

A Cave Exploring Culture from Antiquity

Steve Knutson

Ancient wall just inside the entrance to Cueva Atumpapa

THE MYSTERIOUS CHACHAPOYA

About 800 years ago a culture called the Wauri (or Hauri) created by conquest an empire that spanned the Andes from Chile to Ecuador in South America. They had begun this expansion from a home area in southern Peru. This empire seemed complete except for a still unconquered culture living east of the great canyon of the Marañon River in extreme northern Peru. The main town of this area now is named Chachapoyas. What this culture called themselves is not known, but they have come to be called the Chachapoya.

When the Wauri advanced on the Chachapoya, they discovered the defenders had built a huge fortress on a ridge top high above the Utcubamba River. This was called Cuelape (now Kuelap) and John Hemming (*The Conquest of the Incas*) calls it "...the most spectacularly defended, the strongest by European standards of military fortification." The estimated volume of this great stonework is some 40 million cubic feet, greater than the Great Pyramid of Giza in Egypt, and the largest structure known from ancient times in Peru. It sits at an altitude of about 10,000 feet, is nearly a half-mile long, and on three sides the land falls away precipitously to deep valleys. The outer walls are as much as 50 feet high, and only an easily defended, narrow cleft allows access to the interior.

It appears that here the Wauri were defeated, and their 300-year span of empire began to unravel. The Wauri declined, and the Incas took their place. A shorter period of conquest brought the Inca to empire and they managed to conquer the Chachapoya. This occurred in the 1400s, our calendar. The Inca found these people difficult to know, much less control, and referred to them as the cloud people. They were said to be tall and fair skinned.

Apparently one of the policies of the Inca, for especially truculent cultures, was to relocate many of them and bring in folks of

other cultures, to dilute the resistance.

When in late 1526 Francisco Pizarro of Spain headed a sea-born expedition from Panama that encountered the Inca culture, there began a period of Spanish conquest that ultimately dissected and subdued this far-flung empire. Kuelap was offered by the Chachapoya as a site for defense for one of the Inca rulers but he never reached it. The Chachapoya were then conquered for a second time by the Spaniards.

The Spaniards also practiced relocation and colonization for war-like cultures and so the Chachapoya were quietly removed, diluted and absorbed. Today, almost nothing is known of their mythology, their ways, or even their original appearance.

This land, east of the Marañon, is a broad mountainous region that butts on the Amazon Basin and little of it is above the tree (vegetation) line. Dense jungle occurs to over 13,000 feet elevation. The prevailing winds bring the moist Amazon air up into these mountains and the land is often shrouded in clouds. Some of the topographic maps of this

THE ARCHEOLOGICAL BACKGROUND

In Peru there is an overabundance of ancient cultures. The Inca are generally and popularly given credit for most of what occurs as ruins and constructions, but this is a false notion—the Inca only existed in their empire phase for about 150 years. Most of the constructions and "highways" had been built long before the Incas. Indeed, some cultures flourished long before the Inca even existed.

The result of this overabundance of cultural antiquity is that archeology can only deal with a small part of it, and the popular cultures like the Inca, dominate funding. Cultures like the Chachapoya receive little attention.

This has attracted amateur archeologists like Gene Savoy, who has been traveling the Chachapoyan wilderness for many decades and has discovered whole ruined cities in the mountain jungles. Keith Muscutt also studies the Chachapoya and has written a book, *Warriors of the Clouds*, which gives a good feeling for the place. Muscutt was

Chachapoya area

region have blank areas, where there are almost always clouds. Vast areas are roadless—there was no vehicle road out to the Pacific coast until 1961. Much of it is still as mysterious as the people who once lived there.

We are discovering that the Chachapoya were cave explorers of some ability.



quick to realize there are many burial sites, in sheltered areas under overhanging cliffs, and at cave entrances. Videographer John Armstrong filmed a special for the History Channel called "Cliff Mummies of the Andes," showing Muscutt and his cohorts scaling and rappelling down cliffs to reach unlooted burials in shallow caves on cliffs north of Uchumarca.

Some of the burials were placed in cave entrances high on sheer cliffs, and it is clear that the Chachapoya went to huge efforts to do this—not only were the mummies put there, but usually the opening was walled in with heavy cut stones. The engineering of this had to be formidable.

Peter Lerche is an anthropologist living in Chachapoyas who has appeared in National Geographic specials on Peru. He has studied the Chachapoya for many years.

A few years ago there was a sizable effort to preserve some of the Chachapoya heritage, and an expedition under the Ministry of Culture of Peru went to Lago de los Condores, a day's travel by mule from the nearest road, and secured a collection of about 180 mummies from shelter caves there, which were being hacked up by looters. A museum was built at Leymebamba, south of Chachapoyas, to house these mummies and let the public view them and other artifacts.

In the History Channel special Muscutt and other authorities state that the mummies are always in a dry, sheltered place with a view, and they were placed there so they could look out on the world. I have heard many times from both local residents and the few experts that the mummies were in fact placed so that they could be visited by the descendents. I have even heard they would sometimes be brought back to a village to enjoy a celebration.

What we are finding in some of the caves seems to fly in the face of such notions.

OUR CAVING EXPEDITIONS

We began our caving expeditions to Peru in 1996, hoping the very high elevation limestone would yield deep caves of world class. A lot of our work to date was summarized in an *NSS News* article in the February 2005 issue. In the mountains north of Bolivar we found an area with many pit entrances, and some of these shafts were very deep. As we explored these we came to have the opinion that the Chachapoya did not use them for any purpose that left visible traces. We never saw signs of entry or of modification of the lip for ceremonial purposes nor any artifacts at the bottom to show ceremonial use like the Maya of Central America might have done.

The few horizontal caves we found also

showed no signs of use. It seemed to be as Muscutt and the authorities on his special said: mummies were placed in daylight, in dry sheltered places to aid preservation, so they could look out on the world.

In 2002 John Schwartz and I went tracking a lead from Nick Hawkes, a British caver working as a mining engineer in Peru, near the town of Nueva Cajamarca, out in the start of the Amazon basin, east of Chiclayo in extreme northern Peru. On the way we stopped at Pedro Ruiz Gallo (PRG), a road junction town in the mountains, north of Chachapoyas. We had never really read up on the old culture of that region, the Chachapoyan, though we knew they had built some very large and significant structures, like the ruin Kuelap.

Above Pedro Ruiz, to the east, is a mountain plateau, and the topo showed the Tingoyacu, a stream going underground—a "tragadero" as such are known in Peru. We went to San Carlos, above PRG, a tiny town at roads end. There we found a guide, Hugo Tuesta, who knew the mountain, and could get us up the trail to the *tragadero*. The next day we went up.

That stream sank in a meadow, in a forbidding rock jumble, and we must have looked disappointed, because Hugo offered to take us to a cave, with mummies. I had never actually seen such, so we said ok. An hour later we arrived at the cave entrance, a collapse pile in front of a large room. The map said the place was called Atumpampa (big meadow, in Quechua). We got out lights and headed in.

Immediately we began finding obviously human bones and skulls... not mummies, but very spooky nonetheless. These were scattered about, and a short wall with an opening

in it ran from one side of the passage to the other. Clearly folks had been interred here, but it had been disturbed, ravaged even, and the remains were now scattered all over the place. We continued in for about 300 meters, still finding occasional bones. But at that point we were just scooping and without mapping gear to justify going further, we left.

NEW DISCOVERIES

In the course of our expeditions to the Chachapoya region in '04 and '05 we have come to realize that any notion that cultures from antiquity used only the entrance or twilight portion of caves for burials is completely false. I am sure we are just beginning to get a real picture of what the old cultures of this area did with caves and how far they were willing to go, but so far we have seen burials as far in as the end of one cave, 1.3 km from the entrance, and hundreds of meters into a *tragadero*, a cave taking a flowing stream. We found burials in another shorter stream cave and evidence that a reed torch explorer had passed through a nasty, soupy-mud crawl a few hundred meters in, to check out what lay beyond.

It was already known that these ancients scaled tall cliffs to place burials in cave entrances on the cliff face. Now we have found that at least in one case they used their rope work expertise to place burials at the bottom of a 40m pit.

Let's have a look at the evidence so far.

THE BOLIVAR BURIAL: POZO DEL TUMI

At around 13,000 feet elevation (nearly 4000m) on an unremarkable, small bench, on the side of the Yonan Valley, is a similarly

Heather Levy at the Pozo del Tumi, at an elevation of over 13,000 feet



Steve Knudson

POZO del TUMI

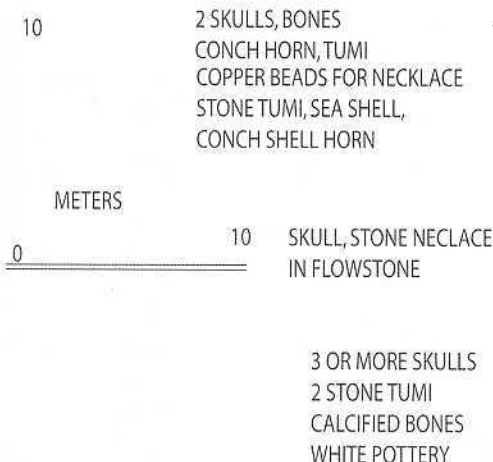
DEPT OF SAN MARTIN, PERU

DRAFTED BY HEATHER LEVY

SURVEY JULY 20-21 2005

MIKE GREEN, HEATHER LEVY

VIEW LOOKING SOUTH
PROFILE ALONG 270-90 DEG AXIS



Calcite-encrusted skull in Pozo del Tumi

The other fork of the pit led a few meters deeper, but ended in a pool of water.

This was an unusual and extraordinary find. In no other pit in the area did we have any recognizable evidence of ancient human activity.

Were these just humans who perhaps fell into the pit, were thrown in, or what? The configuration of the pit seems to rule out anything but that someone was lowered down on a rope, and placed these folks there. The first chamber had a fairly flat floor, and only one remains. If you were tossing bodies or wrapped mummies into this pit, for every one that continued down the rift in the floor of that chamber, several would stay there. The same was true for the next chamber, where there were only two individuals. Yet the greatest number of remains was at the bottom. They had to have been maneuvered along, to get all the way to the bottom.

unremarkable pit, one of many such in this area. It is nestled right at the back of the step up to the next bench, and there is a small alcove that shelters it to some extent.

In 2004 we were camped on the side of this valley, exploring the many pits, in hopes of finding ones that would continue.

David Cole was nearly finished for the day—after nightfall it got hard to find a route back to camp and got bitterly cold as well. Rigging the small opening, he rappelled in. It quickly belled out and about 12 meters down was a visible floor. When he landed, he turned around and was shocked to see a human skull, gazing at him with empty eye sockets. A pile of bones showed that someone had either fallen in, or ...what?

A small rift in the floor continued down, so he passed the rope thru and descended. Thirteen meters down was another chamber—and more bones. Two skulls were in evidence. A look showed there were some artifacts as well: what appeared to be a stone Tumi (a ceremonial cutting device), a

conch-shell horn, and small, greenish lumps that might be corroded copper beads from a necklace.

Another tiny rift continued, but was blocked by a rock. David was able to move this and continue down. Nine meters further was a split in the pit. On the shelf was a fourth set of remains, partly covered with flowstone. One fork went down another seven meters, where it was plugged by a flowstone accumulation. Several more remains could be discerned in the flowstone. Were there more that could not be seen, completely covered? He could see a couple more Tumi, conch shells, and some small ceramic vessels as well, with a strange conical shape, the point at the bottom.



Human remains on a ledge 60 feet down in Pozo del Tumi, most likely placed in situ rather than thrown in



David Cole

Pottery at the bottom of the 130-foot pit



David Cole

Conch shell with a hole drilled in it to use as a high-pitched signal in the mountains

Moreover, the bones observed are lying in a pile, indicating that the body interred was probably a wrapped mummy, since these are always bundled with the body in the fetal position. The artifacts show this was a ceremonial, honored interment. The wetness of the pit had presumably destroyed all organic material. The necklace beads were lying unstrung.

Was this a Chachapoyan burial? It looks very old. Much of the visible material has calcite on it, and this is an area where there is not much calcite deposition in caves. Muscutt offered the opinion that the Chachapoya didn't use Tumi. A Tumi is a ceremonial cutting tool, with a curved blade that is rocked over a surface by a handle that sticks vertically above the blade. They are common in some of the old cultures in Peru but seem to always be made from metal, which is very common and available in Peru. Peter Lerche, an anthropologist in Chachapoyas, said he had never seen one made of stone.

The Tumi in this pit were very well made, about 22 cm long, and had a decoration of what appeared to be two birds facing each other on top. The beaks had a carved line for a mouth and an indented dot for an eye. Forming such a device from stone had to have been very painstaking—they are only about 1 cm thick and very smoothly finished. The rock would be brittle to work with so their manufacture had to be difficult. There were three visible in the pit.

The ceramic vessels are curious. They would have to be carried or hung in a net carrier of some kind. Bonnie Crystal expressed the idea that a person hunting with poison arrows or blowgun darts might use such a vessel to carry the poison—a quick dip with the tip of the dart and it would be ready to use.

ATUMPAMPA CAVE

Now we move on, to the north of Chachapoyas, to the 2600 meter high

plateau above the town of San Carlos, that Schwartz and I visited in '02. We had a much better look in '04 and '05.

The Atumpampa Cave proved to be an easy one to explore. It is a single large passage from the spacious entrance to the breakdown choke that is its end. The floor has a shallow V cross-section, but the bottom of the V is never narrow and difficult to negotiate, nor are there areas of breakdown boulders to make the going hard. A tiny flow of water appears in places and forms shallow pools behind beautiful rimstone dams. Still, one would have trouble making their way with their eyes closed. And with a dim light the wide spacious passage might seem confusing. This passage is often 30 meters wide and 10 high.

At the entrance is a descent of ten meters or so, where the passage had collapsed in the distant past. From the top edge of this descent one can clearly see a low, manmade wall stretching from side to side. This is composed of the natural limestone slabs that litter the floor, and no mortar was used, nor are the stones altered to fit. In the middle of this there is a wide gap allowing access to the rest of the cave. The wall is not high,

only a couple meters, and is about that in width. It seems to be ceremonial, presumably announcing that this cave contains burials. Most caves that have burials seem to have a similar wall.

An anonymous report from the 70s found in the files of the South American Explorers Club, "The Ruins of Curibamba" (Curibamba in Quechua means plain or place of gold), describes a visit to the Atumpampa cave in the 60s. It says near this wall were "several tombs on platforms of rough rock. Each is separate and 1.5 m high. As one advances, the air becomes rare or stuffy and it is not possible to continue."

There is now no evidence of the platforms of rock, but all about the floor in this part of the cave are scattered human bones. The platforms are presumed destroyed.

This has been a well-known cave for a long time, in the current era, as evidenced in the extensive disturbance of the many burials. One torch found was a stick with a rag on the end, held by wire—perhaps a visitor before the use of flashlights?

Bones are scattered all through the cave, but are concentrated in the areas where the burials apparently occurred. When looters

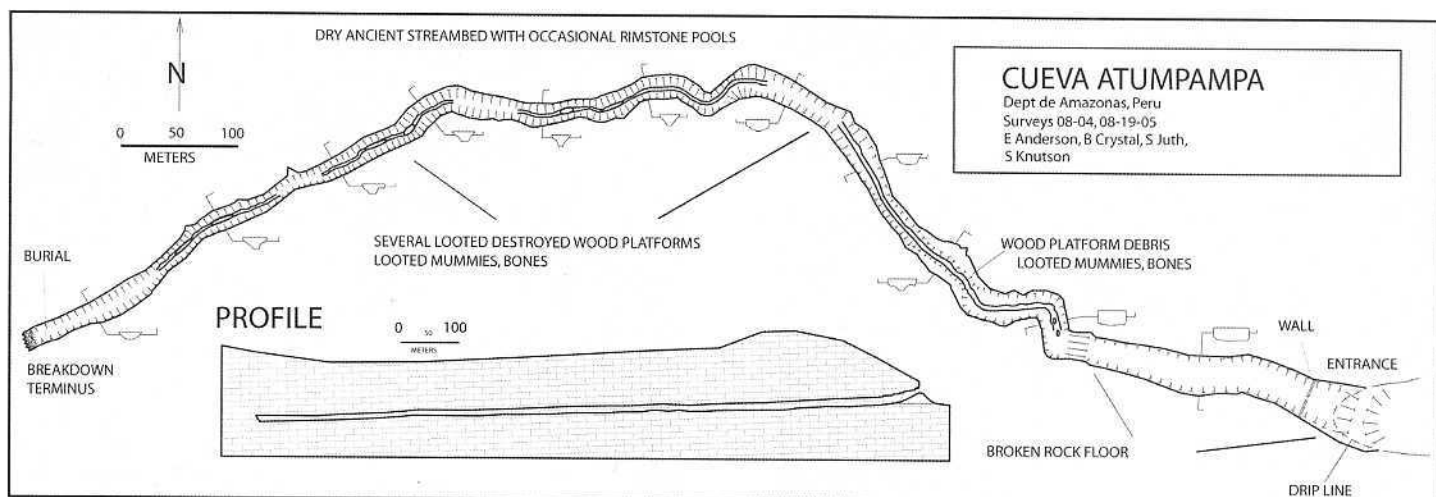


Steve Knutson

Two views of a stone tumi from Pozo del Tumi



David Cole



were in action, which seems to be a period from the recent past, they hacked open the burial wrappings looking for valuables and removed a lot of the mummies. Apparently some of the mummies themselves were carried off, as one often finds an empty, split wrapping and no bones right there.

The large passage, with sometimes high, sloping ledges of debris on either side, continues to a breakdown blockage about 1.3 km from the entrance. Almost right at the end there is a shallow, dug hole and a mummy wrapping, clearly showing a burial site. The locals have a story that up to ten years ago there was a way to get thru the breakdown and that there were further burials on the far side, where the cave continued.

In the middle part of the cave, and well into total darkness, is a series of places where platforms, made of poles of 5-10 cm in diameter, had been constructed and on which mummies had been placed. These platforms were either destroyed by looters, or deteriorated through wood rot, and are now just areas of debris. The mummies were hacked open and some carried off. Many of these are still in evidence, and are in a state of partial preservation, with tissue and carti-

laginous material still keeping some remains partly articulated.

Most wrappings seem to be a woven rope affair, of layed (twisted), natural fiber. One was seen that was woven from rope but the rope was itself woven or braided, and of very fine quality. Also, it seemed to have been bleached, as it was almost white in color.

One lower leg bone was found to have experienced a diagonal break, which had healed, and must have been splinted.

One mummy was found that had been placed behind a boulder, and was intact except for a missing head. It was sitting upright, had no wrapping at all but had four vertical slabs of flat rock forming a box around it. It had presumably been treated for preservation, as the skin was largely intact. It was sitting upright, in essentially a fetal position, the typical mummy configuration. It was a very small individual, either a small woman or child. The chest cavity was full of grass or herbs.

To review, there were burials all through this cave, up to 1.3 km from the entrance. Some had been on platforms. One was in a box of rock with no wrapping. The rest appear to at least have a wrapping of woven

rope. A number had been buried in the scree debris of the side ledges. And we have the ones on rock platforms near the entrance from the "Curibamba" report.

CURIBAMBA CAVE

In the Curibamba report it further says:

"...toward the north is found another cave, SAUCO, 15 m wide at the entrance, and which we could not determine the length of, though we traveled more than 2 km without finding an end. On the floor runs a small stream of crystal-clear water. Also encountered are stalactites and stalagmites, which make us believe the passage leads toward another entrance. To the side at the entrance are some mummies. In the hand of one was the skeleton of a bird; this mummy was given to the Colegio Nacional de Parones San Juan de la Libertad (in Chachapoyas). Several separate skulls show holes indicating death from fighting. The school in San Carlos has skulls that are trepanned."

I think this might refer to the cave we came to call Curibamba.

The entrance to the Curibamba Cave lies in a large deep sinkhole in a meadow area between jungle areas on the same plateau as the Atumpampa Cave. A short climbdown just before the dripline gains the streambed, and 50 meters further, just at the edge of the twilight zone, there is the manmade wall that seems to signal that there are burials inside. It comes from the walls on either side to embrace the streambed with a walk-through opening.

The passage is spacious but much smaller than Atumpampa, about 10 meters in width and the same in height. Fifty meters past the wall the stream cuts thru floor debris, creating a steep-walled canyon four or five meters deep. At the top edge of this are flat ledges that end at the wall. On the right hand side, behind a large boulder, we see our first burial, a mass of bones and cut-open rope wrappings.



At 100 meters from the entrance there is still a ledge on the left side and on that are several obvious burials—collections of bones and burnt wrappings. These appear to have been originally buried under a flat, uniform layer of small rocks about a half-meter deep. Where they haven't been dug up, presumably by artifact hunters, the surface looks quite natural. At the edge of the bank leading down to the stream, however, there is a telltale layer of mat and grass material that is exposed, presumably by erosion.

As one continues, the passage is still spacious, but the canyon is gone and the stream meanders around wide bars of scree and rocks. Occasional burials are noted on these, up to about 440 meters from the entrance.

Beyond the room the passage narrows again to 10 meters, and at 600 meters from the entrance, the remains of a pot with a mouth opening of 15 cm is seen, on a bar

Past that we did not see signs of more burials or human activity, though 50 meters further there was an area where such could have been buried and not now be noticeable, nor, that far into the cave, disturbed by looters.

If this is the Sauco Cave, the mummies cited in the report were removed by looters or the archeologists. We haven't yet checked the indicated museum to see what they have in the way of mummies or records.

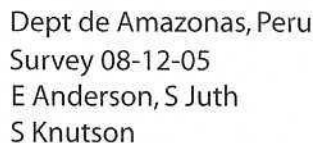
Much is known about Mayan mythology, and that caves figured strongly in this. Mayans created ceremonial sites around pits in caves, where rituals were performed, perhaps sacrifices cast in. They traveled far in them, and left many artifacts. Wall or ceiling paintings are found in a number of them.

Virtually nothing is known of Chachapoyan mythology. They left no record and did not even pass down their name. Their descendents were conquered first by the Incas, and then by the Spaniards. Both the Incas and Spaniards demanded the relocation of many Chachapoyas, and recolonization by folks of other cultures, to



aid the subjugation of the area. Thus there are virtually no current residents one can go to for a look at the ancient mythology. Why was it so important to bury folks in caves? Why some caves and not others? Why were so many different modes of interment used? Were there rituals accompanying these burials?

In fact, it is said that the Chachapoya is the only high culture to use the Amazonas area east of the Marañon River in northern Peru. They built the great fortress of Kuelap, the structure of largest volume in all of Peru. But the burials are clearly of a number of different styles and types. Could there be other, unknown cultures at work here?



The people who live in this area now seem to uniformly show and profess no connection in terms of spiritual ties or ancestry to the burials in the caves.

The condition of the burials in the much-traveled Cueva Atumpampa raises a lot of questions. There appears to have been a period of time in recent decades when it was thought that there were valuables—jewelry or precious metals—in the burials, or that the mummified remains themselves were worth taking. Peter Lerche told us that a complete mummy, in a good, intact wrapping, is worth tens of thousands of dollars on the black market to collectors. When we first arrived in Bolivar, in '96, we said we were interested in caves and folks there immediately exclaimed that we had come to buy mummies. Some of them even ran home to bring back desiccated remains they had probably obtained from some local shelter cave.

It may also be that the culture doing the burials had enemies who would occasionally gain ascendancy and would vandalize the burials to show their disdain or enmity. Perhaps a study would shed light on this. At least some of the disturbance of the burials seems to be from antiquity—there are isolated bones in rimstone pools with a little calcite deposition on them.

Happily, this disturbance seems to have ended. Perhaps no valuables were found, and the unwrapped remains carried off didn't sell.

It also seems that not every cave was deemed suitable. Some fairly obvious entrances have no visible remains. Certainly, so far, the pit burial is a very small percentage of the pits available. Of course some of those were perhaps too deep to allow descent with

the ropes and techniques they used. We presume they lowered workers on a rope, and then lowered the burials to be placed.

The lack of information is in fact one reason for publishing this article. Perhaps there is knowledge that will come to us, from a reader.

THE STYLE OF THE BURIALS

A typical mummy, one might say, is in a seated, fetal position, legs drawn in, knees at face level, arms wrapped around the front, hands also at head level, or on the shoulders.

But some are wrapped in material; some are not. Some apparently were wrapped in a woven covering made of layed, fiber rope. Some have multiple layers of cloth, with a simple, stylized face painted on the outside. One covering we found was of a very fine, braided rope. Some have been found in stylized human-figure sarcophagi—solid containers with a mummy inside.

Some mummies are on platforms of wood, apparently seated there. Some are buried, and the rock coverings are just small talus, so that the result is not even noticeable. Erosion from the side has exposed some of these; you can see that they are there, but from the top, uneroded, you can't tell. Some remains were laid out, with the body at full length. One fetal position mummy was found behind a boulder, encased only in a "box" of four thin slabs of rock, with no wrapping.

The skin and tissue is preserved in many of these, so was a preservative method in use? One we saw had the head removed (looking for valuables, most likely) and the body cavity was full of grass and herbs—presumably it had been prepared that way.

Perhaps more importantly, they are in almost every conceivable location, and situation. They are at the ends of horizontal caves, 1.3 km in. They are in caves high on sheer cliffs, at least two hundred feet above the base and below the top. They are down pits at least 120 feet in depth that require a rope to negotiate. They are in caves that have streams going in, presenting an additional hazard.

At some caves there is a wall inside, projecting from each side near the entrance. This seems to signify a burial site. But some are walled all across, with a doorway. One was just walled all across, no opening. Two, side by side, had a small window in the enclosing wall of one, while the other had a doorway.

CONCLUSIONS

This has all been a big surprise. I believed the words of the experts, who of course were giving the best opinion they could. Many folks do not wish to enter a cave even when engaged in serious cultural studies.

The pit burial was a surprise because we had explored so many of them, not seeing much of anything. Now we have to wonder what might be down the next one.

There are so many styles and modes of cave burial, how can they come from just one culture? We didn't go to Peru for any purpose but simple cave exploration, but now we want to know more about this mysterious cave exploring culture.

Of course this must be kept in perspective. The Chachapoyan culture was just one of many in ancient Peru, and their burial practices were just a small aspect of their life. And it seems we have just magnified the mystery surrounding this great culture. We have no idea why the Chachapoya went to such efforts to place their dead in caves.

Anyone having information to add, or any inquiry, please contact Steve Knutson at sssknutson@aol.com, or 503-695-6552. We are planning further sessions in the summer of '06 so if you are interested, please inquire.

ACKNOWLEDGEMENTS

I want to thank **Inner Mountain Outfitters** for a generous rope discount. The sessions that pursued the investigation of the caves Atumpampa and Curibamba were manned by Evan Anderson, Stephanie Juth, Bonnie Crystal, John Schwartz, Mark Harder and I, in 2002, 2004 and 2005.

Mummies suffering the ravages of time in a cave above Montevideo

