

Blue Jade Fever

Scientists and Shamans Romance a Mystical Stone

NATHAN HOROWITZ

Found in the Guatemalan Wilds reads the headline of a front-page story in the New York Times on May 22, 2002. *Jade Lode as Big as Rhode Island*. "For half a century," the article begins, "scholars have searched in vain for the source of the jade that the early civilizations of the Americas prized above all else...." Only a few deposits of low-quality jade have turned up. Now, though, a team of U.S. scientists has made a number of astonishing discoveries in various locations. Ancient tombs. An ancient stone road leading to a quarry. And bus-sized boulders of blue jade.

The article suggests the finds are linked with the mysterious Olmecs, the earliest Central American civilization, forerunners of the Maya and the first to build pyramids and process chocolate from cacao pods. The Olmecs are best known today for having carved volcanic rock into monolithic heads weighing up to thirty tons. A photo accompanying the article shows the Kunz Axe, an Olmec ceremonial jade axe head carved into quasi-human form (www.uwplatt.edu/~winderk/meso/kunzaxe.htm). The figure's hands are holding a knife pointed down. The face seems equal parts jaguar, snake, and human baby. Two snake tongues curl out of the mouth to lick the upper lip, which is pushed up beneath the nose. The translucent stone snarls with the ferocity of a predator. Another photo shows Dr. George Harlow, Curator of Gems and Minerals at the American Museum of Natural History, holding two samples from the museum's roughly half ton of uncut Guatemalan jade.

I decide to go to Guatemala to write a longer article about the new discoveries. A jade lode — a single, solid piece of jade — the size of Rhode Island sounds incredible. And those bus-sized boulders of blue jade, how beautiful they must be. Most appealing is the idea of visiting recently-discovered archaeological sites. There's something in the modern psyche that desires an unmediated, face-to-face confrontation with the distant past; it's as if we have roots that want to pull nutrients from the deepest soil, to find some power or lesson.

So I contact the four scientists who make up the team that found the jade — George Harlow, of the American Museum of Natural History; Russell Seitz, a geophysicist with the Olin Institute in Cambridge, Massachusetts; Karl Taube, an archaeologist at the University of California at Riverside; and Virginia Sisson, a geologist at Rice University in Texas. All I can get from them at this point is that the sites are off limits, which makes me want to see them even more.

I studied the Olmecs briefly in college. Based on their art, they appear to have shared with modern Amazonian indigenous tribes 3000 years later the curious belief that shamans can somehow transform themselves into jaguars. Since I began spending time with Ecuadorian shamans in 1993 I've been trying to figure jaguar transformation out. The closer you get to a phenomenon, the more complex it appears. A shaman I know says he's married to a female jaguar spirit and has three children by her in another world. The Olmecs probably had similar "family" arrangements that sound strange to us now.

Around 1000 BC, the Olmecs began to work with jade, fashioning it into celts — real or symbolic axe heads — of which the Kunz Axe is an outstanding example. Opinions differ as to whether some were used, or if all were luxury and ritual items. Axe heads, mostly of flint or chert, were tremendously important in Stone Age times, allowing people to clear land to plant crops to support increasing populations. Hence the urge to celebrate and perhaps even deify them.

With the imagination of the ancient mind, the Olmecs would have personified stone. To an animist culture, as all ancient cultures of the earth appear to have been, everything has a soul, and everything is alive. The spirits of things can appear in dreams and visions as people, because everything is people. Ants are people. Jaguars are people. Even the wind is people.

And so stones were people, and had souls, and were seen as lending themselves to the humans to help move the human project forward. In mythological thought worldwide, technological advances are transmitted to man by spirits. Sometimes there's a price. The ancient Mesoamericans saw the world as full of invisible presences, and full of hungers too. Where everything is alive, everything needs to eat. This was a land where, centuries later, the sun would have to be fed human hearts; and a Maya word for gold literally means "excrement of the sun."

The Kunz Axe, then, would appear to reveal a cultural ambivalence about technology. Technology is frightening, a super-powered baby that can't stand on its own but has alarming appetites. It can chew through trees, bite through flesh. It's a tooth of the earth, beautiful and hungry. The hard rock humanoid represented on the Kunz Axe was a cultural symbol like a cross between Mickey Mouse and the Terminator, with a little bit of God and the atom bomb thrown in. I imagine it appearing to a group of early humans and supplying them with the magic and technology they needed to survive, provided they fed it the blood of their enemies — or whomever.

Back to science. Browsing the Internet, I learn that there are actually two quite different rocks known as jade, jadeite and nephrite. Nephrite is the whitish material used by ancient Chinese and Maoris. Jadeite is what most of us today think of as jade, and includes the translucent, intensely green material mined in Myanmar and carved in China. Guatemalan jade, too, is jadeite. Both jadeite and nephrite appear in high Stone Age cultures in various parts of the world, playing remarkably similar roles because of their nearly identical properties. Dense and heavy, they're difficult to work with. You can't chip them like flint, because they don't like to break, and when they do break, they do so in unpredictable ways. But with the right tools, and tremendous patience, they can be sawn through,

ground down, and polished to make objects of great value.

To both jades were ascribed magical properties. Several Chinese emperors were buried in full suits of nephrite connoting immortality. To the Maya, jadeite was essentially the earth's congealed life-force, and was associated with kingship, fertility, corn, and rain.

Jadeite is a silicate of sodium and aluminum. Dr. Harlow, it turns out, is the world expert on its formation, under fairly low heat and extreme pressure where tectonic plates crush together — in the case of Guatemalan jadeite, the North American and the Caribbean plates.

Jadeite boulders are always covered with a rind, because when they form, they press against whatever they're near. It occurs to me that bus-sized boulders of blue jade wouldn't look like blue jade, but like bus-sized boulders. I decide to focus my investigation on the archaeological sites.

Four days after the New York Times article appears, Guatemala's press reports irate responses from its government. Siglo Veintiuno writes, "Authorities from the Ministry of Energy and Mines [MEM] fear a 'blue jade fever'." Prensa Libre reports, "Doubt was cast yesterday on the international announcement of the existence of great veins of blue jade when authorities from the MEM said there were no indications of important deposits of that mineral. 'What we're concerned about is that it's mentioned that there's blue jade in a 3000-square-mile area of national territory, and that's not true,' affirmed Philip Juarez-Paz, General Director of Mining." Another problem the MEM points to is that some of the sites — those I want to see, the tombs, the stone road, and the Olmec quarry — are in undisclosed locations in the Sierra de las Minas, a precariously-protected nature reserve next to the Motagua River valley where most Guatemalan jade has been found up to now.

The Sierra de las Minas is a mountain range thirty miles wide, one hundred miles long and up to 10,050 feet high, at the boundary of the North American and the Caribbean plates. Though it's increasingly threatened by timber cutting and land invasion, it's still one of Guatemala's best-preserved areas of untouched nature, the cloud forest home of jaguars, and of quetzals, the birds whose long green tail feathers were prized by the ancient Mesoamericans almost as highly as jade.

After a while I figure out that the New York Times article's headline's reference to a "Jade Lode as Big as Rhode Island" is an honest, sloppy mistake, born of enthusiasm on the part of whoever was writing the headlines for the front page that day. The article itself reports nothing but several lodes of jade within an area the size of Rhode Island.

I end up wrapped in a blanket in Detroit Metro Airport at 3 AM on June 7, waiting for a 6:47 flight to Miami with a connection to Guatemala City. I muse on themes like greed and desire. I don't have permission to visit the archaeological sites, but I want to try anyway, because blue jade has taken on a greater meaning in my mind. It's everything one craves: sex, money, ice cream, gold. It's the flame and I'm the moth. Do I really want to go there? It's a special effect: stone smooth as water, the color of sky. It's poetry, taking a basic premise — jade, which as everyone knows is green — and sending it off into the blue. Once it was the cutting edge of art and culture, the Cremaster and Star Wars of its day. And if I go see it, the scientists will get upset and not talk to me or let me illustrate the article I hope to write with pictures of the Kunz Axe.

Will I have access to the sites, I wonder, or will I be reduced to visiting the nearby natural history museum I read about on the Internet, viewing the skeletons of the mastodon, the giant ground sloth, and the glyptodont — a prehistoric armadillo the size of a bear — and writing about how the land is a palimpsest, forever bearing traces of earlier eras? The proverbial cookie crumbles in various ways. Sometimes you get jade. Sometimes you get glyptodonts.

Hodday Ahsool

Much later that day, in sprawling, crowded Guatemala City, which everyone calls Guate, I ride in a taxi toward the Popol Vuh Museum of Archaeology. The streets are narrow, dirty, noisy and smoggy. There are no good maps of Guate, so the driver has to pull over and ask directions four times.

I tell him what I'm doing. "Ah!" he says. "Studying the ancient people! I saw a documentary on TV recently. They deciphered hieroglyphs in a cave that said the Mayas were taken away on space ships by aliens!"

"Nonsense," I say.

"But it was on TV!"

"Anyone can come up with any damn thing and put it out in the press," I say. "Journalists are just like you and me."

"But this was on TV!" he insists.

The Popol Vuh Museum is full of Maya artifacts. I walk past a ceramic sculpture of the sun god holding a pair of ferocious jaguar kittens on his lap and turn to see funerary urns in which corpses were placed in fetal position. One urn is formed as the head of the sun god, spiral-eyed, with a helix going up the middle of his forehead, and something like flattened fangs curving down out of the corners of his mouth. On the lid is a smaller full-body image of the same god, sitting peacefully, crosslegged; his left hand is a jaguar paw with huge claws. Another urn includes a depiction of a man with the hands, feet, and head of a jaguar. There must have been shamans buried in these vessels, riding as if inside the jaguar sun itself down to the land of the dead.

Blue jade in Spanish, *jade azul*, is pronounced "hodday ahsool". I turn the words around in my mind, murmur them. Excuse me, I'm looking for the hodday. The hodday ahsool.

At the gift shop I buy a scholarly book, *Maya Cosmos: 3000 Years on the Shaman's Path*, by Linda Schele, David Friedel, and Joy Parker, two top Mayanists and a creative writer. It has roll-out photos of some Maya vases. Captions explaining the vases' painted imagery say things like "Reborn Maize Gods dance with the stones of Creation" and "The Old Jaguar [Canoe-]Paddler God wears the headdress of Three-White-Dog in a scene from Creation mythology." I realize again the phenomenal complexity of archaic thought.

At breakfast the next morning I'm distressed by what I'm reading in *Maya Cosmos*. The Mayas loved to take their higher-ranking enemies captive and sacrifice them, often after torture. Maya nobles also practiced ritual bloodletting on themselves. As a gift to the gods, the men would pierce their penises with obsidian or jade lancets or stingray spines; the women would pierce their tongues and pass knotted cords through them. They would blot up the blood with paper and burn it. If the ritual was done correctly, as their brain chemistry changed from the pain and their minds verged on dream, a serpent

might appear in the swirling clouds of smoke from the burning bloody paper, and the serpent's jaws open to reveal a dead soul with whom they wished to communicate. These serpents sometimes had a head at each end of their bodies, or were half-flesh, half-skeletal. Each one had its own name.

I never heard of bloodletting rituals among the Ecuadorian jungle tribes, but an old Aztec shaman once described to me visions he experienced at a Lakota Sioux Sun Dance while hanging from a tree by pegs piercing his chest: the sun turned blue and exploded, and he saw all the matter in the universe in a shimmering ring. In the Old Testament, the prophet Elijah fought against priests who went into trances by cutting themselves. Rituals summoning the dead were prohibited in the Bible, but King Saul lost his nerve and did it anyway. Odysseus summoned ghosts in *The Odyssey*, feeding them ram's blood. I mop up egg yolk on my plate with a corn tortilla. Unbelievably loud buses roar by in the narrow street outside. I have to catch one to go to the city of Zacapa, near the Sierra de las Minas where the archaeological sites are. "Señora, can I get another cup of this instant coffee?"

Out the bus window, the hills are deforested and dry. Like the woman sitting next to me, the land appears exhausted from the effort of supporting its children. The driver dances the bus past slower vehicles and pulls it back into the right lane just in time to avoid oncoming traffic. At the front of the bus, a metal plaque reads "Your Operator / Safe — Reliable — Courteous." Above it and to the left is a larger notice painted neatly in Spanish: If your husband cheats on you, get back at him with the driver.

A little while before the bus reaches Zacapa, we drive between the Motagua River and the Sierra de las Minas. Soft green foothills yield to bluish heights, and cumulus clouds obscure the peaks. That's the cloud forest ecosystem where the quetzals and the jaguars live, on an island of antiquity in an ocean of modernity.

In Zacapa I visit the natural history museum. The giant ground sloth and mastodon skeletons are suitably impressive. The glyptodont, the giant prehistoric armadillo, is underwhelming: actually there's only a piece of a glyptodont's shell. After its death it was probably scavenged and dismembered.

The spiked mace tail, the most interesting part, is absent. Below the floor, though, down a flight of stairs, are three simple Maya tombs excavated and displayed on location. Behind glass, diorama-style, skulls rest on a smooth dirt floor, accompanied by objects that the deceased were thought to have needed in the next world. As it happened, the next world turned out to be a museum.

Earlier I had posted a message on an Internet newsgroup and one day I check my e-mail to find a note from Carla Molina of Ecotour Adventure. I phone her. She says "Your article should focus on the people who really discovered blue jade: Jay and Mary Lou Ridinger. You can come with me to the factory and showroom of their jewelry company, Jades S.A., in Antigua, and see some of the blue jade they've been selling there since 1987."

We meet in Guate and drive together to Antigua, a lovely Colonial town which was the Guatemala's capital until 1776. In the Jades S.A. showroom, under the relaxed eyes of half a dozen armed guards, the manager takes me around. I admire jewelry of green, lavender, black and rainbow jade. But the blue jade itself, the precious substance, looks like a blue corn tortilla chip, mottled and a bit too gray. Ouch.

I borrow a book on Olmec art from the manager and sink into the images, many of them jade carvings in a wide array of blues and greens. Four pieces sculpted in serpentine — a less precious green stone often found around jade — illustrate phases of man's metamorphosis into jaguar: first the face changes, and last of all a tail appears. Most of the pieces portray rulers or gods. Some of the figures look remarkably modern, like characters in a Japanese cartoon. I get the impression of people staring into the spirit world and seeing beings much like themselves: the humans and nonhumans share a mood of intense awareness and a don't-mess-with-me attitude.

The ancient artisans put their hearts and minds into that work, and thousands of years later we're left with their solidified thoughts and visions. Jade produces time capsules of consciousness. Had the Olmecs worked in softer, prettier gold, their art would have been melted down by the Spaniards.

The next morning it's back to Guate for my meeting at the Ministry of Energy and Mines with

Philip Juarez-Paz, Guatemala's Director of Mining. I get a cab. The driver has to stop to ask directions four times. Guate is baking in the heat, and the wind blows dust clouds; even the sun seems dirty. Mercifully, the Ministry of Energy and Mines is air-conditioned. Juarez-Paz is powerful and mellow, grizzled and a bit rounded, expressing himself with precision. I click on the tape recorder and put it on the table and we talk about hodday ahsool.

NH: Have you gone out into the field to check on the discoveries?

PJP: I haven't. A group went out to make an initial investigation and was unable to locate deposits of blue jade. It's generally found as isolated stones broken off and carried downriver from the source. But they don't come from some huge vein. What worries us is, the New York Times article says there's jade in a protected area, and we don't want ten thousand people rushing in. We decided to clarify the situation because, based on the Times article, a newspaper here reported a 3121-square-kilometer vein of blue jade. Well, we at the Ministry want the mining sector to grow, whether through gold, silver, nickel, jade, whatever. If something like this really exists, it will be wonderful, it will represent economic growth for the local communities. So we're inclined to give all the necessary advice and assistance to the businesses and persons who wish to search for jade. The more jade that's found, the greater the economic benefit to the country. But we believe it's necessary to set the record straight and not exaggerate the news. And if people want to request permission to search an area, let them do so following the steps that the law requires.

NH: Was it illegal for the U.S. scientists to take out half a ton of jade, as the New York Times reported?

PJP: Well, I don't believe everything that's written in newspapers. But, if it's true, it was.

NH: Are you going to give them a hard time about that?

PJP: No. A few days ago I received e-mails from Mr. Harlow and Mr. Seitz. They were a little worried. They said, "If we have made a mistake, please forgive us." So we're not interested in sanctioning them, but in orienting them as to how they should carry out their activities here. We don't want to be the bad guys of the film.

NH: So if I'm looking for bad guys for the film, who can it be?

PJP: There aren't any. Only uninformed people.

Where Jaguars Walk through Clouds

Through luck and detective work, I've figured out the general location of the archaeological sites and gotten permission to get in from a nearby landowner. (Names and places are changed in this section to disguise the sites' locations, in compliance with a request from Guatemala's Minister of Sports and Culture.)

Up on a mountain road in a light rain, the people who drop us off ask me if I understand where I'm going. I say "I'm letting my guide handle the navigation." Carlos Quintana looks uncomfortable and the two of us shake hands all around and set off on foot. My running shoes immediately soak through in the long grass that grows on the steep trail that switchbacks and doglegs through the pine forest down the slope.

Carlos is around forty, thin and rangy, and going through a divorce. When he smiles, which is often, it's apparent that he only has about half his teeth left. He's carrying a knapsack on his back, while his machete and his glasses case hang from his belt. It's hard for me to understand his Spanish, but he doesn't mind; ahead of me on the path, he keeps up a running commentary about something or other, and after a while I realize it's not important for me to know what.

After an hour and a half we reach the floor of the valley of Las Tolas, where the tombs are said to be. We cross a river on a wobbly footbridge woven of barbed wire and bamboo, then walk amid palm trees and boulders through pasturelands.

"Look," Carlos says quietly. "These are the tombs."

They are about ten domes of heaped stone and earth, roughly five feet high, fifteen feet in diameter. Most have holes dug in them by looters; others are untouched. If it had just been me, I would have walked right by them. The valley is green and peaceful. I try to imagine what this scene would have looked like 2500 years ago. Probably about the same. The grass on the tombs might have been shorter. What a satisfying way to go into eternity, with friends and offspring building a rocky mound above you. They bury you with some choice possessions, maybe some jade beads; you've died with the certainty that you can take it with you.

We walk on. An hour later, as light is ebbing from the sky and the rain is starting up again, Carlos sights a hut. We call out as we pass through a gate in the barbed wire fence. Dogs emerge from the hut and bark, and two teenagers shout at the dogs to back off. Inside we meet Reinaldo Montoya, an old acquaintance of Carlos, and the father of one of the young men and uncle of the other.

Rei tells us his brother guided the scientists last year. The tombs we passed are indeed the ones they visited. And yes, he can take us to the stone road and the quarry that the New York Times article mentioned.

About fifty, Rei is quietly self-confident, in contrast to the effusive Carlos. Judging by the length of Rei's stubble, he's been away from his village for about a week and a half; he and the boys have brought their employer's cattle up here to pasture.

Rei rules the house from a low-slung chair built of spare wood and an empty grain sack. For illumination, one of the boys puts a few pieces of lit heartwood of pine, fragrant and bright, on the dirt floor in front of him. The boys warm tortillas on the wood stove for Carlos and me.

There's a permanent state of conflict here between humans and canines. As Carlos and I eat, the dogs stare at us, creep up, begging. One has gotten too close to me. "Chucho!" Rei cries, outraged, and whacks him on his bony back with a thin piece of firewood. The dog trots away into a shadow behind the stool I'm sitting on and lurks at my elbow. I transfer the tortilla to my left hand and rub the animal's neck and shoulders with my right.

Rei's grizzled face is like a mask in the firelight as he tells us about the scientists' visit here last year. "But there is a place they didn't go," he says, "where ancient people lived in caves, one with paintings inside."

"Can we go there?" I ask.

"Yes. I'll bring you tomorrow."

Carlos and I share a room with three hens, and a turkey with six chicks, one of which was injured by a dog during the day, and some fleas. I can't sleep. The hammock I'm in is so narrow that I keep almost falling out when I try to turn on my side. In the middle of the night I take out plastic sheeting I brought in case we needed to build a shelter and spread it on the dirt floor, but the floor is slanted, so every time I move I slip down toward the door. And

every time I get semi-comfortable a flea bites me.

At dawn we get up. The injured turkey chick has died during the night. The boys slap cornmeal dough between their hands and bake tortillas on the metal sheeting above the fire on the table.

There's a headless rattlesnake split open lengthwise, skewered on a stick and smoked, stuck up in the rafters. "What's that for?" I ask Rei.

"Medicine."

"What's it good for?"

"Anything. Stomach problems, cold, flu. You just shave off a bit and put it in your food."

We assemble our gear and set out. Rei carries a shotgun and a *chinta*, like a machete with a long wooden handle and a short hooked blade.

We hike a couple of hours down the river, leaping and scrambling from stone to stone, boulder to boulder, to reach the caves. The first is at the level of the river, and empty. We climb to the other ones. The first twenty feet is the steepest, all sheer rock, dirt, and cacti. After that, the slope is gentler, and wooded in places.

The only things in the caves are what the looters didn't want: pieces of broken clay pots; a section of wall cemented together with a mortar incorporating pine needles; and a broken metate, the stone platter used even today for grinding corn.

We keep on climbing. Nothing's in the higher cavs but rocks, sticks, a rusted machete blade.

On the limb of a tree that's growing on the slope below us, its higher foliage at our level, Rei spies an iguana. I can't make it out through the leaves. He aims his shotgun and fires. I glimpse the falling body. We'll retrieve it later.

The highest cave goes in about 25 feet. A big hole at the rear looks out on a sheer drop of about 70 feet, at the bottom of which the river rushes by. Next to the hole are the paintings Rei mentioned, which, unfortunately, are only weathered circles and dots. Any meaning they might have carried is lost. I fight off a sense of disillusionment. Minerals have seeped through the walls and ceilings of all the caves, forming strange stalactites and stalagmites and probably obliterating other paintings.

We collect the meter-long iguana, then climb back down and proceed to other caves further along. At the entrance to one, I find something I like very much, an abstract carving in the stone that Rei hadn't known about. I imagine adding a line to my resume: Discovered a petroglyph in Guatemala.

Soon I find two more small cave paintings with half circles, dots, and wavy lines — graceful, garbled messages from the past.

At the riverbank, we lunch on corn tortillas and a can of refried beans, with plenty of water from the river. The high, steep hills blaze in the sunshine, jutting up at the blue sky. The boulders below seem huge, warm animals dozing in the noonday sun. I lean back and whistle while Rei and Carlos discuss cattle rustlers.

On the way back to the hut we rest in a quiet valley reminiscent of Tuscany. "So," Rei begins, "you can come here, but we can't go to your country, right?"

My stomach tenses up. "That's correct."

"Why?"

"Because the skills you have aren't useful there; or if they are, it's an unfair advantage, because you can work for less money."

"I want to marry an American woman," Carlos grins.

"Bring us to the United States," Rei urges. Better food, I think. Longer lifespans.

"No. Stay here. Everything you need is here." I indicate the beautiful valley, where distant deciduous trees are swaying in the wind. Off to my left, Carlos and Rei mutter and laugh.

We head back to the hut intending to miss the afternoon thunderstorm that has been massing for some time. No such luck, but it does the job of washing off our sweat. The boys kill a rooster and soon we have chicken soup. Later they roast the iguana over a fire on the floor.

I tie the sides of the hammock tighter so I won't fall out, and sleep well.

The next morning I watch smoke and flame spilling up from the cooking fire in the sandbox on the table. A dog yawns. The boys appear satisfied and comfortable with their lives, but curious about the outside world too. Drinking coffee with fresh milk from one of the cows outside, I tell them about the importance of learning computer skills, and then about how big the universe is.

The sun breaks over the hills. Dogs, chickens, turkeys and kittens wander around.

Two local men in their early 20s appear, hiking through on their way from one village to another. As they accept tortillas and coffee from my hosts, one of them tells me he looted one of the tombs nearby. "I found blue, white, and green jade beads,

and some pots, but the pots fell off a shelf during an earthquake, and my younger brothers lost the beads after playing with them for a while. Those beads were really pretty. The light glittered inside. I also found long bones, molars, and a ceramic object shaped like a frying pan, with its handle in the shape of a bear's paw, but that was too damaged to save. Also a little blue jade fish."

"Interesting."

"Do you want to dig up a tomb with me?" he asks.

"No. Please save them for the archaeologists, because..." I'm about to say, "...because that way the knowledge will benefit everyone," but I can't figure out how it would benefit him. "Because the archaeologists might hire you to help them, and you could make more money that way than you could by just selling the things inside."

He nods, apparently convinced.

Three of the kittens are playing atop a low boulder in the morning sunlight, keeping their minds off their hunger. All the men here are skinny, their dogs more so.

We breakfast on coffee, tortillas, and iguana, then Rei, Carlos and I set out for Los Pasos where the quarry is. After a couple hours' hike we reach the old stone trackway snaking across the hills. I wonder how the scientists determined that it was Olmec. It's just a path of stones, wide enough for one man, built up in some places to keep it level. How would you date something like that?

Suddenly the path opens out onto a hill. Rei points out the remains of a simple shelter — tree limbs supporting a palm-thatched roof — in which the scientists slept.

"And this is the jade," Rei continues, bringing Carlos and me to a hole ten feet in diameter with bluish-green rocks scooped out of it and scattered across the ground. We hold some with thin edges up to the sun and see the translucence.

The New York Times article mentioned "signs of ancient mining". Strange. The hole seems quite new.

We each pick up a few rocks, then Carlos and I say goodbye to Rei, who's headed in the other direction. We get back on the stone trackway and head down out of the hills.

The Jade King

It's not easy, but Jay Ridinger is having a hell

of a good time in the second act of his business career. A former mining engineer in the United States, in 1973 he moved with his kids and his second wife, Mary Lou, to Guatemala, intending to cool his heels. But Mary Lou was studying archaeology and became interested in the mystery of where the ancient Mesoamerican cultures had obtained their jade. Using a document detailing tribute paid to Moctezuma, the last Aztec emperor, she traced the rock to Guatemala. After searching for eighteen months, she and Jay struck jade in 1974. They formed a business around their finds and brought the Guatemalan jade industry back to life after nearly 500 years. The hardest thing was convincing the world that there really was jade in Guatemala, but after a two million dollar investment, they began to turn a profit, employing scores of locals to collect, cut, and polish the stone, and make it into jewelry.

Jay picks me up at his showroom and navigates us through the comfortably-scaled streets of Antigua.

I say, "Have you heard the rumor that [Guatemala's current president] Alfonso Portillo was heading to the airport in Tikal with a suitcase full of Pre-Colombian jades to sell in Europe, but the local peasants physically blockaded his car until he gave them up?"

"I hadn't heard that, but you know the Museum of Archaeology and Ethnology in Guate, where most of the country's jades are? All the jades are kept in a room like a bank vault with a combination lock on a thick steel door. There's only one guy who knows the combination. Because Guatemalan presidents used to go on tours of Europe with the jades, and somehow toward the end of the trip some of the jades would mysteriously get lost."

"They put that bank door on to keep out the presidents!"

"That's right."

I bring up a story about Jay that I read on the Internet. One day back in 1985, he, Mary Lou, and their daughter Robin went jade-hunting on remote mountainsides. Seventeen year-old Robin stayed to search one place while the helicopter pilot flew her parents over to another. After a while, quite suddenly, a fog came up. Jay and Mary Lou got back in the copter and the pilot flew them in Robin's direction but they couldn't find her. It was getting late and the clouds were getting thicker. The

pilot said that if they didn't find her in the next ten minutes they would have to leave her there. Jay remembered a shaman friend describing a quasi-telepathic connection between pieces of jade cut from the same boulder. He, Mary Lou and Robin were all wearing pendants from the same stone. He gripped his and concentrated on his daughter. "She's down there! Land there!" he exclaimed. The clouds suddenly opened and she was there, waving frantically. The pilot descended, Robin got in, they flew off, and immediately the whole place was obscured by clouds again.

"Something like that might be why the Mayas liked jade so much," Jay tells me.

"My archaeologist friends say some of the palace complexes have small rooms that seem to be meditation chambers. Probably a king would go there with his jades to check out what was happening in his kingdom or the other kingdoms around there. I think that's something that the human mind can do. I do the same thing when I'm up in the States: make sure that everything's going all right down here. I believe there's something to it."

Later, after responding to a delicate question, he says, "Don't quote me on that. I've had enough trouble. I've had my daughters' and my grandchildren's lives threatened. I've been shot at. My driver was kidnapped for two days and tortured."

We pass through the gate of his massive, old, one-story colonial home. A single peacock is walking slowly in the driveway, the last survivor, Jay says, of a group of six.

Jay shows me articles printed in various media that establish him and Mary Lou as the first rediscoverers of blue jade, including of a quarry the Olmecs used.

We stroll in the sunny courtyard. "Now, these guys say they've found huge boulders of jewelry-quality blue jade," I say. "Isn't that pretty impressive?"

"Sure. Let me tell you something, though. Ninety-nine percent of the jade I've worked with is worthless. Look at this boulder. It's several hundred pounds of jewelry-quality green jade. And there might be a single vein in there the size of my finger that's pure enough from inclusions of other minerals and has intense enough color to make into a piece of jewelry."

Jay points out the paving stones we're walking on. "These are from boulders we couldn't use.

Make sure you write in your article that there's a crazy man in Guatemala whose garden walk is paved with jade."

Dreams and Desires

Back in the States, I continue researching jade and writing e-mails to the four scientists, wanting to know more about their discoveries. Dr. Sisson doesn't respond. Russell Seitz, the geophysicist at the Olin Institute, calls me on the phone when I'm out but doesn't leave his number and never calls again. I call the Olin Institute and they say he hasn't actually been there in a long time, so they don't have his phone number.

Karl Taube, the archaeologist, writes to me that he's in Guatemala, in the ruins of the Maya city of Copan, where he's studying a temple that features a two-meter-high skull mask of the rain god, and he'll be happy to talk with me on the phone when he gets back to the States. He adds that he saw "no obvious signs of ancient jade working" at the quarry site I visited, the one the New York Times described as "an old mining area". "All seems to be recent," Dr. Taube says. "Even the stone trackway might be from as late as the 19th century."

Dr. Harlow, of the American Museum of Natural History, writes back too. He explains that he has worked on the geology of Guatemala since 1984 and has never had any trouble collecting and bringing out rock samples before. He adds that he hopes to return soon to continue his investigations. He doesn't answer my question about how he got half a ton of Guatemalan jade up to New York City. However, given that he and his colleagues made a number of trips, it is most likely that they simply labeled it as geological samples and mailed it or carried it in their luggage. To keep things in perspective, the market value of half a ton of rough jade in Guatemala is about \$120.

Seitz emails to say that he is underwhelmed by my resume, which a friend has posted on the Web. He is too busy to grant me an interview but sends me his curriculum vitae. This proves weird and wonderful. Alongside "Discovered The source area of Olmec and other Formative period jadeites," one finds (in the original typography): "Conducted research on military resource availability in Biafra, summer 1968 summer jobs a Army and copoate labs_ thermochemicals, Cadmium Telluride, Kallirosopes and hydrothermal synthesis in silica

gels. New phase of bariumtitanosilicate achieved in 1964... Marine Photography: one man show at Brick Market Gallery, Newport R.I. -Photography Aboard the Tall Ships', July 1982. Per Sec Nav's request, Persuaded HM's Spanish Navy that joining Nato was OK., Tried to get Chilean Navy to liase with Spain: 1 for 2."

In 1995 Seitz co-authored, with Tom Clancy, a sobering article about how easy it would be for terrorists to gain access to the technology required to create weapons of mass destruction and then deliver them on planes. And a final note says he's currently working on an article on possible revision of the Montreal Protocol, which limits ozone-depleting gasses, in light of 9/11.

I phone Gillett Griffin, the curator of the Princeton University Museum's Pre-Columbian collection.

"Let me walk out on the porch and find a chair," he says. "Ah."

"Dr. Griffin — " I begin.

"I'm not a doctor," he shoots back. "Don't ever trust me with a knife!"

He has the voice and energy of a thirty-year-old. "What's your background in this area?" he quizzes.

"I took a class on the Maya in college. Later, I spent time in the Ecuadorian Amazon with indigenous tribes."

"Did you? That's great!"

"One parallel really interested me between the Olmecs and the tribes I was with, that the shaman is supposed to be able to transform himself into a jaguar."

"Well, Ecuador is where it all came from. There's recent work establishing that the Olmec deities were Amazonian. You know the Valdivia culture, the one that flourished in Ecuador about five thousand years ago? Its influence spread up and down the west coast of South America, reaching Mexico in 1800 BC. So if you're looking at the Olmecs in the light of Amazonian beliefs, you're right on the money." Griffin is off and running. I scribble in my notebook as fast as I can.

Griffin on Olmec jade: "Between 300 and 700 AD there was a jade rush in Costa Rica. They mined Maya and Olmec tombs to get it. People traded jade heirlooms all around. I have a tubular bead of jade,

over a foot long. It's completely identical to Costa Rican ones, but it was found in the Mexican state of Guerrero." And, "A palace called Cacaxtla, from around 1000 AD, was discovered in the 1970s in Puebla, Mexico. There's a 30-foot mural of a ritual battle between Mexicans and Mayas. The Mayas are being butchered. You can tell they're captives being sacrificed, because they're poorly armed, and naked except for jade jewelry and bird headdresses. Two of them are leaders, wearing Olmec jade pectorals — pendants around their necks with large oval Olmec faces. The mural seems to depict the new order, the Mexicans, defeating the old order, the Mayas."

"Look," he says, "I wish I could show you my collection and the Princeton collection, but I'm vacationing in Massachusetts right now. If you'd like, you can come and stay with me for a couple of days and meet my friend Mike Coe, who has a farm near here."

Michael Coe, a professor emeritus at Yale University, is the grand old man of Olmec and Maya archaeology. "Sure," I say.

A few days later I'm chatting with the affable, seventysomething Griffin about human sacrifice at an old farmhouse that he owns with some friends. My tape of the evening's conversation is punctuated by the clinking of ice cubes in glasses of scotch.

"Most religions," Griffin begins, "decreed the end of human sacrifice: Judaism; in China, in Ur. If when you die you're sacrificing your wife, your servants, your cattle and your slaves, at some point that gets expensive; and your wife really doesn't want to follow you into eternity, and your servants certainly don't want to follow you forever. So that is terminated and you put in tomb figures and wean yourself away from it. But in Mesoamerica it went the other way, and you needed more and more sacrifices. As curator of Pre-Columbian art, it's very hard for me to justify this part of things that went just the other way than the rest of the world went. Among the Aztecs, an 18-year-old youth from one of the important families was taken and treated like a god for a year and walked to his sacrifice. They knew that when they died in sacrifice, as in war, they would go immediately into the Milky Way. But if they died in bed, they wouldn't.

"The Spanish were shocked by human sacrifice. However, what they did to the Indians was something else."

The next morning Griffin and I meet Michael Coe at Coe's farm. The archaeologist is interested in my photos from the Sierra de las Minas. "Those definitely are Olmec-style tombs," he says. He's on his way back to New Haven, where he's finishing a book on Angkor Wat before flying to Siberia to go trout fishing.

NH: Is there evidence for Olmec bloodletting?

Michael Coe: Yes. They found real stingray spines and effigy stingray spines in jade at the Olmec site of La Venta, and jade awls or stilettos that end in a thin, needlelike projection. They're very, very sharp, and almost certainly bloodletters. Incidentally, Moises Morales, a caretaker at the Maya site of Palenque, told me an old Lacandon Maya shaman told him he still did bloodletting. The shaman said, "I'm too old to have any more children of my own, but this is how I guarantee the survival of my lineage."

NH: What's the connection between jade and corn?

MC: The Maize God is incised on some of the Olmec celts. There's no doubt in my mind that the celts were symbolic maize. Even the blue and black ones have maize gods incised on them. Maize is the staff of life, it was everything in Mesoamerica. All Mesoamerican religion comes down to that, ultimately.

NH: What can you tell me about the Maya myth of a primordial tree, from which all things grew?

MC: That's the ceiba tree, Ceiba pentandra, at the center of the universe. Interestingly, the same tree is semi-sacred in Southeast Asia. Today, among some Maya, the idea is that the souls of the dead go up right through the trunk of the tree, up through the branches, and up to heaven. It connects the earth to the heavens.

NH: Like Yggdrasil, the world tree in Norse mythology.

MC: Yeah. It's probably really ancient, going back to the peopling of the New World, the kind of thing that would have come into North America with the first migrants, thousands of years ago.

Karl Taube talks to me on the phone.

KT: The world tree is a very common concept

in Maya mythology. The world center is the source of life and wealth, and is embodied by things green, especially the corn plant, jade, and quetzal feathers. The world center is often shown as the maize god. There are caches in Copan where you have offerings — a bowl on top of a bowl, placed lip-to-lip, with four directions symbolism inside, and in the center, a jade image of the corn god.

NH: And that's an image of the cosmos?

KT: Right. By the way, this whole association of the maize god and the world center and jade goes back to the Olmec jade celts, where you have the maize god surrounded by the four directions.

NH: Were the Olmec celts ever used for utilitarian purposes?

KT: Probably not the translucent blue-green ones. Those conferred wealth and were treasured for generations. Maybe the dark green and black ones.

NH: I understand you're working on the symbolic meaning of jade. What can you tell me about it?

KT: When a Pokom Maya king died, they'd put a precious bead in front of his face, almost certainly of jade. They'd say that this would capture the breath or life spirit of the individual, to communicate with him later. The 16th century Spanish friar Bartolome de las Casas describes people who actually had the office of taking care of these beads. The Classic Maya would graphically depict a jade breathing, with serpentlike breath scrolls coming out of it. They thought of jade as something alive, filled with life force. In many of the royal burials, you find a jade bead placed in the mouth, because the kings don't simply lie down in the underworld, they're revived and pulled into the heavens. And the Spanish chronicler Bernardo Sahagun says the Aztecs said when you go look for jade, look for moist areas with vegetation, because it breathes, and its breath is moist and fresh. Even though it's this really hard, durable stone, it's describing some of the most delicate aspects of life itself: breath. And flowers. A lot of the jade ear spools — like earrings for people with large piercings — are in the shape of flowers.

NH: How much difference is there between blue and green jade symbolism?

KT: I don't think there is much. What we're looking at is aesthetics. The Olmecs had translucency. They cut very thin edges: you get these

needlelike bloodletters and thin earspools, and celts. The later Maya treat the jade almost like housepaint, applying it on wood, on masks. The Maya are not interested in translucency so much as strength of color. But the Olmec would carve an entire mask out of a single piece that you could hold up and see through.

In ancient times we sacrificed humans to nature. Now we sacrifice nature to humans. Sacrificing people is an inefficient use of human resources. Besides which, it's repugnant. At the time of the Spanish conquest, neither of these two concepts had yet dawned on the Mesoamericans. What had occurred to them was that the gods went through tremendous struggle and self-sacrifice to create a habitable world. There's even a Maya image of the sun god cutting himself and hallucinating the cosmos into existence. The gods needed to be paid back for their trouble, to close the circuit of energy and ensure the continuation of life. Humans were a crop that they grew to feed themselves.

It was mutual. Every time someone harvested an ear of corn, they were decapitating the corn god. He was happy to die for them again and again, perhaps because he had once been a man, and that's why they celebrated him with dance and song.

Once in rural Mexico I felt I understood the kind of consensual sacrifice that Gillett Griffin described. My hostel room was next to a pen where lived the biggest pig I had ever seen. He was being fattened up to be killed in five months for the town's Easter feast, and I think he knew it. In the meantime he was treated like a god, with all he could eat and a clean pen. I took a photo of him and another of the man who was taking care of him; they wore exactly the same warm, contented smile on their white-whiskered faces.

The Olmecs and the Maya had their beliefs and we all have ours. Whatever else jade might be, it's fertile ground for dreams to grow in. The Maya believed you could preserve souls in jade, and when you look at some of the Olmec masks, you're not so sure they were wrong. I believed there was a Rhode Island-sized chunk of jade in Guatemala, just because the New York Times said so. Like jade, the truth, when we find it, is often harder and less pretty than we had imagined — but far more beautiful.