

32-1 Machu Picchu (view from adjacent peak), Inka, Peru, 15th century.

Inka architects designed Machu Picchu so that the windows and doors frame spectacular views. Inka masons cut large upright stones in shapes that echo the contours of nearby sacred peaks.

32

NATIVE ARTS OF THE AMERICAS AFTER 1300

In the years following the arrival of Christopher Columbus (1451–1506) in the New World in 1492, the Spanish monarchs poured money into expeditions that probed the coasts of North and South America, but the Spaniards had little luck in finding the wealth they sought. When brief stops on the coast of Yucatán, Mexico, yielded a small but still impressive amount of gold and other precious artifacts, the Spanish governor of Cuba outfitted yet another expedition. Headed by Hernán Cortés (1485–1547), this contingent of explorers was the first to make contact with the great Aztec emperor Moctezuma II (r. 1502–1521). In only two years, with the help of guns, horses, native allies revolting against their Aztec overlords, and perhaps also a smallpox epidemic that had swept across the Caribbean and already thinned the Aztec ranks, Cortés managed to overthrow the vast and rich Aztec Empire. His victory in 1521 opened the door to hordes of Spanish conquistadors seeking their fortunes and to missionaries eager for new converts to Christianity. The ensuing clash of cultures led to a century of turmoil throughout the Spanish king's new domains.

The Aztec Empire that the Spaniards defeated was but the latest of a series of highly sophisticated indigenous art-producing cultures in the Americas. Their predecessors have been treated in Chapter 14. This chapter examines in turn the artistic achievements of the native peoples of *Mesoamerica*, Andean South America, and North America after 1300.

MESOAMERICA

After the fall and destruction of the great central Mexican city of Teotihuacan in the eighth century and the abandonment of the southern Maya sites around 900, new cities arose to take their places. Notable were the Maya city of Chichén Itzá in Yucatán and the Toltec capital of Tula, not far from modern Mexico City (see Chapter 14). Their dominance was relatively short-lived, however. For the early Postclassic period (ca. 900–1250) in Mesoamerica, scholars have less information than for Classic Mesoamerica, but much more evidence exists for the cultures of the late Postclassic period.

Mixteca-Puebla

One of the most impressive art-producing peoples of the Postclassic period in Mesoamerica was the Mixtecs, who succeeded the Zapotecs at Monte Albán in southern Mexico (MAP **32-1**) after 700. They extended their political sway in Oaxaca by dynastic intermarriage as well as by war. The treasures found in the tombs at Monte Albán bear witness to Mixtec wealth, and the quality of these works demonstrates the high level of Mixtec artistic achievement. The Mixtecs were highly skilled goldsmiths and won renown for their work in *mosaic* using turquoise obtained from distant regions such as present-day New Mexico.

BORGIA CODEX The peoples of Mesoamerica prized illustrated books. Miraculously, some manuscripts survived the depredations of the Spanish invasion. The Postclassic Maya were preeminent in the art of writing. Their books were precious vehicles for recording history, rituals, astronomical tables, calendrical calculations, maps, and trade and tribute accounts. The texts consisted of *hieroglyphic* columns read from left to right and top to bottom. Unfortunately, only three Maya books exist today. Bishop Diego de Landa (1524–1579), the author of an invaluable treatise on the Maya of Yucatán, described how the "Indians" made their books and why so few remain:

They wrote their books on a long sheet doubled in folds, which was then enclosed between two boards finely ornamented; the writing was on one side and the other, according to the folds.... We found a great number of books in these [Indian] letters and, since they contained nothing but superstitions and falsehoods of the devil, we burned them all, which they took most grievously, and which gave them great pain.¹

In contrast, 10 non-Maya books survive, five from Mixtec Oaxaca and five from the Puebla region (MAP **32-1**). Art historians have named the style they represent Mixteca-Puebla, an interesting example of a Mesoamerican style that crossed both ethnic and regional boundaries. The Mixteca-Puebla artists painted on long sheets of deerskin, which they first coated with fine white lime plaster and folded into accordion-like pleats. Some of the manuscripts are *codices* (singular, *codex*) and resemble modern books with covers of wood, mosaic, or feathers.

32-2 Mictlantecuhtli and Quetzalcoatl, from the *Borgia Codex*, Mixteca-Puebla, possibly from Puebla or Tlaxcala, Mexico, ca. 1400–1500. Mineral and vegetable pigments on deerskin, $10\frac{5''}{8} \times 10\frac{3''}{8}$. Biblioteca Apostolica Vaticana, Rome.

One of the rare surviving Mesoamerican books, the Mixteca-Puebla *Borgia Codex* includes this painting of the gods of life and death above an inverted skull symbolizing the Underworld.

One extensively illustrated book that escaped the Spanish destruction is the Borgia Codex, from somewhere in central highland Mexico (possibly the states of Puebla or Tlaxcala). It is the largest and most elaborate of several manuscripts known as the Borgia Group. One illustration (FIG. 32-2) in the codex shows two richly attired, vividly gesticulating gods rendered predominantly in reds and yellows with black outlines. The god of life, the black Quetzalcoatl (depicted here as a masked human rather than in the usual form of a feathered serpent), sits back-to-back with the god of death, the white Mictlantecuhtli. Below them is an inverted skull with a double keyboard of teeth, a symbol of the Underworld (Mictlan), which could be entered through the mouth of a great earth monster. Both figures hold scepters in one hand and gesticulate with the other. The image conveys the inevitable relationship of life and death, an important theme in Mesoamerican art. Some scholars believe the image may also be a kind of writing conveying a specific divinatory meaning. Symbols of the 13 divisions of 20 days in the 260-day Mesoamerican ritual calendar appear in panels in the margins. The origins of this calendar, used even today in remote parts of Mexico and Central America, are unknown. Except for the Mixtec genealogical codices, most books painted before and immediately after the Spanish conquest deal with astronomy, calendrics, divination, and ritual.

Aztec

The greatest Mesoamerican culture at the time of the European conquest was that of the Aztecs, a Nahuatl-speaking people who left behind a history of their rise to power. Scholars have begun to question the accuracy of the Aztec account, and some think it is a mythic construct. According to the traditional history, the destruction of Toltec





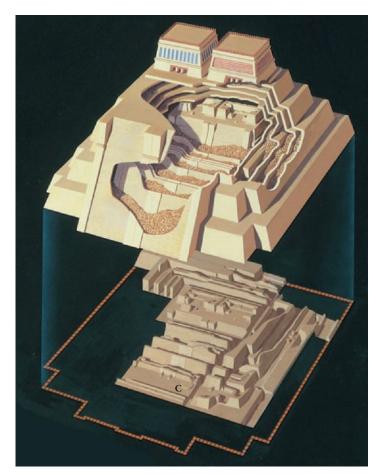
MAP 32-1 Mixteca-Puebla and Aztec sites in Mesoamerica.

Tula about 1200 (see Chapter 14) brought a century of anarchy to the Valley of Mexico, the vast highland valley 7,000 feet above sea level that now contains sprawling Mexico City (MAP **32-1**). Waves of northern invaders established warring city-states and wrought destruction in the valley. The Aztecs were the last of these conquerors. With astonishing rapidity, they transformed themselves within a few generations from migratory outcasts and serfs to mercenaries for local rulers and then to masters in their own right of the Valley of Mexico's small kingdoms. They began to call themselves Mexica, and, following a legendary prophecy that they would build a city where they saw an eagle perched on a cactus with a serpent in its mouth, they settled on an island in Lake Texcoco (Lake of the Moon). Their settlement grew into the magnificent city of Tenochtitlán, which in 1519 amazed Cortés and his small band of adventurers.

Recognized by those they subdued as fierce in war and cruel in peace, the Aztecs indeed seemed to glory in battle and in military prowess. They radically changed the social and political structure in Mexico. Subservient groups not only had to submit to Aztec military power but also had to provide victims to be sacrificed to Huitzilopochtli, the hummingbird god of war, and to other Aztec deities (see "Aztec Religion," page 856). The Aztecs practiced bloodletting and human sacrifice—which had a long history in Mesoamerica (see Chapter 14)—to please the gods and sustain the great cycles of the universe. But the Aztecs engaged in human sacrifice on a greater scale than any of their predecessors, even waging special battles, called the "flowery wars," expressly to obtain captives for future sacrifice. This cruelty is one reason Cortés found ready allies among the peoples the Aztecs had subjugated.

TENOCHTITLÁN The ruins of the Aztec capital, Tenochtitlán, lie directly beneath the center of Mexico City. In the late 1970s, Mexican archaeologists identified the exact location of many of the most important structures within the Aztec sacred precinct, and extensive excavations near the cathedral in Mexico City continue. The principal building is the Great Temple (FIG. **32-3**), a temple-pyramid honoring the Aztec god Huitzilopochtli and the local rain god Tlaloc. Two great staircases originally swept upward from the plaza level to the double sanctuaries at the summit. The Great Temple is a remarkable example of *superimposition*, a common trait in Mesoamerican architecture. The excavated structure, composed of seven shells, indicates how the earlier walls nested within the later ones. (Today, only two of the inner structures remain. The Spaniards destroyed the later ones in the 16th century.) The sacred precinct also contained the temples of other deities, a ball court (see "The Mesoamerican Ball Game," Chapter 14, page 372), a skull rack for the exhibition of the heads of victims killed in sacrificial rites, and a school for children of the nobility.

The Aztecs laid out Tenochtitlán on a grid plan that divided the city into quarters and wards, reminiscent of Teotihuacan (FIG. **14-5**), which, long abandoned, had become a pilgrimage site for the Aztecs. Tenochtitlán's island location required conducting communication and transport via canals and other waterways. Many of the Spaniards thought of Venice in Italy when they saw the city rising from the waters like a radiant vision. Crowded with buildings, plazas, and courtyards, the city also boasted a vast and ever-busy marketplace. In the words of Bernal Díaz del Castillo, "Some of the soldiers among us who had been in many parts of the world, in Constantinople, and all over Italy, and in Rome, said that so large a marketplace and so full of people, and so well regulated and arranged, they had never beheld before."² The city proper had a population of more than 100,000. (The total population of the area of Mexico the Aztecs dominated at the time of the conquest was approximately 11 million.)



32-3 Reconstruction drawing with cutaway view of various rebuildings of the Great Temple, Aztec, Tenochtitlán, Mexico City, Mexico, ca. 1400–1500. C = Coyolxauhqui disk (FIG. 32-4).

The Great Temple in the Aztec capital encased successive earlier structures. The latest temple honored the gods Huitzilopochtli and Tlaloc, whose sanctuaries were at the top of a stepped pyramid.

RELIGION AND MYTHOLOGY

Aztec Religion

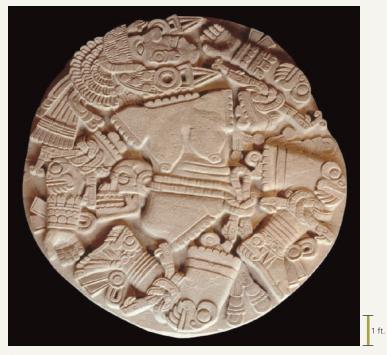
The Aztecs saw their world as a flat disk resting on the back of a monstrous earth deity. Tenochtitlán, their capital, was at its center, with the Great Temple (FIG. 32-3) representing a sacred mountain and forming the axis passing up to the heavens and down through the Underworld—a concept with parallels in other cultures (see, for example, "The Stupa," Chapter 6, page 163). Each of the four cardinal points had its own god, color, tree, and calendrical symbol. The sky consisted of 13 layers, whereas the Underworld had nine. The Aztec Underworld was an unpleasant place where the dead gradually ceased to exist.

The Aztecs often adopted the gods of conquered peoples, and their pantheon was complex and varied. When the Aztecs arrived in the Valley of Mexico, their own patron, Huitzilopochtli, a war and sun deity, joined such well-established Mesoamerican gods as Tlaloc and Quetzalcoatl (the latter the feathered serpent who was a benevolent god of life, wind, and learning and culture, as well as the patron of priests). As the Aztecs went on to conquer much of Mesoamerica, they appropriated the gods of their subjects, such as Xipe Totec, a god of early spring and patron of gold workers imported from the Gulf Coast and Oaxaca. Images of the various gods made of stone (FIG. **32-5**), terracotta, wood, and even dough (eaten at the end of rituals) stood in and around their temples. Reliefs (FIG. **32-4**) depicting Aztec deities, often with political overtones, also adorned the temple complexes.

The Aztec ritual cycle was very full, given that they celebrated events in two calendars—the sacred calendar (260 days) and the solar one (360 days plus 5 unlucky and nameless days). The Spanish friars of the 16th century noted that the solar calendar dealt largely with agricultural matters. The two Mesoamerican calendars functioned simultaneously, requiring 52 years for the same date to recur in both. A ritual called the New Fire Ceremony commemorated this rare event. The Aztecs broke pots and made new ones for the next period, hid their pregnant women, and extinguished all fires. At midnight on a mountaintop, fire priests took out the heart of a sacrificial victim and with a fire drill renewed the flame in the exposed cavity. Then they set ablaze bundles of sticks representing the 52 years that had just passed, ensuring that the sun would rise in the morning and that another cycle would begin.

Most Aztec ceremonies involved the burning of incense (made from copal, resin from conifer trees). Colorfully attired dancers and actors performed, and musicians played conch shell trumpets, drums, rattles, rasps, bells, and whistles. Almost every Aztec festival also included human sacrifice. To Tlaloc, the rain god, the priests offered small children, because their tears brought the rains.

Rituals also marked the completion of important religious structures. The dedication of the last major rebuilding of the Great Temple at Tenochtitlán in 1487, for example, reportedly involved the sacrifice of thousands of captives from recent wars in the Gulf Coast region. Varied offerings have been found within earlier layers of the temple, many representing tribute from subjugated peoples. These include blue-painted stone and ceramic vessels, conch shells, a



32-4 Coyolxauhqui (She of the Golden Bells), Aztec, from the Great Temple of Tenochtitlán, Mexico City, Mexico, ca. 1469. Stone, diameter 10' 10". Museo del Templo Mayor, Mexico City.

The bodies of sacrificed foes that the Aztecs hurled down the stairs of the Great Temple landed on this disk depicting the murdered, segmented body of the moon goddess Coyolxuahqui, Huitzilopochtli's sister.

jaguar skeleton, flint and obsidian knives, and even Mesoamerican "antiques"—carved stone Olmec and Teotihuacan masks made hundreds of years before the Aztec ascendancy.

Thousands of priests served in Aztec temples. Distinctive hairstyles, clothing, and black body paint identified the priests. Women served as priestesses, particularly in temples dedicated to various earth-mother cults. Bernal Díaz del Castillo (1492-1581), a soldier who accompanied Cortés when the Spaniards first entered Tenochtitlán, recorded his shock upon seeing a group of foul-smelling priests with uncut fingernails, long hair matted with blood, and ears covered in cuts, not realizing they were performing rites in honor of the deities they served, including piercing their skin with cactus spines to draw blood. These priests were the opposite of the "barbarians" the European conquistadors considered them to be. They were, in fact, the most highly educated Aztecs. The Spanish reaction to the customs they encountered in the New World has colored popular opinion about Aztec culture ever since. The religious practices that horrified their European conquerors, however, were not unique to the Aztecs but were deeply rooted in earlier Mesoamerican society (see Chapter 14).

COYOLXAUHQUI The Temple of Huitzilopochtli at Tenochtitlán commemorated the god's victory over his sister and 400 brothers, who had plotted to kill their mother, Coatlicue (She of the Serpent Skirt). The myth signifies the birth of the sun at dawn, a role Huitzilopochtli sometimes assumed, and the sun's battle with the forces of darkness, the stars and moon. Huitzilopochtli chased away his brothers and dismembered the body of his sister, the moon goddess Coyolxauhqui (She of the Golden Bells, referring to the bells on her cheeks), at a hill near Tula (represented by the pyramid itself). The mythical event is depicted on a huge stone disk (FIG. 32-4), whose discovery in 1971 set off the ongoing archaeological investigations near the main plaza in Mexico City. The relief had been placed at the foot of the staircase leading up to one of Huitzilopochtli's earlier temples on the site. (Cortés and his army never saw it because it lay within the outermost shell of the Great Temple.) Carved on the disk is an image of the murdered and segmented body of Coyolxauhqui. The mythological theme also carried a contemporary political message. The Aztecs sacrificed their conquered enemies at the top of the Great Temple and then hurled their bodies down the temple stairs to land on this stone. The victors thus forced their foes to reenact the horrible fate of the goddess that Huitzilopochtli dismembered. The Coyolxauhqui disk is a superb example of art in the service of state ideology. The unforgettable image of the fragmented goddess proclaimed the power of the Mexica over their enemies and the inevitable fate that must befall them when defeated. Marvelously composed, the relief has a kind of dreadful yet formal beauty. Within the circular space, the design's carefully balanced, richly detailed components have a slow turning rhythm reminiscent of a revolving galaxy. The carving is in low relief, a smoothly even, flat surface raised from a flat ground. It is the sculptural equivalent of the line and flat tone, the figure and neutral ground, characteristic of Mesoamerican painting.

COATLICUE In addition to relief carving, the Aztecs produced freestanding statuary. Perhaps the most impressive is the colossal statue (FIG. 32-5) of the beheaded Coatlicue discovered in 1790 near Mexico City's cathedral. The sculpture's original setting is unknown, but some scholars believe it was one of a group set up at the Great Temple. The main forms are in high relief, the details executed either in low relief or by incising. The overall aspect is of an enormous blocky mass, its ponderous weight looming over awed viewers. From the beheaded goddess's neck writhe two serpents whose heads meet to form a tusked mask. Coatlicue wears a necklace of severed human hands and excised human hearts. The pendant of the necklace is a skull. Entwined snakes form her skirt. From between her legs emerges another serpent, symbolic perhaps of both menses and the male member. Like most Aztec deities, Coatlicue has both masculine and feminine traits. Her hands and feet have great claws, which she used to tear the human flesh she consumed. All her attributes symbolize sacrificial death. Yet, in Aztec thought, this mother of the gods combined savagery and tenderness, for out of destruction arose new life, a theme seen earlier at Teotihuacan (FIG. 14-7).

Given the Aztecs' almost meteoric rise from obscurity to their role as the dominant culture of Mesoamerica, the quality of the art they sponsored is astonishing. Granted, they swiftly appropriated the best artworks and most talented artists of conquered territories, bringing both back to Tenochtitlán. Thus, craftspeople from other areas, such as the Mixtecs of Oaxaca, may have created much of the exquisite pottery, goldwork, and turquoise mosaics the Aztec elite used. Gulf Coast artists probably made the life-size terracotta sculptures of eagle warriors found at the Great Temple. Nonetheless, the Aztecs' own sculptural style, developed at the height of their power in the late 15th century, is unique.

AZTECS AND SPANIARDS Unfortunately, much of Aztec and Aztec-sponsored art did not survive the Spanish conquest and the subsequent period of evangelization. The conquerors took Aztec gold artifacts back to Spain and melted them down, zealous friars destroyed "idols" and illustrated books, and perishable materials such as textiles and wood largely disappeared. Aztec artisans also fashioned beautifully worked feathered objects and even created mosaic-like



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32-5 Coatlicue (She of the Serpent Skirt), Aztec, from Tenochtitlán, Mexico City, Mexico, ca. 1487–1520. Andesite, 11' 6" high. Museo Nacional de Antropología, Mexico City.

This colossal statue may have stood in the Great Temple complex. The beheaded goddess wears a necklace of human hands and hearts. Entwined snakes form her skirt. All her attributes symbolize sacrificial death.

images with feathers, an art they put to service for the Catholic Church for a brief time after the Spanish conquest, creating religious pictures and decorating ecclesiastical clothing with the bright feathers of tropical birds.

The Spanish conquerors found it impossible to reconcile the beauty of the great city of Tenochtitlán with what they regarded as its hideous cults. They admired its splendid buildings ablaze with color, its luxuriant and spacious gardens, its sparkling waterways, its teeming markets, and its grandees resplendent in exotic bird feathers. But when the emperor Moctezuma II brought Cortés and his entourage into the shrine of Huitzilopochtli's temple, the newcomers started back in horror and disgust from the huge statues clotted with dried blood. Cortés was furious. Denouncing Huitzilopochtli as a devil, he proposed to put a high cross above the pyramid and a statue of the Virgin in the sanctuary to exorcise its evil. This proposal came to symbolize the avowed purpose and the historical result of the Spanish conquest of Mesoamerica. The conquistadors venerated the cross and the Virgin, triumphant, in new shrines raised on the ruins of the plundered temples of the ancient American gods. The banner of the Most Catholic King of Spain waved over new atrocities of a European kind.

SOUTH AMERICA

Late Horizon is the name of the period in the Andes Mountains of Peru and Bolivia (MAP **32-2**) that corresponds to the end of the late Postclassic period in Mesoamerica. The dominant power in the region at that time was the Inka.

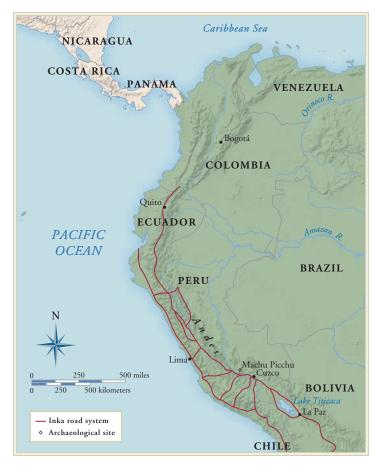
Inka

The Inka were a small highland group who established themselves in the Cuzco Valley around 1000. In the 15th century, however, they rapidly extended their power until their empire stretched from modern Quito, Ecuador, to central Chile, a distance of more than 3,000 miles. Perhaps 12 million subjects inhabited the area the Inka ruled. At the time of the Spanish conquest, the Inka Empire, although barely a century old, was the largest in the world. Expertise in mining and metalwork enabled the Inka to accumulate enormous wealth and to amass the fabled troves of gold and silver the Spaniards so coveted. An empire as vast and rich as the Inka's required skillful organizational and administrative control. The Inka had rare talent for both. They divided their Andean empire, which they called Tawantinsuyu, the Land of the Four Quarters, into sections and subsections, provinces and communities, whose boundaries all converged on, or radiated from, the capital city of Cuzco.

The engineering prowess of the Inka matched their organizational talent. They mastered the difficult problems of Andean agriculture with expert terracing and irrigation and knitted together the fabric of their empire with networks of roads and bridges. Shunning wheeled vehicles and horses, they used their highway system to move goods by llama herds and armies by foot throughout their territories. The Inka upgraded or built more than 14,000 miles of roads, one main highway running through the highlands and another along the coast, with connecting roads linking the two regions. They also established a highly efficient, swift communication system of relay runners who carried messages the length of the empire. The Inka emperor in Cuzco could get fresh fish from the coast in only three days. Where the terrain was too steep for a paved flat surface, the Inka built stone steps, and their rope bridges crossed canyons high over impassable rivers. They placed small settlements along the roads no more than a day apart where travelers could rest and obtain supplies for the journey.

The Inka aimed at imposing not only political and economic control but also their art style throughout their realm, subjugating local traditions to those of the empire. Control extended even to clothing, which communicated the social status of the person wearing the garment. The Inka wove bands of small squares of various repeated abstract designs into their fabrics. Scholars believe the patterns had political meaning, connoting membership in particular social groups. The Inka ruler's tunics displayed a full range of abstract motifs, perhaps to indicate his control over all groups. Those the Inka conquered had to wear their characteristic local dress at all times, a practice reflected in the distinctive and varied clothing of today's indigenous Andean peoples.

The Inka never developed a writing system, but they employed a remarkably sophisticated record-keeping system using a device known as the *khipu*, with which they recorded calendrical and astronomical information, census and tribute totals, and inventories. For example, the Spaniards noted that Inka officials always knew exactly how much maize or cloth was in any storeroom in their empire. Not a book or a tablet, the khipu consisted of a main fiber cord and other knotted threads hanging perpendicularly off it. The color and position of each thread, as well as the kind of knot and its location, signified numbers and categories of things, whether people, llamas, or crops. Studies of khipus have demonstrated that the Inka used the



MAP 32-2 Inka sites in Andean South America.

decimal system, were familiar with the zero concept, and could record numbers up to five digits. The Inka census taker or tax collector could easily roll up and carry the khipu, one of the most lightweight and portable "computers" ever invented.

MACHU PICCHU The imperial Inka were great architects. Although they also worked with adobe, the Inka were supreme masters of shaping and fitting stone. As a militant people, they selected breathtaking, naturally fortified sites and further strengthened them by building various defensive structures. Inka city planning reveals an almost instinctive grasp of the proper relation of architecture to site.

One of the world's most awe-inspiring sights is the Inka city of Machu Picchu (FIGS. 32-1 and 32-6), which perches on a ridge between two jagged peaks 9,000 feet above sea level. Completely invisible from the Urubamba River Valley some 1,600 feet below, the site remained unknown to the outside world until Hiram Bingham (1875–1956), an American explorer, discovered it in 1911. In the very heart of the Andes, Machu Picchu is about 50 miles north of Cuzco and, like some of the region's other cities, was the estate of a powerful mid-15th-century Inka ruler. Though relatively small and insignificant compared with its neighbors (it had a resident population of little more than a thousand), the city is of great archaeological importance as a rare site left undisturbed since Inka times. The accommodation of its architecture to the landscape is so complete that Machu Picchu seems a natural part of the mountain ranges that surround it on all sides. The Inka even cut large stones to echo the shapes of the mountain beyond (FIG. 32-1). Terraces spill down the mountainsides (FIG. 32-6) and extend even up to the very peak of Huayna Picchu, the great hill just beyond the city's main plaza. The Inka carefully sited buildings so that windows and doors framed spectacular views of sacred peaks and facilitated the recording of important astronomical events.

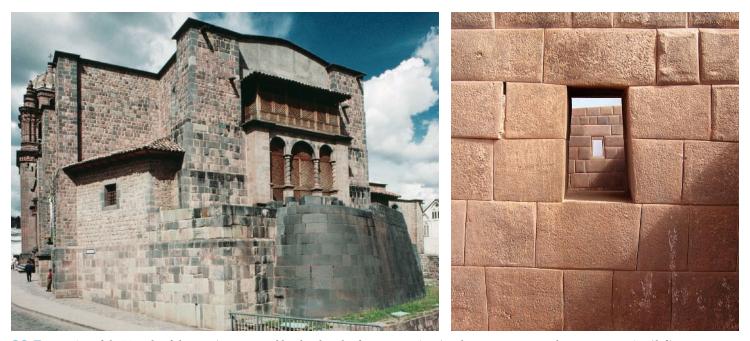


32-6 Aerial view of Machu Picchu, Inka, Peru, 15th century.

Machu Picchu was the estate of an Inka ruler. Stone terraces spill down the Peruvian mountainsides. Precisely placed windows and doors facilitated astronomical observations.

CUZCO In the 16th century, the Spanish conquistadors largely destroyed the Inka capital at Cuzco. Consequently, most of the information about the city has been gleaned from often contradictory Spanish sources rather than from archaeology. Some descriptions state that Cuzco's plan was in the shape of a puma, with a great shrine-fortress on a hill above the city representing its head and the southeastern convergence of two rivers forming its tail. Cuzco residents still refer to the river area as "the puma's tail." A great plaza, still the hub of the modern city, nestled below the animal's stomach. The puma referred to Inka royal power.

One Inka building at Cuzco that survives in small part is the Temple of the Sun (FIG. **32-7**), built of *ashlar masonry* (fitting stone blocks together without mortar), an ancient construction technique the Inka mastered. Inka masons laid the stones with perfectly joined faces so that the lines of separation between blocks and courses were almost undectable. Remarkably, the Inka produced the close joints of their masonry by abrasion alone, grinding the surfaces to a perfect fit. The stonemasons usually laid the blocks in regular horizontal courses (FIG. **32-7**, *right*). Inka builders were so skilled that they could fashion walls with curved surfaces (FIG. **32-7**, *left*), their planes as level and



32-7 Remains of the Temple of the Sun (surmounted by the church of Santo Domingo), Inka, Cuzco, Peru, 15th century. Exterior (*left*); interior (*right*).

Perfectly constructed ashlar masonry walls are all that remain of the Temple of the Sun, the most important shrine in the lnka capital. Gold, silver, and emeralds covered the temple's interior walls.

continuous as if they were a single form. The surviving walls of the Temple of the Sun are a prime example of this single-form effect. On the exterior, for example, the stones, precisely fitted and polished, form a curving semi-parabola. The Inka set the ashlar blocks for flexibility in earthquakes, allowing for a temporary dislocation of the courses, which then would return to their original position.

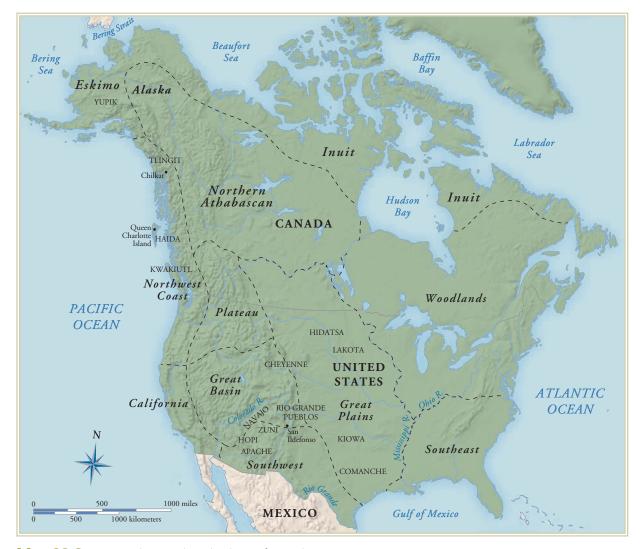
Known to the Spanish as Coricancha (Golden Enclosure), the Temple of the Sun was the most magnificent of all Inka shrines. The 16th-century Spanish chroniclers wrote in awe of Coricancha's splendor, its interior veneered with sheets of gold, silver, and emeralds. Built on the site of the home of Manco Capac, son of the sun god and founder of the Inka dynasty, the temple housed mummies of some of the early rulers. Dedicated to the worship of several Inka deities, including the creator god Viracocha and the gods of the sun, moon, stars, and the elements, the temple was the center point of a network of radiating sight lines leading to some 350 shrines, which had both calendrical and astronomical significance.

Smallpox spreading south from Spanish-occupied Mesoamerica killed the last Inka emperor and his heir before they ever laid eyes on a Spaniard. The deaths of the emperor and his named successor unleashed a struggle among competing elite families that only aided the Europeans in their conquest. In 1532, Francisco Pizarro (1471–1541), the Spanish explorer of the Andes, ambushed the would-be emperor

Atawalpa on his way to be crowned at Cuzco after vanquishing his rival half-brother. Although Atawalpa paid a huge ransom of gold and silver, the Spaniards killed him and took control of his vast domain, only a decade after Cortés had defeated the Aztecs in Mexico. Following the murder of Atawalpa, the Spanish erected the church of Santo Domingo (FIG. **32-7**, *left*), in an imported European style, on what remained of the Golden Enclosure. A curved section of Inka wall serves to this day as the foundation for Santo Domingo's *apse*. A violent earthquake in 1950 seriously damaged the colonial building, but the Peruvians rebuilt the church. The two contrasting structures remain standing one atop the other. The Coricancha is therefore of more than architectural and archaeological interest. It is a symbol of the Spanish conquest of the Americas and serves as a composite monument to it.

NORTH AMERICA

In North America during the centuries preceding the arrival of Europeans, power was much more widely dispersed and the native art and architecture more varied than in Mesoamerica and Andean South America. Three major regions of the United States and Canada are of special interest: the American Southwest, the Northwest Coast (Washington and British Columbia) and Alaska, and the Great Plains (MAP **32-3**).



MAP 32-3 Later Native American sites in North America.



32-8 Detail of a kiva mural from Kuaua Pueblo (Coronado State Monument), Ancestral Puebloan, New Mexico, late 15th to early 16th century. Interior of the kiva, $18' \times 18'$. Museum of New Mexico, Santa Fe.

The kiva, or male council house, was the spiritual center of Puebloan life. Kivas were decorated with mural paintings associated with agricultural fertility. This one depicts a lightning man, fish, birds, and seeds.

Southwest

The dominant culture of the American Southwest between 1300 and 1500 was the Ancestral Puebloan (formerly called the Anasazi), the builders of great architectural complexes such as Chaco Canyon and Cliff Palace (FIG. 14-32). The spiritual center of Puebloan life was the kiva, or male council house, decorated with elaborate mural paintings representing deities associated with agricultural fertility. According to their descendants, the present-day Hopi and Zuni, the detail of the Kuaua Pueblo (pueblo is Spanish for "urban settlement") mural shown here (FIG. 32-8) depicts a "lightning man" on the left side. Fish and eagle images (associated with rain) appear on the right side. Seeds, a lightning bolt, and a rainbow stream from the eagle's mouth. All these figures are associated with the fertility of the earth and the life-giving properties of the seasonal rains, a constant preoccupation of Southwest farmers. The Ancestral Puebloan painter depicted the figures with great economy, using thick black lines, dots, and a restricted palette of black, brown, yellow, and white. The frontal figure of the lightning man seen against a neutral ground makes an immediate visual impact.

NAVAJO PAINTING AND WEAVING When the first Europeans came into contact with the ancient peoples of the Southwest, they called them "Pueblo Indians." The successors of the Ancestral Puebloans and other Southwest groups, the Pueblo Indians include linguistically diverse but culturally similar peoples such as the Hopi of northern Arizona and the Rio Grande Pueblos of New Mexico. Living among them are the descendants of no-madic hunters who arrived in the Southwest from their homelands in northwestern Canada sometime between 1200 and 1500. These

are the Apache and Navajo, who, although culturally quite distinct from the original inhabitants of the Southwest, adopted many features of Pueblo life.

Among these borrowed elements is *sand painting*, which the Navajo learned from the Pueblos but transformed into an extraordinarily complex ritual art form. The temporary sand paintings (also known as *dry paintings*), constructed to the accompaniment of prayers and chants, are an essential part of ceremonies for curing disease. (Because of the sacred nature of sand paintings, the Navajo do not permit photographing them.) In the healing ceremony, the patient sits in the painting's center to absorb the life-giving powers of the gods and their representations. The Navajo perform similar rites to assure success in hunting and to promote fertility in human beings and nature alike. The artists who supervise the making of these complex images are religious leaders or "medicine men" (rarely women), thought to have direct contact with the powers of the supernatural world, which they use to help both individuals and the community.

The natural materials used—sand, varicolored powdered stones, corn pollen, and charcoal—play a symbolic role that reflects the Native Americans' preoccupation with the forces of nature. The paintings depict the gods and mythological heroes whose help the Navajo seek. As part of the ritual, the participants destroy the sand paintings, so no models exist. However, the traditional prototypes, passed on from artist to artist, must be adhered to as closely as possible. Mistakes can render the ceremony ineffective. Navajo dry painting is therefore highly stylized. Simple curves, straight lines, right angles, and serial repetition characterize most sand paintings.



By the mid-17th century, the Navajo had also learned how to weave from their Hopi and other Pueblo neighbors, quickly adapting to new materials such as sheep wool and synthetic dyes introduced by Spanish settlers and, later, by Anglo-Americans. They rapidly transformed blankets they wore into handsome rugs in response to the new market created by the arrival of the railroad and early tourists in the 1880s. Other tribes, including those of the Great Plains, also purchased Navajo textiles, which became famous for their quality (the thread count in a typical Navajo rug is extraordinarily high) as well as the sophistication of their designs. Navajo rugs often incorporate vivid abstract motifs known as "eye dazzlers" and copies of sand paintings (altered slightly to preserve the sacred quality of the impermanent ritual images).

HOPI KATSINAS Another art form from the Southwest, the katsina figurine, also has deep roots in the area. Katsinas are benevolent supernatural spirits personifying ancestors and natural elements living in mountains and water sources. Humans join their world after death. Among contemporary Pueblo groups, masked dancers ritually impersonate katsinas during yearly festivals dedicated to rain, fertility, and good hunting. To educate young girls in ritual lore, the Hopi traditionally give them miniature representations of the masked dancers. The Hopi katsina illustrated here (FIG. 32-9), carved in cottonwood root with added feathers, is the work of OTTO PENTEWA (d. 1963). It represents a rain-bringing deity who wears a mask painted in geometric patterns symbolic of water and agricultural fertility. Topping the mask is a stepped shape signifying thunderclouds and feathers to carry the Hopis' airborne prayers. The origins of the katsina figurines have been lost in time (they even may have developed from carved saints the Spaniards introduced during the colonial period). However, the cult is probably very ancient.

PUEBLO POTTERY The Southwest has also provided the finest examples of North American pottery. Originally producing utilitarian forms, Southwest potters worked without the potter's wheel and instead coiled clay shapes that they then slipped, polished, and fired. Decorative motifs, often abstract and conventionalized, dealt largely with forces of nature—clouds, wind, and rain. The efforts of San Ildefonso Pueblo potter MARÍA MONTOYA MARTÍNEZ (1887–1980) and her husband Julian Martínez (see "Gender Roles in Native American Art," page 863) in the early decades of the 20th century revived old techniques to produce forms of striking shape, proportion, and texture. Her black-on-black pieces (FIG. **32-10**) feature matte designs on highly polished surfaces achieved by extensive polishing and special firing in an oxygen-poor atmosphere.

Northwest Coast and Alaska

The Native Americans of the coasts and islands of northern Washington state, the province of British Columbia in Canada, and southern Alaska have long enjoyed a rich and reliable environment. They fished, hunted sea mammals and game, gathered edible plants, and made their homes, utensils, ritual objects, and even clothing from the region's great cedar forests. Among the numerous groups who make up

32-9 OTTO PENTEWA, Katsina figurine, Hopi, New Oraibi, Arizona, carved before 1959. Cottonwood root and feathers, 1' high. Arizona State Museum, University of Arizona, Tucson.

Katsinas are benevolent spirits living in mountains and water sources. This Hopi katsina represents a rain-bringing deity who wears a mask painted in geometric patterns symbolic of water and agricultural fertility.

ART AND SOCIETY

Gender Roles in Native American Art

Although both Native American women and men have created art objects for centuries, they have traditionally worked in different media or at different tasks. Among the Navajo, for example, weavers tend to be women, whereas among the neighboring Hopi the men weave. According to Navajo myth, long ago Spider Woman's husband built her a loom for weaving. In turn, she taught Navajo women how to spin and weave so that they might have clothing to wear. Today, young girls learn from their mothers how to work the loom, just as Spider Woman instructed their ancestors, passing along the techniques and designs from one generation to the next.

Among the Pueblos, pottery making normally has been the domain of women. But in response to heavy demand for her wares, María Montoya Martínez, of San Ildefonso Pueblo in New Mexico, coiled, slipped, and burnished her pots, and her husband Julian painted the designs. Although they worked in many styles, some based on prehistoric ceramics, around 1918 they invented the black-on-black ware (FIG. 32-10) that made María, and indeed the whole pueblo, famous. The elegant shapes of the pots, as well as the traditional but abstract designs, had affinities with the contemporary Art Deco style in architecture (FIG. 35-76) and interior design, and collectors avidly sought (and continue to seek) them. When nonnative buyers suggested she sign her pots to increase their value, María obliged, but, in the communal spirit typical of the Pueblos, she also signed her neighbors' names so that they might share in her good fortune. Though María died in 1980, her descendants continue to garner awards as outstanding potters. Women also produced the elaborately decorated skin

and, later, the trade-cloth clothing of the Woodlands and Great Plains regions using moose hair, dyed porcupine quills, and imported beads. Among the Cheyenne, quillworking was a sacred art, and young women worked at learning both proper ritual and correct techniques to obtain membership in the prestigious quillworkers' guild. Women gained the same honor and dignity from creating finely worked utilitarian objects that men earned from warfare. Both women and men painted on tipis and clothing (FIGS. **32-16** and **32-17**), with women creating abstract designs (FIG. **32-16**) and men working in a more realistic narrative style, often celebrating their exploits in war or recording the cultural changes resulting from the transfer to reservations.

In the far north, women tended to work with soft materials such as animal skins, whereas men were sculptors of wood masks among the Alaskan Eskimos and of walrus ivory pieces (FIG. 14-27) through-



32-10 MARÍA MONTOYA MARTÍNEZ, jar, San Ildefonso Pueblo, New Mexico, ca. 1939. Blackware, $11\frac{1''}{8} \times 1' 1''$. National Museum of Women in the Arts, Washington, D.C. (gift of Wallace and Wilhelmina Hollachy).

Pottery is traditionally a Native American woman's art form. María Montoya Martínez won renown for her black-on-black vessels of striking shapes with matte designs on highly polished surfaces.

> out the Arctic. The introduction of printmaking, a foreign medium with no established gender associations, to some Canadian Inuit communities in the 1950s provided both native women and men with a new creative outlet. Printmaking became an important source of economic independence vital to these isolated and once-impoverished settlements. Today, both Inuit women and men make prints, but men still dominate in carving stone sculpture, another new medium also produced for and sold to outsiders.

> Throughout North America, indigenous artists continue to work in traditional media, such as ceramics, beadwork, and basketry, marketing their wares through museum shops, galleries, regional art fairs, and, most recently, the Internet. Many also obtain degrees in art and express themselves in European media such as oil painting and mixed-media sculpture (FIG. **36-66**).

the Northwest Coast area are the Kwakiutl of southern British Columbia; the Haida, who live on Queen Charlotte Island off the coast of the province; and the Tlingit of southern Alaska (MAP **32-3**). In the Northwest, a class of professional artists developed, in contrast to the more typical Native American pattern of part-time artists. Working in a highly formalized, subtle style, Northwest Coast artists have produced a wide variety of art objects for centuries: totem poles, masks, rattles, chests, bowls, clothing, charms, and decorated houses and canoes. Some artistic traditions originated as early as 500 BCE, although others developed only after the arrival of Europeans in North America.



32-11 Eagle transformation mask, closed (*top*) and open (*bottom*) views, Kwakiutl, Alert Bay, Canada, late 19th century. Wood, feathers, and string, $1' 10'' \times 11''$. American Museum of Natural History, New York.

The wearer of this Kwakiutl mask could open and close it rapidly by manipulating hidden strings, magically transforming himself from human to eagle and back again as he danced.

1 ft



KWAKIUTL AND TLINGIT MASKS Northwest Coast religious specialists used masks in their healing rituals. Men also wore masks in dramatic public performances during the winter ceremonial season. The animals and mythological creatures represented in masks and a host of other carvings derive from the Northwest Coast's rich oral tradition and celebrate the mythological origins and inherited privileges of high-ranking families. The artist who made the Kwakiutl mask illustrated here (FIG. **32-11**) meant it to be seen in flickering firelight, and ingeniously constructed it to open and close rapidly when the wearer manipulated hidden strings. He could thus magically transform himself from human to eagle and back again as he danced. The transformation theme, in myriad forms, is a central aspect of the art and religion of the Americas. The Kwakiutl mask's human aspect also owes its dramatic character to the exaggeration and distortion of facial parts—such as the hooked beaklike nose and flat flaring nostrils—and to the deeply undercut curvilinear depressions, which form strong shadows. In contrast to the carved human face, but painted in the same colors, is the two-dimensional abstract image of the eagle painted on the inside of the outer mask.

The Kwakiutl mask is a refined yet forceful carving typical of the area's more dramatic styles. Others are more subdued, and some, such as a wooden Tlingit war helmet (FIG. **32-12**), are exceedingly naturalistic. Although the helmet mask may be a portrait, it might also represent a supernatural being whose powers enhance the wearer's strength. In either case, the artist surely created its grimacing expression to intimidate the enemy.



32-12 War helmet mask, Tlingit, Canada, collected 1888–1893. Wood, 1' high. American Museum of Natural History, New York.

This naturalistic wood war helmet mask may be a portrait of a Tlingit warrior or a representation of a supernatural being. The carver intended the face's grimacing expression to intimidate enemies.

HAIDA TOTEM POLES Although Northwest Coast arts have a spiritual dimension, they are often more important as expressions of social status. Haida house frontal poles, displaying totemic emblems of clan groups, strikingly express this interest in prestige and family history. Totem poles emerged as a major art form about 300 years ago. The examples in FIG. **32-13** date to the 19th century. They stand today in a reconstructed Haida village that BILL REID (1920–1998, Haida) and his assistant DOUG CRANMER (b. 1927, Kwakiutl) completed in 1962. Each of the superimposed forms carved on these poles represents a crest, an animal, or a supernatural being that figures in the clan's origin story.

Additional crests could also be obtained through marriage and trade. The Haida so jealously guarded the right to own and display crests that even warfare could erupt over the disputed ownership of a valued crest. In the poles shown, the crests represented include an upside-down dogfish (a small shark), an eagle with a downturned beak, and a killer whale with a crouching human between its snout and its upturned tail flukes. During the 19th century, the Haida erected more poles and made them larger in response to greater competitiveness and the availability of metal tools. The artists carved poles up to 60 feet tall from the trunks of single cedar trees.



32-13 BILL REID (Haida), assisted by DOUG CRANMER (Nāmgīs), 19thcentury-style Haida houses and totem poles, 1962. Courtesy University of British Columbia, Museum of Anthropology, Vancouver, Canada.

Each of the superimposed forms carved on Haida totem poles represents a crest, an animal, or a supernatural being who figures in the clan's origin story. Some Haida poles are 60 feet tall.



32-14 Chilkat blanket with stylized animal motifs, Tlingit, Canada, early 20th century. Mountain goat wool and cedar bark, $2' 11'' \times 6'$. Southwest Museum of the American Indian, Los Angeles.

Chilkat blankets were collaborations between male designers and female weavers. Decorated with animal and abstract motifs, they were worn over the shoulder and were items of ceremonial dress.

CHILKAT BLANKETS Another characteristic Northwest Coast art form is the Chilkat blanket (FIG. **32-14**), named for an Alaskan Tlingit village. Male designers provided the templates for these blankets in the form of wooden pattern boards for female weavers. Woven of shredded cedar bark and mountain goat wool on an upright loom, the Tlingit blankets took at least six months to complete. These blankets, which served as robes worn over the shoulders, became widespread prestige items of ceremonial dress during the 19th century. They display several characteristics of the Northwest Coast style recurrent in all media: symmetry and rhythmic repetition, schematic abstraction of animal motifs (in the robe illustrated, a bear), eye designs, a regularly swelling and thinning line, and a tendency to round off corners.

YUPIK MASKS Farther north, the 19th-century Yupik Eskimos living around the Bering Strait of Alaska had a highly developed ceremonial life focused on game animals, particularly seal. Their religious specialists wore highly imaginative masks with moving parts. The Yupik generally made these masks for single occasions and then abandoned them. Consequently, many masks have ended up in museums and private collections. The example shown here (FIG. **32-15**) represents the spirit of the north wind, its face surrounded by a hoop signifying the universe, its voice mimicked by the rattling appendages. The paired human hands commonly found on these masks refer to the wearer's power to attract animals for hunting. The painted white spots represent snowflakes. The devastating effects of 19th-century epidemics, coupled with government and missionary repression of Native American ritual and social activities, threatened to eradicate the traditional arts of the Northwest Coast and the Eskimos. In the past half century, however, there has been an impressive revival of traditional art forms, some created for collectors and the tourist trade, as well as the development of new ones, such as printmaking. Canadian Eskimos, known as the Inuit, have set up cooperatives to produce and market stone carvings and prints. With these new media, artists generally depict themes from the rapidly vanishing traditional Inuit way of life.

Great Plains

After colonial governments disrupted settled indigenous communities on the East Coast and the Europeans introduced the horse to North America, a new mobile Native American culture flourished for a short time on the Great Plains. Artists of the Great Plains worked in materials and styles quite different from those of the Northwest Coast and Eskimo/Inuit peoples. Much artistic energy went into the decoration of leather garments, pouches, and horse trappings, first with compactly sewn quill designs and later with beadwork patterns. Artists painted tipis, tipi linings, and buffalo-skin robes with geometric and stiff figural designs prior to about 1830. After that, they gradually introduced naturalistic scenes, often of war exploits, in styles adapted from those of visiting European artists.





The personal regalia of a Hidatsa warrior included his pipe, painted buffalo robe, bear-claw necklace, and feather decorations, all symbols of his affiliations and military accomplishments.

32-15 Mask, Yupik Eskimo, Alaska, early 20th century. Wood and
feathers, 3' 9" high. Metropolitan Museum of Art, New York (Michael C.
Rockefeller Memorial Collection, gift of Nelson Rockefeller)."biography
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This Yupik mask represents the spirit of the north wind, its face surrounded by a hoop signifying the universe, its voice mimicked by the rattling appendages. The white spots represent snowflakes.

1 ft

HIDATSA REGALIA Because most Plains peoples were nomadic, they focused their aesthetic attention largely on their clothing and bodies and on other portable objects, such as shields, clubs, pipes, tomahawks, and various containers. Transient but important Plains art forms can sometimes be found in the paintings and drawings of visiting American and European artists. The Swiss painter KARL BODMER (1809–1893), for example, portrayed the personal decoration of Two Ravens, a Hidatsa warrior, in an 1833 watercolor (FIG. **32-16**). The painting depicts his pipe, painted buffalo robe, bear-claw necklace, and feather decorations, all symbolic of his affiliations and military accomplishments. These items represent his "biography"—a composite artistic statement in several media that neighboring Native Americans could have "read" easily. The concentric circle design over his left shoulder, for example, is an abstract rendering of an eagle-feather war bonnet.

Plains peoples also made shields and shield covers that were both artworks and "power images." Shield paintings often derived from personal religious visions. The owners believed that the symbolism, the pigments themselves, and added materials, such as feathers, provided them with magical protection and supernatural power.

LEDGER PAINTINGS Plains warriors battled incursions into their territory throughout the 19th century. The pursuit of Plains natives culminated in the 1890 slaughter of Lakota participants who had gathered for a ritual known as the Ghost Dance at Wounded Knee Creek, South Dakota. Indeed, from the 1830s on, U.S. troops forcibly removed Native Americans from their homelands and resettled them in other parts of the country. Toward the end of the century, governments confined them to reservations in both the United States and Canada.

1 in.



32-17 Honoring song at painted tipi, in Julian Scott Ledger, Kiowa, 1880. Pencil, ink, and colored pencil, $7\frac{1''}{2} \times 1'$. Mr. and Mrs. Charles Diker Collection.

During the reservation period, some Plains artists recorded their traditional lifestyle in ledger books. This one depicts men and women dancing an honoring song in front of three painted tipis.

During the reservation period, some Plains arts continued to flourish, notably beadwork for the women and painting in ledger books for the men. Traders, the army, and Indian agents had for years provided Plains peoples with pencils and new or discarded ledger books. They, in turn, used them to draw their personal exploits for themselves or for interested Anglo buyers. Sometimes warriors carried them into battle, where U.S. Army opponents retook the ledgers. After confinement to reservations, Plains artists began to record not only their heroic past and vanished lifestyle but also their reactions to their new surroundings, frequently in a state far from home. These images, often poignant and sometimes humorous, are important native documents of a time of great turmoil and change. In the example shown here (FIG. **32-17**), the work of an unknown Kiowa artist, a group of men and women, possibly Comanches (allies of the Kiowa), appear to dance an honoring song before three tipis, the left forward one painted with red stone pipes and a dismembered leg and arm. The women (at the center and right) wear the mixture of clothing typical of the late 19th century among the Plains Indians—traditional high leather moccasins, dresses made from calico trade cloth, and (on the right) a red Hudson's Bay blanket with a black stripe. Although the Plains peoples no longer paint ledger books, beadwork has never completely died out. The ancient art of creating quilled, beaded, and painted clothing has evolved into the elaborate costumes displayed today at competitive dances called *powwows*.

Whether secular and decorative or spiritual and highly symbolic, the diverse styles and forms of Native American art in the United States and Canada reflect the indigenous peoples' reliance on and reverence toward the environment they considered it their privilege to inhabit.

THE BIG PICTURE

NATIVE ARTS OF THE AMERICAS AFTER 1300

MESOAMERICA

- When the first Europeans arrived in the New World, they encountered native peoples with sophisticated civilizations and a long history of art production, including illustrated books. The few books that survive provide precious insight into Mesoamerican rituals, science, mythology, and painting style.
- The dominant power in Mesoamerica in the centuries before Cortés overthrew it was the Aztec Empire. The Aztec capital was Tenochtitlán (Mexico City), a magnificent island city laid out on a grid plan with a population of more than 100,000.
- The Great Temple at Tenochtitlán was a towering pyramid encasing several earlier pyramids. Dedicated to the worship of Huitzilopochtli and Tlaloc, it was also the place where enemies were sacrificed and their battered bodies thrown down the stone staircase to land on a huge disk bearing a representation in relief of the dismembered body of the goddess Coyolxauhqui.
- In addition to relief carving, Aztec sculptors produced stone statues, some of colossal size, for example, the 11' 6" image of the beheaded Coatlicue from Tenochtitlán.

SOUTH AMERICA

- In the 15th century, the Inka Empire, with its capital at Cuzco in modern Peru, extended from Ecuador to Chile. The Inka were superb engineers and constructed 14,000 miles of roads to exert control over their vast empire. They kept track of inventories, census and tribute totals, and astronomical information using a "computer of strings" called a khipu.
- Master architects, the Inka were experts in ashlar masonry construction. The most impressive preserved Inka site is Machu Picchu, the estate of an Inka ruler. Stone terraces spill down the mountainsides, and the buildings have windows and doors designed to frame views of sacred peaks and facilitate the recording of important astronomical events.

NORTH AMERICA

- In North America, power was much more widely dispersed and the native art and architecture more varied than in Mesoamerica and Andean South America.
- In the American Southwest, the Ancestral Puebloans built urban settlements (pueblos) and decorated their council houses (kivas) with mural paintings. The Navajo produced magnificent textiles and created temporary sand paintings as part of complex rituals. The Hopi carved katsina figurines representing benevolent supernatural spirits. The Pueblo Indian pottery produced by artists like María Montoya Martínez is among the finest in the world.
- On the Northwest Coast, masks played an important role in religious rituals. Some examples can open and close rapidly so that the wearer can magically transform himself from human to animal and back again. Haida totem poles sometimes reach 60 feet in height and are carved with super-imposed forms representing clan crests, animals, and supernatural beings. Chilkat blankets are the result of a fruitful collaboration between male designers and female weavers.
- The peoples of the Great Plains won renown for their magnificent painted buffalo robes, bead necklaces, feather headdresses, and shields. Native American art lived on even after the U.S. government forcibly relocated the Plains peoples to reservations. Painted ledger books record their vanished lifestyle, but the production of fine crafts continues to the present day.



Borgia Codex, ca. 1400-1500



Coyolxauhqui, Great Temple, Tenochtitlán, ca. 1469



Machu Picchu, 15th century



Martínez, San Ildefonso Pueblo jar, ca. 1939



Kwakiutl eagle transformation mask, late 19th century