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Untold Stories of

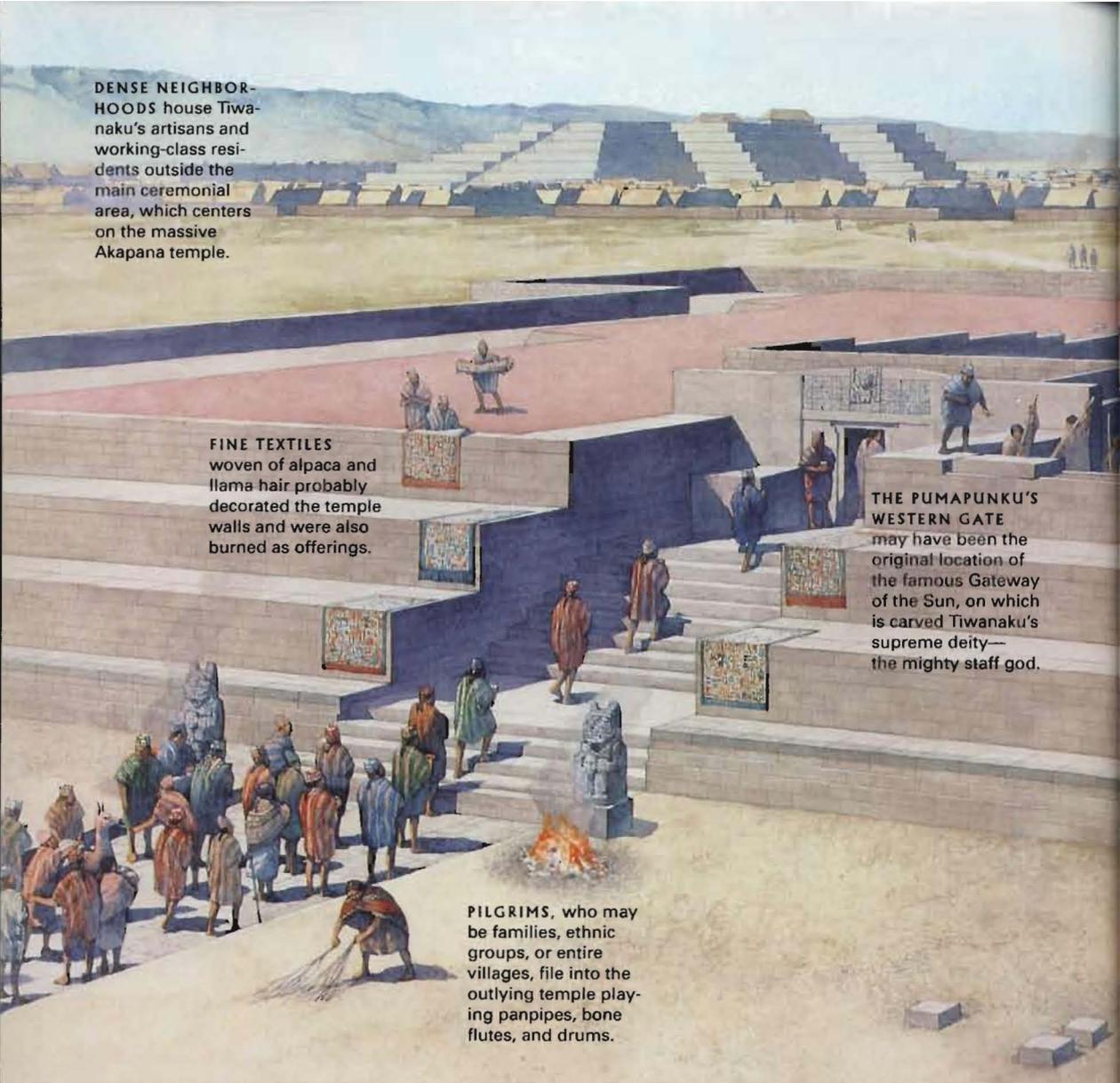
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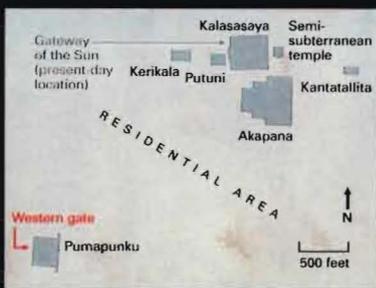
**DENSE NEIGHBORHOODS** house Tiwanaku's artisans and working-class residents outside the main ceremonial area, which centers on the massive Akapana temple.

**FINE TEXTILES** woven of alpaca and llama hair probably decorated the temple walls and were also burned as offerings.

**THE PUMAPUNKU'S WESTERN GATE** may have been the original location of the famous Gateway of the Sun, on which is carved Tiwanaku's supreme deity—the mighty staff god.

**PILGRIMS**, who may be families, ethnic groups, or entire villages, file into the outlying temple playing panpipes, bone flutes, and drums.

**TIWANAKU ANDEAN MECCA** Though it began around 200 B.C. as a farming village ten miles south of Lake Titicaca, by A.D. 700 Tiwanaku had grown into a thriving imperial capital (above) with terraced pyramids, palaces, and irrigated agriculture that fed as many as 60,000 people in a hostile land. The Pumapunku temple on the city's western edge is considered one of the best examples of Tiwanaku architecture. The precise fit of the temple's sandstone slabs—weighing up to 130 tons—has spawned far-out theories of extraterrestrial engineering. Researcher Alexei Vranich believes the Pumapunku served as Tiwanaku's Ellis Island, indoctrinating pilgrims from remote parts of the empire into the state religion with *chicha* (a fermented drink), hallucinogens, and ritual theater. When the rituals were over, the converts could proceed to other temples in the city's ceremonial core, like the 56-foot-high Akapana temple, in the background above. A devastating drought around A.D. 1100 may have ended the city's 600-year reign over the south-central Andes.



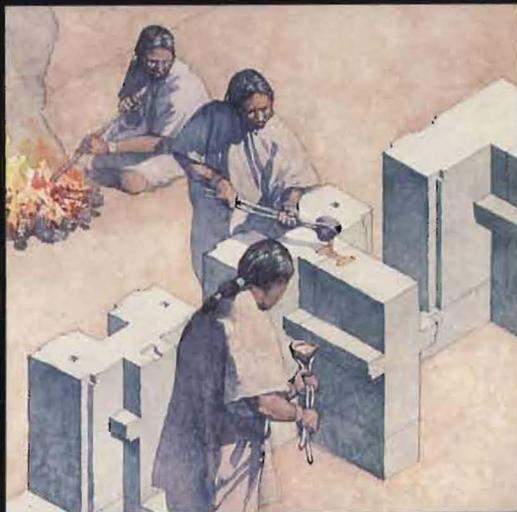
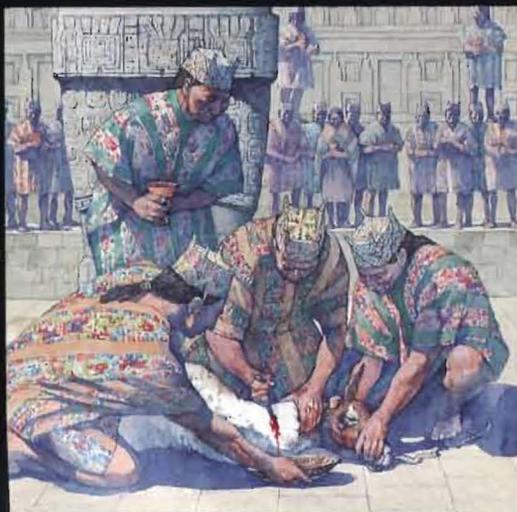


**SACRIFICES** were held in a central sunken courtyard. In the llama sacrifice (enlarged below) a standing priest waits to fill a cup with blood. He will then pour it on the monolith behind him to incur favor with the gods.

**A PAINTED TERRACE** would have been the final touch, though the Pumapunku was still unfinished when the empire fell. Such large public works, requiring enormous labor, may have contributed to its demise.

**STONE MASONS** (below) connect the blocks in the temple walls with bronze clamps, a technique perfected by the Tiwanaku. Workers pour the molten metal from small ceramic crucibles and then let it harden in place for a perfect fit.

ART BY GREG HARLIN



Pikillacta was carefully laid out in a grid. Viewed from a nearby hilltop, it looks like an engineer's dream: row after row of red stone walls crossing the landscape in perfectly straight lines. Curiously, despite the orderliness of the ruins, Pikillacta would have been anything but easy to navigate in Wari times.

"The walls on either side of us would have been about 40 feet high," says McEwan as we walk down one of Pikillacta's old roads. "There were no windows, so we would have seen only a slice of sky. There were more than 700 rooms but only seven roads. All the buildings would have been plastered stark white, Wari style."

McEwan thinks Pikillacta was a provincial center for the all-important reciprocity ceremonies. "You came here as a guest, perhaps of the local government. You didn't get into Pikillacta without an invitation or a guide. You couldn't have found your way around by yourself." Inside the city, administrators probably handed down orders and dispensed chicha, and priests took hallucinogenic drugs while performing secret rites to summon the spirits and advice of the ancestors.

But it wasn't because of state-sponsored partying that Pikillacta was built to be inaccessible, McEwan says. Rather it was because part of the city may have served as a mummy storage depot. Indeed, argues McEwan, the real control the Wari exercised over their colonies came from their success in capturing local peoples' ancestral mummies and skeletons, then holding them hostage—a practice that effectively turned the living into hostages too since their property rights were tied to their ancestors.

Ancestor worship has a long tradition in Andean cultures, extending back thousands of years—and continuing into Inca times. (Even today many Andean peoples have a deep reverence for their departed relatives.) Details may have differed in each society, but in general people often kept the bones of their ancestors close at hand, stored in urns or baskets where they could be easily retrieved, feted, and called on for blessings and advice. The stored bones also had a practical side: They gave their caretakers land and water rights. They were concrete proof that your great-great-grandfather had worked the land and that it rightfully belonged to you.

"I think the Wari used this belief to create their empire," McEwan says. "They captured

other peoples' mummies or ordered them to bring their ancestral bundles to places like Pikillacta for storage. The only access you then had to your ancestors—and so to your land and water—was through the state. If you didn't comply, the Wari destroyed your ancestors, which left you destitute. The Inca did the same thing, but it was probably the Wari's idea."

Pikillacta sat close to the frontier of the Wari Empire. The Wari built a few other settlements farther down the Cusco valley. But the more they advanced to the south, the closer they came to Lake Titicaca and the territory of their chief competitors: the Tiwanaku.

**T**he Inca may have taken the practical administrative methods of empire from the Wari, but they looked to Tiwanaku for matters spiritual. To the Inca as well as to the first Spanish explorers, Tiwanaku was a mystical place of grandeur, temples, and gods. It was where their ancestors had come from, the Inca told the Spanish, implying that the blood relationship gave them the right to rule the Andes. Archaeologists have not yet determined if the Inca's claim to this heritage was valid or merely wishful thinking. But their desire for the connection, researchers say, speaks volumes about the importance of Tiwanaku.

"Everyone in the Andes knew about Tiwanaku," says Alexei Vranich, an archaeologist at the University of Pennsylvania. He is excavating a Tiwanaku temple called the Pumapunku. "The temple was a place of great religious importance and a center of pilgrimage, and it drew people to Tiwanaku. It's easy to see why," he adds. "Watch what happens as we climb to the top of the temple."

Vranich, a square-jawed young man with a scholar's serious demeanor, and I started our climb about a half mile from the temple site, walking up a gentle grade toward the Pumapunku. In Tiwanaku times pilgrims probably began their trek on the shores of Lake Titicaca, some ten miles away and among the most sacred places in the Andes. According to Andean religion the creator emerged from its waters to shape the earth and the first people, and the lake's shores are ringed with the ruins of small shrines and temples dating as far back as 700 B.C. Researchers think that Tiwanaku was originally one of these small religious centers. But in the sixth century A.D., perhaps

because of the lake's central location in Andean mythology or because of the political power of the Tiwanaku people, Tiwanaku became a prime pilgrimage center. Some of these pilgrims probably traveled long distances, crossing the lake's lapis blue waters on reed rafts. Then, like Vranich and me, they would have walked due east over the grassy plains of the altiplano toward the blue-and-white peaks of the Andes. For most of that journey the highest of these, Mount Illimani, would have pulled them on "like a beacon," Vranich says. "Illimani was their most sacred mountain, where they believed many ancestors went when they died."

At a certain point along the pilgrimage path Illimani suddenly disappears from view. In its place rises the Pumapunku, a pyramid-shaped temple with a flattened top that the people of Tiwanaku created from packed earth and stone. Most of the temple is now in ruins, its huge stone slabs lying askew as if some willful giant had knocked them over. During the ancient pilgrimages, however, not a trace of stonework would have been visible. Instead Vranich envisions that the temple walls would have been covered with sheets of beaten gold and silver as well as colorful textiles threaded with flecks and beads of precious stones and metals; its packed clay floors would have been brilliantly colored with layers of deep red, blue, and green paints.

"It must have been overwhelming," Vranich says, "a mind-altering, life-changing experience made even more so by the drugs they were taking." A hallucinogenic cactus, other hallucinogenic plants, drug paraphernalia, and snuff have been found among Tiwanaku's ruins. Recently another archaeologist uncovered the mummy of a shaman with his packet of drugs and medicines.

Vranich believes that the Tiwanaku architects knew exactly what they were doing when they sited the temple to hide the mountain. "They knew the effect it would have, that Illimani would disappear," he says. "It was one of the optical illusions they created here."

Only when you climb the very last stair and reach the temple's flat summit does the mountain reappear, blue and white and shining.

"Now look around," Vranich says. "Illimani is before us, Lake Titicaca behind us. In the Andean cosmology this spot really does mark a place between heaven and earth."

**T**he Pumapunku is only one of several temples and elaborate courtyards with stone statues and carvings that the Tiwanaku built over an area covering two square miles. They surrounded this religious center with a moat, creating in essence a miniature lake with the temple complex as an island in the center. "They entirely transformed the landscape, integrating it into their own religious beliefs," says Alan Kolata, a University of Chicago archaeologist who has directed excavations at Tiwanaku since the late 1970s.

The central temple, called the Akapana, was built in a series of seven levels, apparently to resemble the nearby Quimsachata peaks. To make it even more like a mountain, the Tiwanaku plumbed the Akapana with drains so that when the annual rains arrived, water would thunder through it. "It was a way of renewing the earth and maintaining the circulatory system of the universe," says Kolata, who thinks the Tiwanaku probably celebrated fertility ceremonies and other rites while the water roared through their mountain-temple.

Other ceremonies were grimmer. Like the Wari, the Tiwanaku were aggressive and celebrated their victories by sacrificing captives. Dismembered remains have been found around the Akapana. Perhaps some were the mummified remains of their enemies' ancestors, while others were warriors captured in battles. Also like the Wari, the Tiwanaku decorated their ceramics with gruesome scenes of puma-masked warriors holding severed heads in their hands or wearing belts of trophy heads, their tongues out and eyes rolled back.

At their peak between A.D. 700 and 1000 the Tiwanaku controlled nearly the entire Lake Titicaca basin as well as lands to the southeast in Bolivia and to the southwest in Chile. Superb engineers and farmers, like the Wari, the Tiwanaku turned the broad valley of the Katari River, which feeds Lake Titicaca, into their capital's breadbasket, using extensive canals and causeways to irrigate 30 square miles of raised beds for corn, potatoes, quinoa, and other crops. "They actually altered the meanders of the river," says John Janusek, an archaeologist at Vanderbilt University who excavated several nearby Tiwanaku settlements, "and turned it into a straight shot through the valley." Remains of the ancient raised beds are visible today, and the river