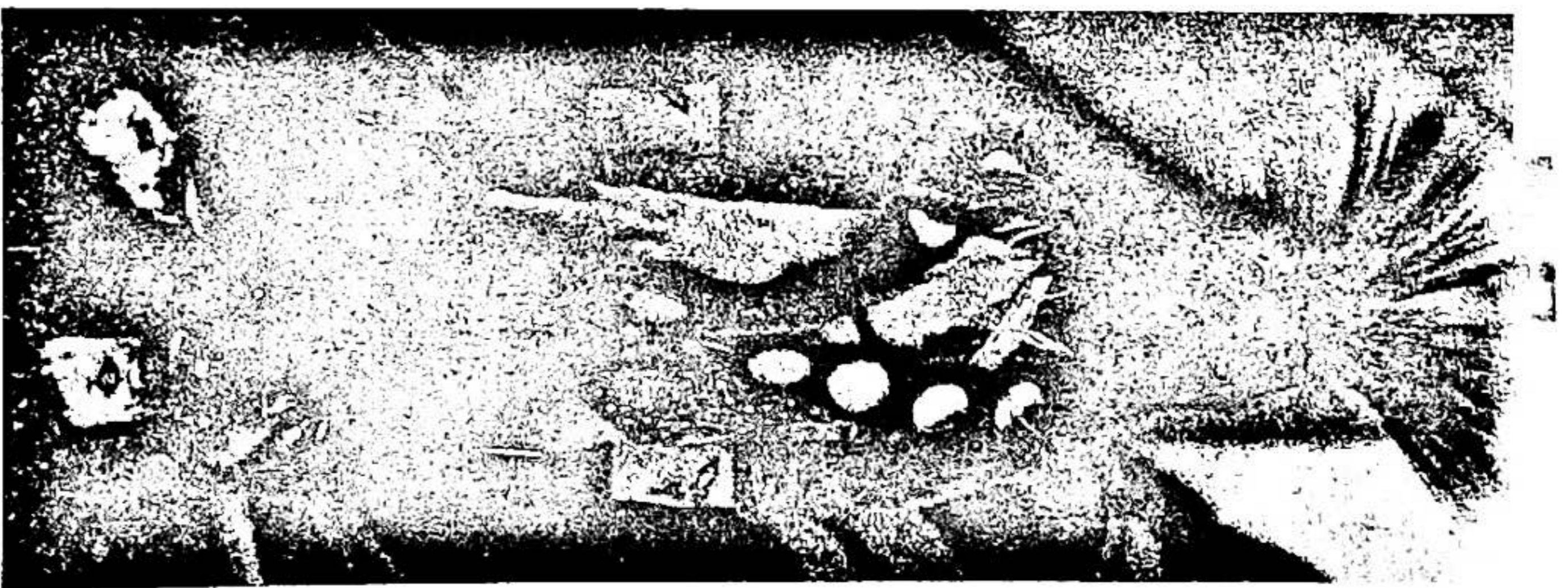
A young Navajo man of Arizona or New Mexico.



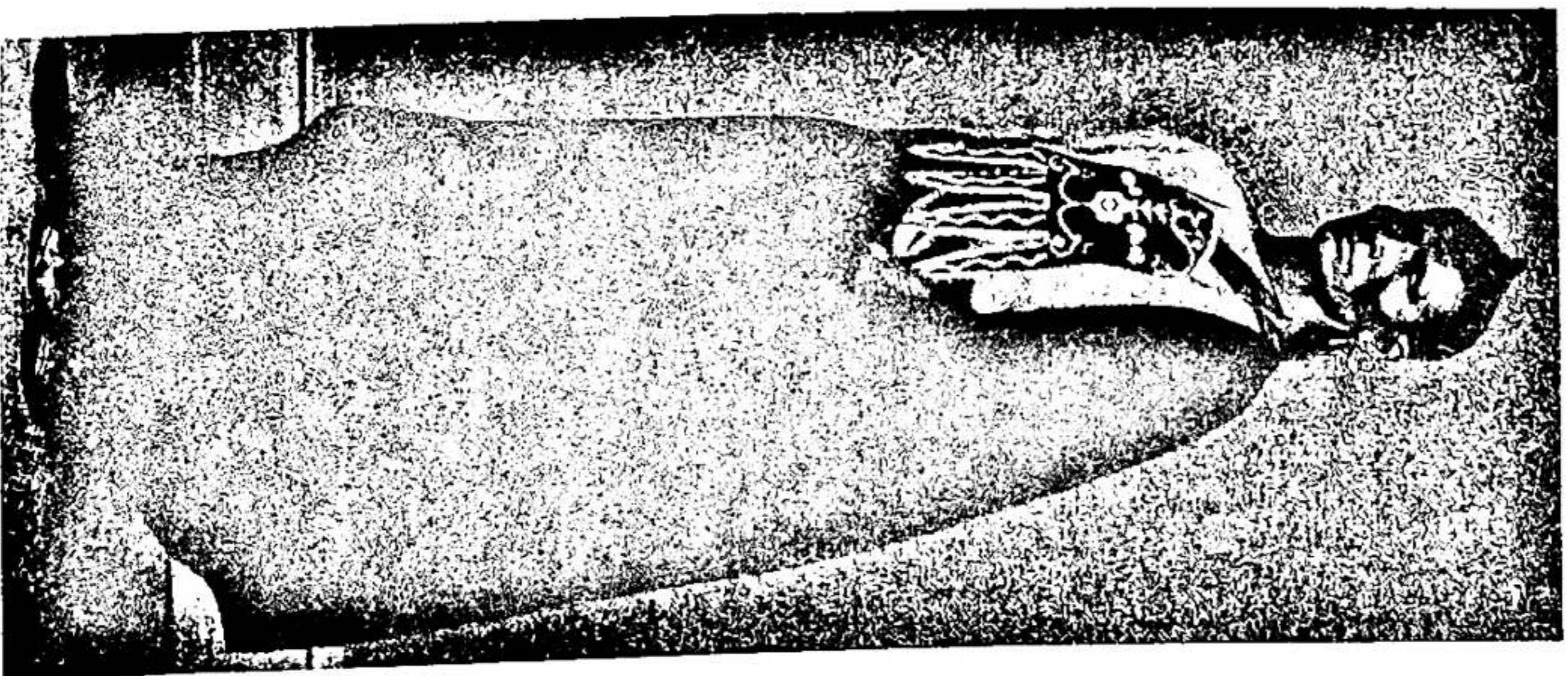
A family from an unknown (possibly Bannock) southeastern Idaho people.



A girl of the Kiowa nation who lived in the Colorado, Texas, and Oklahoma Great Plains.



Nez Perce boy from the Columbia Plateau region of Washington and Idaho.



the Kansa people who lived in the Kansa, Nebraska, and Kansas Great Plains.