

BY DAVID ROBERTS PHOTOGRAPHS BY IRA BLOCK

The sandstone keep of Cliff Palace has endured seven centuries of Mesa Verde winters. Thousands of such sites shelter clues to the Pueblo culture that once enlivened canyons and mesas across the Colorado Plateau.

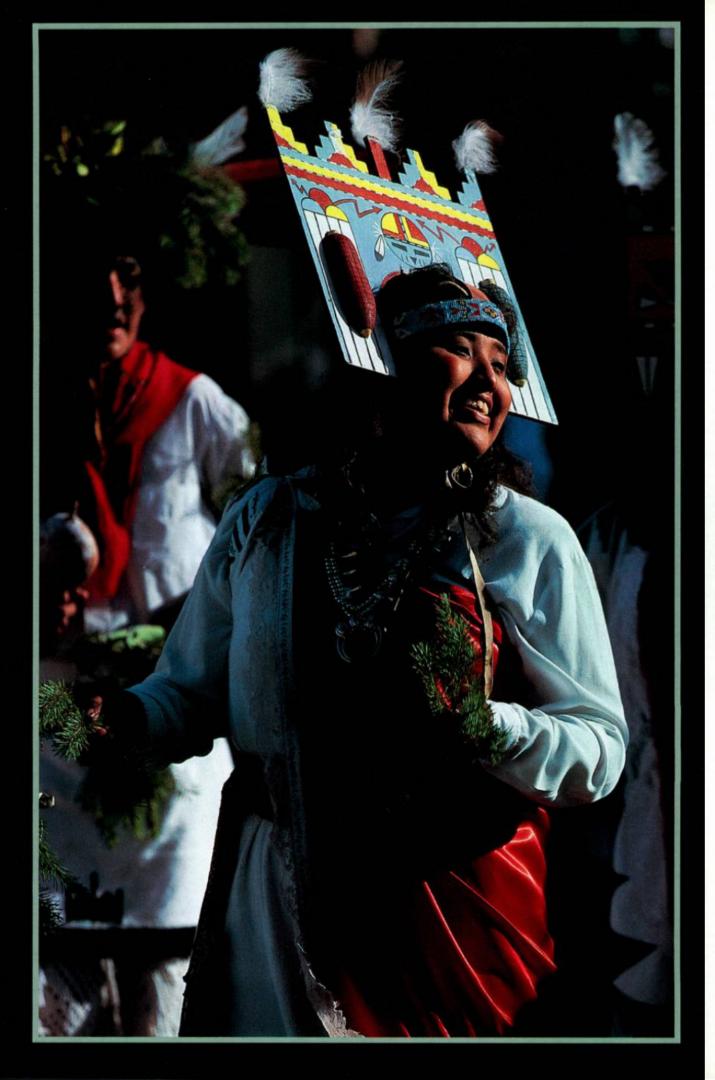


Sunbaked mud still clings to the stone walls of Keet Seel, Arizona,

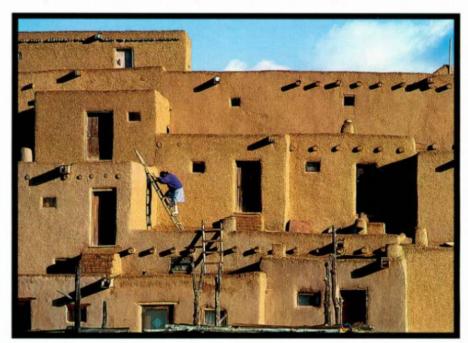
 $abandoned\ in\ a\ sudden\ migration\ of\ the\ people\ known\ as\ the\ Anasazi.$ 



Pootsteps have long since faded, yet a sandal last worn about 1200



Life's basics—food and shelter—tie modern pueblos to ancient ones. Santa Clara celebrates corn, a long-standing staple. Taos maintains adobe apartments reminiscent of the old dwellings. "We were and still are a communal society in architecture and thought," notes Tessie Naranjo of Santa Clara.



N AN ISOLATED CANYON in southeast
Utah a little-known ruin rests beneath the edge of a 500-foot precipice,
half-hidden under a small overhang.
Sometime in the 13th century the
Anasazi, ancestors of modern Pueblo Indians,
built five rooms here out of sandstone slabs,
mortaring them with mud in which you can
still see the imprints of their fingers. Scores of
potsherds decorated with jagged black designs
lie scattered in the dirt. The floor of one room
is littered with small corncobs, every one
plucked clean.

By most measures, the ruin's location makes little sense. This dwelling had belonged to farmers, but they had built it far from their fields of corn, squash, and beans back north across the mesa top. Their water source was even farther away: Every day, to fill their jars, Anasazi women must have traced and retraced the difficult route down to the stream on the canyon floor.

The only attribute the site had going for it, it seemed, was its supreme defensiveness. The

DAVID ROBERTS's most recent book is In Search of the Old Ones: Exploring the Anasazi World of the Southwest, just published by Simon & Schuster. IRA BLOCK photographed Arizona's San Xavier Mission for the December 1995 issue. house was invisible from the canyon rim 80 feet above. A single guard, stationed on the sloping descent from the rim, could prevent all access to the place. But what were these people afraid of?

For more than 2,000 years the Anasazi had lived seemingly without such fear, flourishing across an expanse of the desert Southwest the size of New England—from the Grand Canyon east to the headwaters of the Pecos River, from the junction of the Green and Colorado Rivers south to present-day Flagstaff (map, pages 96-7). We do not know what they called themselves, but they have become known to archaeologists as the Anasazi—an unfortunate name, because the word is Navajo rather than Pueblo; it means "ancient enemies."

Many of the modern descendants of these ancients still live in houses of sandstone and mud. Some 50,000 in number, they belong to 20 tribes that inhabit the three Hopi mesas in northeastern Arizona, the Zuni pueblo in western New Mexico, and 18 pueblos along the Rio Grande and its tributaries from Taos to Isleta. Among Native Americans, the Pueblo peoples have been especially successful at retaining their ties to the past, maintaining their ancestral religion, and keeping their communities intact.

Long before the time of Christ, the Old Ones (as some Pueblos call their ancestors) had become skilled hunter-gatherers. They chased antelope, deer, and bighorn sheep with flint-bladed spears and darts flung from powerful atlatls. They collected piñon nuts, cactus fruit, and berries by the basketful. By A.D. 500 they had grown more sedentary, making pottery and planting crops. By the year 1200 the Anasazi numbered well into the tens of thousands; their villages, which had become elaborate grids of square rooms, often stacked several stories high, spread across their heartland.

But something happened in the 13th century that forced most of the Anasazi from mesa tops and valley bottoms into defensible villages and dizzy cliff dwellings such as the one I had explored. Then, just before 1300, the Anasazi suddenly abandoned half their ancestral domain—virtually all of the Colorado Plateau, every site northwest of a diagonal line drawn between Flagstaff, Arizona, and Pagosa Springs, Colorado, a distance of 300 miles.

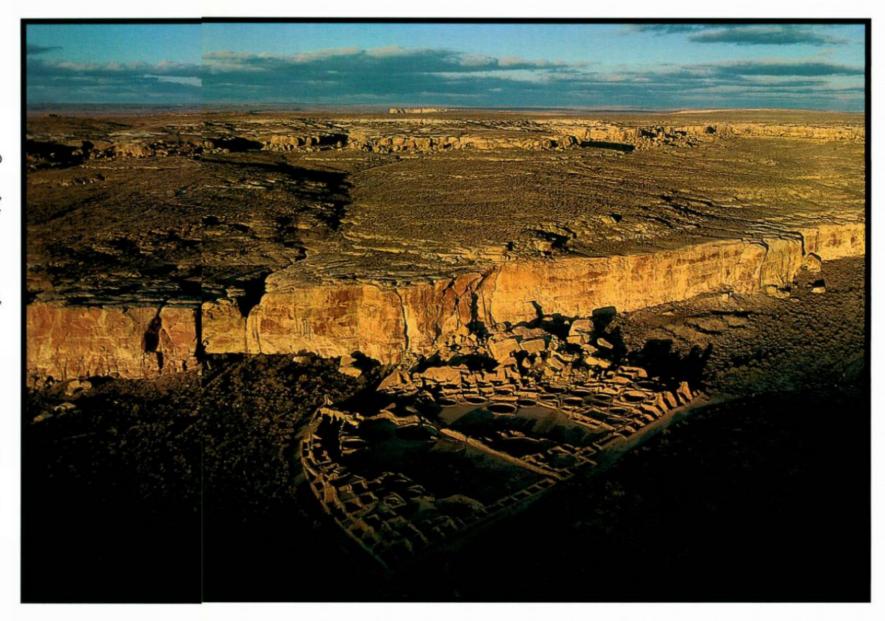
Their leave-taking remains the crucial puzzle in the archaeology of the Southwest, despite more than a century of research. For decades scholars sought an environmental explanation: drought, deforestation, famine, or disease. Or they invoked attacks by hostile nomadic tribes. But in recent years some experts have turned to a cultural theory: By 1300 a new religion may have arisen to the southeast, so compelling that it helped draw tens of thousands of Anasazi from the homeland in which they had lived for millennia.

HAVE FOUND my strongest linkages with the Old Ones by hiking into the back-country and discovering for myself ruins like the one high on the precipice. In dozens of remote canyons, I have visited hundreds of unrestored sites, admiring the relics strewn in the dirt while taking care to leave them exactly as I found them.

One fall in my favorite Utah canyon I studied mystifying panels of rock art carved in the natural black patina called desert varnish. Massive, triangular-bodied figures, some with birds on their heads and others with crescent-shaped halos floating above them, stared balefully back at me.

I clambered up to granaries built out of bound, upright sticks covered with mud, where the ancients had cached their beans and Signature of a culture at its height, Pueblo Bonito's giant D shape embraces three acres of Chaco Canyon, New Mexico. A master plan apparently guided construction for two centuries, beginning about A.D. 900.

Probably ceremonial, Pueblo Bonito may have been part of a regional center that included neighboring sites in the canyon. Roads converged on this area from dozens of outlying communities. Did pilgrims travel here for rituals? Were subjugated people compelled to come for terrifying displays of cannibalism? Experts debate the answers.



corn. I fingered hundreds of painted potsherds and pieces of worked flint. I scaled frightening prehistoric hand-and-toe trails that took me high above this sun-bleached land. Some of the ruins were simply beyond my reach, so instead I sat admiring those aeries for hours through my binoculars. I slept under cottonwood trees, on stream banks where the Anasazi had hunted deer and rabbits. I drank from the same streams that had watered the ancients so long ago.

Scores of interconnected rooms line the cliffs of the canyon. Many archaeologists believe that because the rooms are of equal size, the Anasazi were an egalitarian people. Until about 900 nearly all their settlements remained hamlets of fewer than a hundred people, each community autonomous.

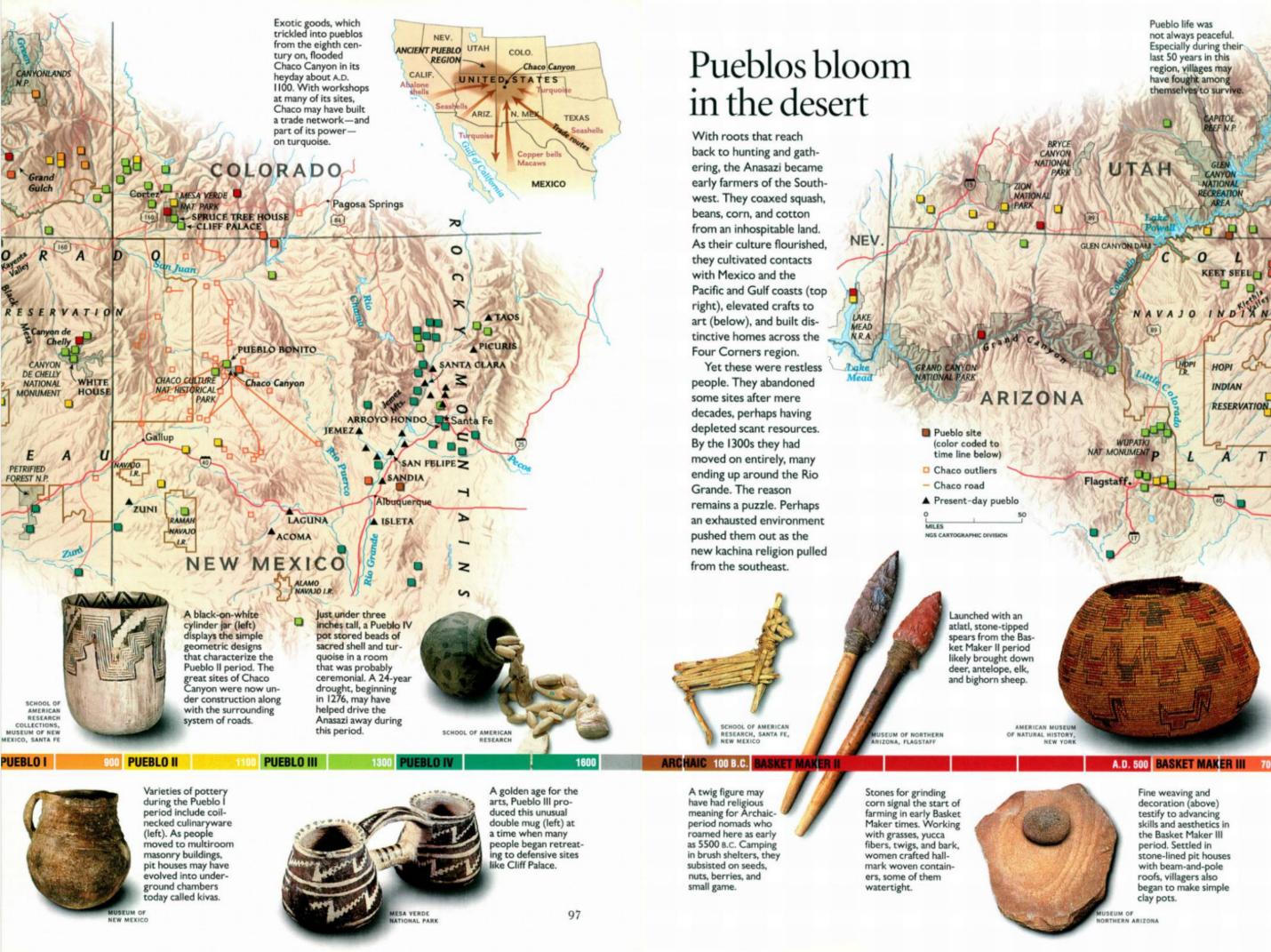
But around that time, in a shallow canyon in northwestern New Mexico, a new way of life began. Archaeologists call it the Chaco phenomenon. Anasazi villages joined together in a network stretching 250 miles from north to south. Scattered for nine miles along Chaco Canyon, nine great houses, rectangular blocks of hundreds of rooms looming as high as five stories and centered on big plazas, anchored the network. An estimated 150 villages throughout the Southwest were tied into the Chacoan system, mirroring the design of the great houses and sharing their culture.

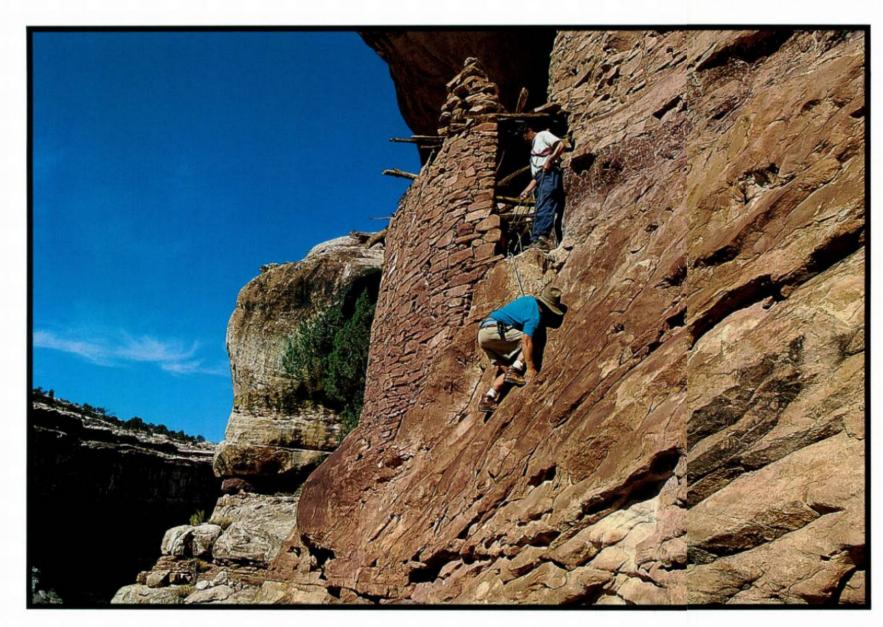
The complexity of this network, many scholars believe, required the Anasazi to become a hierarchical society. Moreover, the discovery of several burials at Chaco teeming with precious grave goods, such as turquoise necklaces and jet pendants and amulets, suggests that the Chacoans had powerful rulers.

At the peak of its glory, at the end of the 11th century, Chaco commanded an extensive trade in the exotic: macaw feathers from Mexico, seashells from the Gulf of California, turquoise from central New Mexico. The Mexican links indicate that Chaco was in contact with more advanced civilizations.

The most mysterious aspect of the Chaco phenomenon is a system of roads extending at least 200 miles and perhaps as far as southeastern Utah and southwestern Colorado. These roads often are 30 feet wide and stretch for miles in dead-straight lines, ignoring natural contours. They pose a great puzzle: Why should people who had no vehicles, no beasts of burden, need highways?

Some experts think the roads bore laborers who carried some 200,000 heavy roof beams of ponderosa pine, felled and trimmed with stone axes, from as far as 80 miles away to build the great houses. Others picture the roads as routes for ceremonial pilgrimages to Chaco.





One scholar, David Wilcox of the Museum of Northern Arizona, believes that small Chacoan armies traveled along the roads. "I see them marching up and down the roadways like something out of the movie *The Seven Samurai*," he says. "Perhaps the villages were beset by bandits, so they hired 'samurai' to protect them." Wilcox bases his argument on enigmatic towers and lookout posts that line the roadways, which he believes might have been used as staging areas and resupply points.

Archaeologists have traditionally viewed Chaco as a peaceful civilization dominated by astronomer-priests, tradesmen, and governors. Evidence from recent years, however, may undercut this picture. The Chaco phenomenon may have been linked with violent rites aimed at intimidating reluctant pueblos on the Anasazi periphery. New discoveries—

of human bones scored with fine cut marks and of fractured bones—suggest that the Anasazi practiced ritual cannibalism. If true, this theory may force scholars to take a fresh look at the nature of the ancients.

HE FIRST RAYS OF DAWN crept along the dusty wash behind me. A breeze out of the south brought the scent of sagebrush. Chaco Canyon was so still that I heard a raven flap its wings seconds before its cry broke the silence. The morning was cool, but soon bleaching heat and haze would seize the canyon below.

I topped the 150-foot cliff that borders the wash on the north and turned to gaze down on the Anasazi edifice called Pueblo Bonito. Its builders had marshaled at least 700 rooms into a design shaped like a huge capital D. Centering the ruin was a spacious plaza bordered

Two grown men need all their strength and skill for a climb that was child's play before toeholds up this Utah cliff eroded. Master masons built the aerie at the top, blending their work with the rock. "I had walked right by the ruin twice before and missed it," says author David Roberts, who led the ascent. Meant to be seen, art decorates a nearby spring. It likely spoke volumes to a culture with no writing, but its message is lost to modern viewers.



by some 40 circular underground chambers, called kivas.

Pueblo Bonito was at the hub of Chaco, the axis from which the roadways emanated, and in many

respects it represents the most sophisticated architecture in the pre-Columbian United States. During many previous visits, wandering inside the ruin, I had stared in awe at some of the finest masonry crafted in the prehistoric Southwest: tabular slabs of sandstone, often thinner than my little finger, shaped and fitted so tight that I could not see the mortar that bound them together.

Now my thoughts were on the darker side of the Chacoan builders—on the picture of violent ritual that emerges from the controversial work of Christy G. Turner II, a physical anthropologist at Arizona State University, and a handful of colleagues. For more than two decades Turner has reexamined skeletons and bones exhumed from earlier digs, discovering consistent markings that he can account for only as the result of cannibalism.

Reaching among the cluttered shelves in his

university office, Turner brought out several boxes full of bones dug from a mesa in northwestern New Mexico in 1969, the skeletal remains of 11 victims dating from around 950. "This is a femur," he said, picking up a long, broken leg bone. "It's a tough bone, hard and dense—one of the least likely to break. No natural process is apt to produce this kind of fracture."

When I peered closer, I saw thin parallel grooves running across the bone, the kind of marks a flint knife would make. Turner handed me a diminutive skull. I sucked in my breath. The skull, which had been glued back together in the lab, had been violently fractured; even the tooth sockets were smashed. "This was a child between six and eight years old, probably a girl," Turner said, then showed me parallel grooves on the forehead. "You see cut marks here, probably from scalping. Also anvil abrasions." I looked closer, and saw tiny scrape marks.

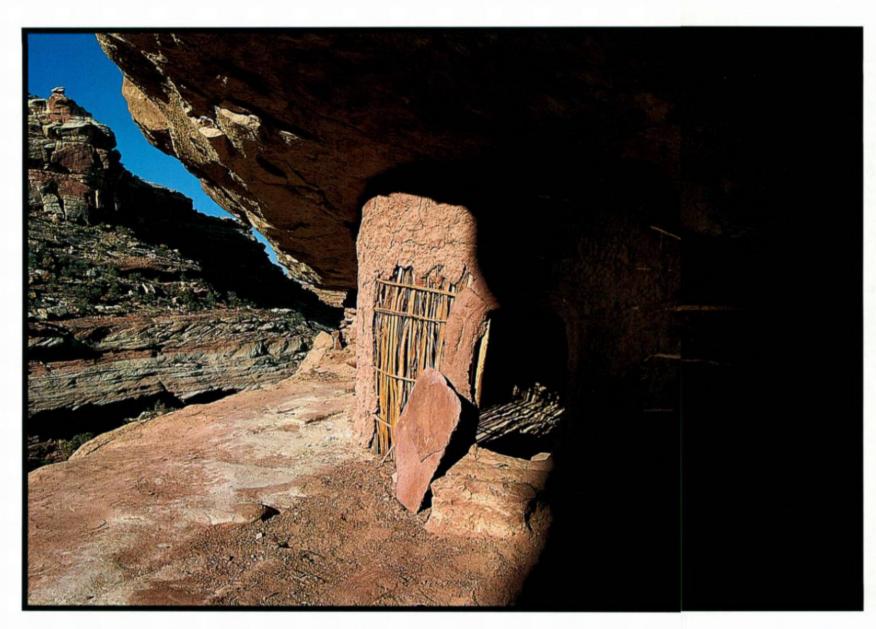
"What are they?"

"You place a bone on a stone, an 'anvil,' then smash it with another stone to break it open," Turner replied. "The bone slides off the anvil, leaving these scrape marks."

Turner went on to demonstrate other signs



utting into a parched Utah mesa, Grand Gulch delivered water to





of cannibalism: burned bones, vertebrae pulverized perhaps to get at the marrow inside, bone ends polished by hours of stewing in ceramic pots.

"The clincher," added Turner, "is that the process is exactly the same as the Anasazi used to butcher and cook antelope and prairie dog, two of their staple foods. What other possible explanation could there be?"

This is a troubling hypothesis to modern Pueblo people, who cherish the image of their ancestors as peaceful agriculturalists, living in harmony with the land and one another. "Claims of cannibalism are deeply offensive to all Pueblo peoples," said Kurt Dongoske, an Anglo who serves as Hopi tribal archaeologist. "As far as I'm concerned, you can't prove cannibalism until you actually find human remains in prehistoric human excrement."

Some scholars argue that systematic

smashing, cutting, and burning of bones could indicate not cannibalism but the ritual execution and mutilation of witches, whose evil deeds were believed to have thrown the world out of harmony. In more recent times certain Pueblos have occasionally disposed of suspected witches in this way.

Yet in 25 years of work Turner has amassed some three dozen separate instances of what he believes is Anasazi cannibalism, comprising more than 300 victims.

Why would the Anasazi resort to cannibalism? One explanation is offered by Turner and David Wilcox, though few of their colleagues have endorsed it. At first the two assumed that famine drove the Anasazi to eating one another. One day two years ago, however, they plotted the cannibalism sites on a large map. "Suddenly, we had a kind of Eureka!" Turner recalled. "The sites were not randomly

distributed: Nearly every one lay next to a village in the Cha-

coan system. And the dates were right—between 900 and 1200. The cannibalism must be tied to the rise of Chaco."

enon lasted less than 300 years. By 1200 Chaco's domination of the Anasazi world was finished, and most of the canyon was abandoned. Why Chaco fell remains a mystery.

With Chaco's demise, the whole network collapsed. Each village lapsed back into autonomy—a pattern that holds in modern pueblos. Yet the Anasazi flourished for a century after the fall, building such masterly villages as Cliff Palace and Spruce Tree House at Mesa Verde, Colorado, and Keet Seel in Arizona.

Secret caches hold the stuff of daily living almost as the owners left it. A wattle-and-daub granary probably kept corn from weather and rodents; a pot held water for a small pueblo; a carved sheep's horn worked as a shovel. The locations of these and countless other artifacts have not been publicized. "People find these places themselves," explains wilderness guide Fred Blackburn, "so the experience means a lot more than reading from a guidebook. That usually results in better care of the ruin."

Then, around 1250, some new crisis seized the Southwest, leading to the mass abandonment in the years

just before 1300. For a century researchers have struggled to comprehend its causes. The old notion that marauding Utes, Paiutes, or Navajos drove the Anasazi into their defensive cliff dwellings, then forced them out of the Colorado Plateau, seems far-fetched. There is no evidence that those nomads arrived on the plateau before 1400.

But thanks to the recent work of a younger generation of archaeologists, warfare once more takes center stage in the Anasazi world after 1250—not battles against an alien tribe, but internecine warfare.

On a serene, cloudless October day in northeastern Arizona, I received a vivid demonstration of this conflict. My tutors were Jonathan Haas, of Chicago's Field Museum of Natural History, and his wife, Winifred Creamer, a professor at Northern Illinois University. They led me up a 900-foot flatiron, a great tilted slab of red sandstone, above the Kayenta Valley.

As we approached the base of the great rock, which anchors the ancient site nicknamed Happy Valley, Creamer pointed out potsherds strewn here and there, noting the graceful pat-

terns of thin black lines on white that are characteristic of early 13th-century Anasazi potters. We started our ascent, scrambling up soft earth, then spidering flat-footed on the tilted stone. At one point the only way to continue was to traverse in shallow toeholds carved by the ancients. As we climbed higher, new scatterings of potsherds appeared on ledges underfoot, different in style from the ones we had found at the base: The black paint covered most of the surface, reducing the white slip to tiny squares.

"The sherds below were all made before 1250," Creamer explained. "These all date from after 1250. This proves the people moved to the top of Happy Valley around that date."

As we gained height, the barren valley stretching east of us unfolded: Buttes and pinnacles jutted against the horizon, vividly outlined by the afternoon sun. "The sites down below are not defensive," Creamer said. "We think that before 1250 the

Anasazi here lived in a state of peace. Then something ominous happened. From climatic studies we know that after 1150 there were periodic droughts, and erosion cut into the arable land. It got harder and harder to live here, and it got really bad around 1250. The population had to compete for fewer resources. The people retreated into high, defensive villages like the one you're about to see."

Breathless and exhilarated, I reached the summit of the flatiron to discover a sandy clearing dotted with small junipers. All about me stood the crumbling walls of some 80 adjoining rooms. Thousands of potsherds along with flint and obsidian flakes, debris from the making of hundreds of arrowheads, lay scattered in the sand.

We lingered in the clearing for two hours,

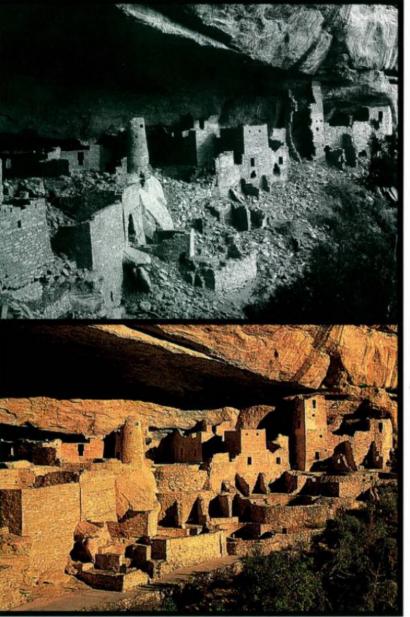
Cowhand archaeologists, the Wetherill brothers explored and led expeditions to many ruins near their Colorado ranch. Benjamin Alfred Wetherill (below, at left) stumbled on Cliff Palace while hiking in the late 1880s. By that time walls had begun to crumble (right). Partly restored early in this century, the largest Anasazi cliff dwelling now gets 170,000 visitors a year.



poking through the ruins, marveling at the sheer precipices of the flatiron. As we sat on the highest rock in the orange glow of approaching sunset, Haas pointed out other butte-top sites in the distance, all inhabited after 1250.

"Archaeologists have prowled all over this country since the early 1900s, but for the most part nobody thought to look on these summits until we began to 13 years ago," Haas said, gesturing at the ruins before us. "This is an improbable place to build. Look how far you have to go to get water." I squinted at the creek bed, 900 feet below. "And where do you plant your corn? Far below, on the plain. There's simply no other reasonable explanation. Happy Valley was built for defense."

During the next two days Haas and



MESA VERDE NATIONAL PARK (LEFT): NATIONAL BOARD OF ANTIQUITIES, FINLAND (TO

Creamer guided me to a half dozen other defensive sites in the Kayenta area. Atop each butte they pointed out that each village was connected to others by lines of sight. These villages formed a coalition of mutual support, for line of sight was the Anasazi answer to attack by siege, a means of signaling allies for help. Everyone outside the coalition loomed as the enemy. On one hillside, not far from today's Highway 160, the ancients had carved a V-notch out of an intervening ridge to ensure a view between a pair of high villages.

On the last afternoon we drove ten miles west down the highway and came to the Klethla Valley. Those ten miles had been dotted with villages as late as 1250. After that date, apparently, not a soul lived there. In the broad basin of the valley my guides showed me

half a dozen more butte-top sites that made up another defensive network, also linked by line of sight. The two researchers believe that the Anasazi of Klethla and Kayenta were enemies.

Throughout the Anasazi domain, researchers are finding new evidence, cropping up right around 1250, that buttresses Haas and Creamer's work: environmental stress, Anasazi retreats to cliffs and butte tops, defensive structures such as walls and watchtowers, and scores of skeletons showing trauma at time of death.

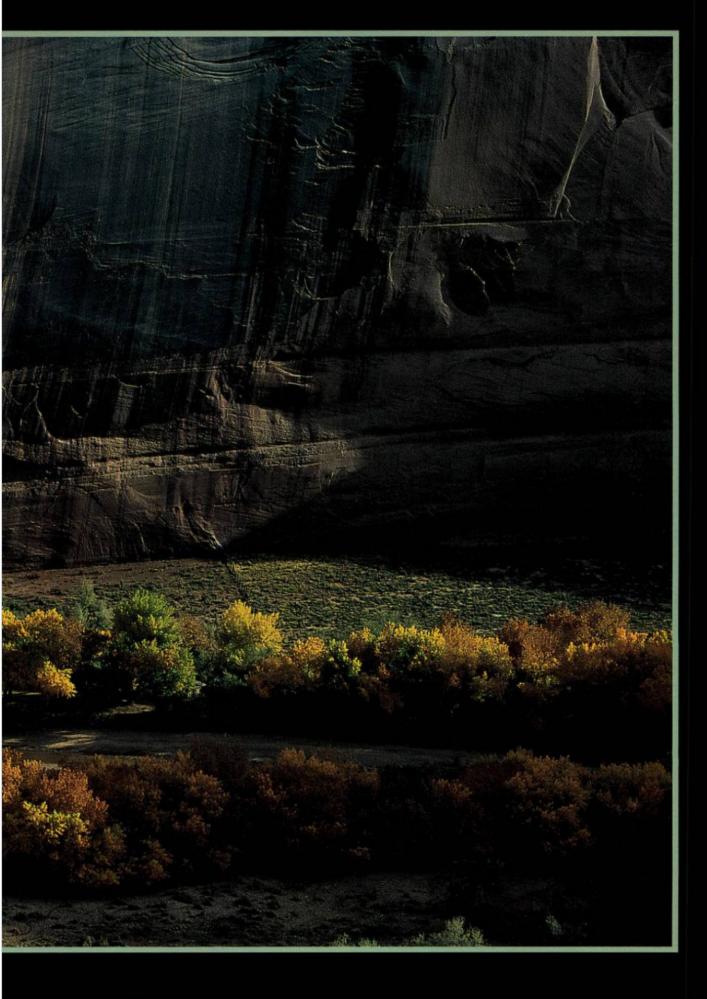
But the era of paranoia and violence didn't last long. Before 50 years had passed, the Anasazi forever abandoned the Colorado Plateau to begin a better life elsewhere.

archaeologists saw this abandonment only in terms of a 'push.' But we're starting to see that it takes a 'pull' as well," says Bill Lipe, an Anasazi scholar from Washington State University. "Something immensely attractive must have been going on to the south and east, and up on the Colorado Plateau the Anasazi got wind of it. More and more, I'm coming to believe that the pull was a new religion. When they moved, they dramatically changed patterns of

ceremonial architecture and site layout that had lasted for centuries."

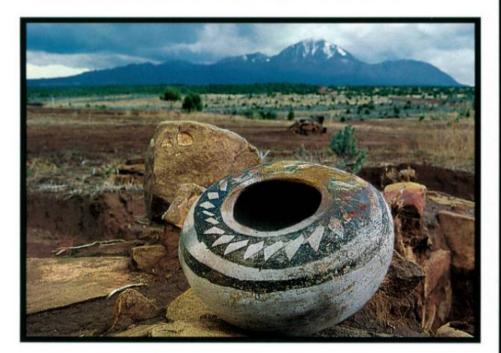
Archaeologists debate whether the Pueblos' kachina religion developed early enough to be Lipe's "pull factor." But there is general agreement that in the 1300s this new religion flourished throughout the Pueblo world. Today's Pueblos believe that hundreds of ancestral spirits, called kachinas, act as intercessors to the gods for rain, good crops, health, and happiness. In the kivas and plazas of pueblos, men dance kachina dances, in which they act out the roles of kachinas to ensure the pueblo's success. Their masks, which are made of wood, hair, feathers, and animal hide, are elaborately decorated to symbolize the history and meaning of the various kachinas.

Images of masks similar to the ones used by



the split-level White House seems small, yet its 80 rooms housed an entire community.

The creative fire of a trench kiln blazes forth for the first time since the old Pueblo potters departed from Mesa Verde. Artist Clint Swink, at far right, experimented for six years to recover lost techniques that produced pieces similar to this seed jar (below), unearthed near Cortez. "Primitive pottery is hard work," he concludes. Yet his labors have kindled a new appreciation for those who left behind the beauty of their art and architecture.



modern kachina dancers appear in Anasazi rock art, pottery designs, and kiva murals dating back to about 1300. The earliest of these were discovered well to the south and east of the Colorado Plateau, which is why some archaeologists believe that the same religion that anchors the society of today's Pueblos might have pulled the Anasazi from their homeland.

"The kachina phenomenon, by integrating kinship groups, allowed a kind of socialism to flourish—huge villages inhabited by equals cooperating to build a communal life," says Bruce Bradley, a researcher at Crow Canyon Archaeological Center in Cortez, Colorado. "It's worked in the pueblos for 700 years. In the 14th century the Anasazi found an answer to how to live together."

The primacy of community endures in modern pueblos, where the group is considered more important than individuals. When someone is ill or in trouble, the whole village is expected to come to his aid.

Another link between today's Pueblos and their Anasazi ancestors comes from their oral traditions. For hundreds of years most Pueblos have honored their forebears by telling the story of their migration from the

Colorado Plateau. The Jemez, a tribe that lives 40 miles north of Albuquerque, believe their ancestors' wanderings ended at Kwanstiyukwa, a site on

the edge of a thousand-foot-high mesa overlooking today's pueblo.

One autumn morning William Whatley, the Jemez tribal archaeologist, drove me to Kwanstiyukwa, "place of the pine bird."

The site of Kwanstiyukwa seemed blissful, with lordly views south all the way to Albuquerque, east to the summits of the Jemez Mountains, which were dusted with new snow. Wind tossed the tall ponderosas around us, carrying the scent of pine sap. Cones thudded softly to the ground, and tangles of brown needles drifted like sand dunes.

We strode across a grassy clearing, whose surface swooped and undulated as we crossed the buried walls of some 2,500 rooms. "The gist of the Jemez migration story is that the people came from the Four Corners area on the Colorado Plateau," Whatley said. "They pushed hundreds of miles south and east. This





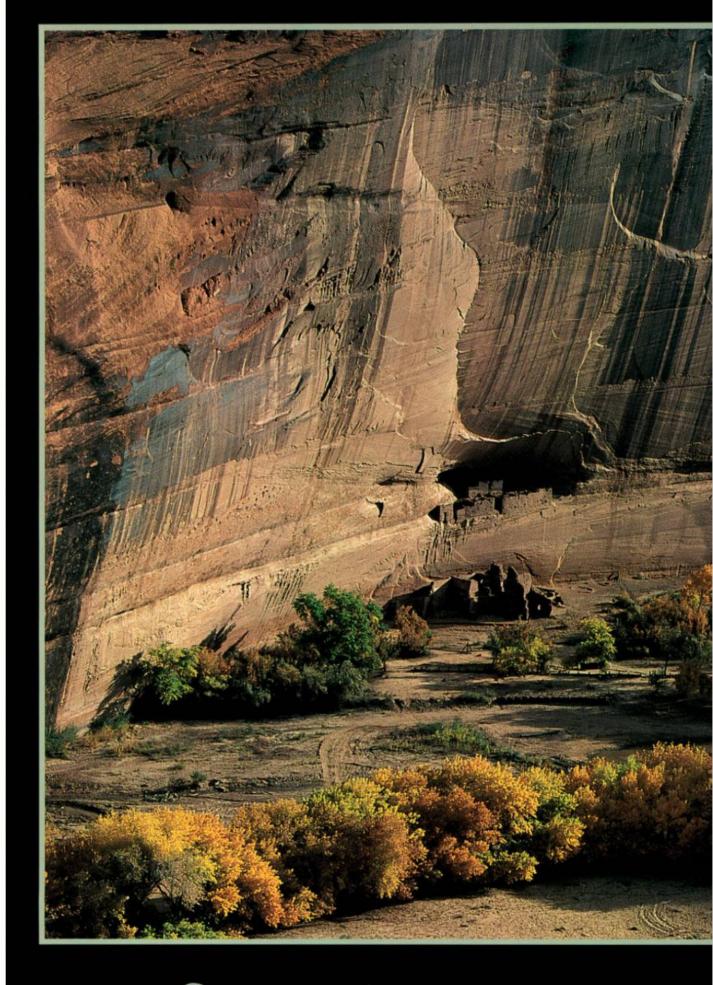
was the first place they stopped to build. The pottery goes back to about 1300."

From the summit of a high mound I could make out the grid of rooms sprawling about me, a crosshatched pattern of faint ridges scoring the ground. I could also discern the flat depressions of seven big plazas, a reservoir, and a large kiva. The ruin's height—21 feet at maximum—suggests that some of the blocks of rooms had towered five stories.

All told, Kwanstiyukwa covers an area of 160,000 square feet, almost the size of three football fields. Not even at the height of Chaco's glory had the Anasazi built a village so large. Yet towns of more than a thousand rooms, centered on big plazas and kivas, became the norm in the 1300s. Archaeologists believe that the florescence of Pueblo religion dictated this town plan, as elaborate ceremonies became the focus of community life.

N MY LAST AFTERNOON in Utah the wind came up in gusts, and the west grew dark with storm clouds. Just before dusk I crouched inside a soot-blackened kiva. Half of the roof was intact, and I craned my neck to look at it from beneath. Tiny square knots of yucca fiber still bound the cross sticks of the ceiling in place. Faint etched designs, like chessboard grids, decorated the plaster on the kiva's inner walls. For more than seven centuries the most delicate whims of the builders' art had hung, frozen and perfect, in the timeless air.

Then a gust of wind swirled through the kiva. I squinted as a burst of fine particles streamed across my face. I blinked and looked up. The motes were wisps of shredded juniper bark, used to chink the roof. The work of the ancients was turning back into dust before me.



Ctacked up against the massive face of Arizona's Canyon de Chelly,