

Iskanwaya

Kallawaya Healers





When we first heard about Iskanwaya and the extraordinary theory about these ruins in the early 80'ties we were electrified. Because the hint described a pre-Inca site in the Andes, which was older and bigger than Machu Picchu. We had not heard about it before despite our visits to many archeological sites in Bolivia. This site was situated not far from La Paz in the Cordillera near Lake Titicaca.

Our research lasted over a year, but by coincidence we met an Airforce Officer. He showed us detailed aerial pictures of the area. Now we knew it was possible to get there without trekking for days. We decided to approach it via the northern mountain flanks, because the visible tracks came closer to the site despite the ruins lying on the other side.

Difficult Journey

We planned for two weeks even with mere 300 km to cover. We knew from experience you never know what to expect. The last stretch we had to do on foot without a trail including steep downhill climbing, crossing the icy river and up again on the other side. This planning reminded us of Machu Picchu before the train tracks were built into the Urubamba valley. Then it was a couple of days trekking over ancient cobbled Inca trails.

But here there was no trail, because it was a pre-Inca site. We needed a guide who spoke Quechua and Aymara. We found a teacher, who was archeologically interested and knew a few isolated sites off the beaten track. But he did not know Iskanwaya and wanted to travel to the area to investigate first. Months passed until he came back with good news. Now we only had to wait till the end of the rainy season.

Prayers to Sun God Inti

Always when we drove on the Altiplano towards Lake Titicaca we stopped at the impressive ruins of Tiahuanaco with its famous Sun Gate. And we followed the typical Indio ritual. So, we asked Inti to allow us to visit Iskanwaya and guard us on the way. Our sacrifice were few flowers, crackers and sprinkling beer. The Indios around Lake Titicaca spoke another old language called Uru, which was spoken only by a few left real Uru people.

Spanish would not have brought us anywhere. Therefore, our guide was the perfect language and cultural interpreter. The Altiplano panorama was always so impressive with its permanently snow covered mountains like Illimani, Huayna Potosi, Illampu

and Condoriri just to name a few. Most of them were over 6,000 meters high. And in between was Chacaltaya with 5,700 meters the highest ski slope on earth, which we tried out and it was a true breathtaking adrenalin experience.

Technical Preparations

The engine with distributor and fuel pump of our Landcruiser was specially prepared for the altitude, to prevent the 50 % drop in power. In this way we were able to master rather steep mountain tracks of up to 5,500 meters. The fuel consumption went up four times and so an additional fuel tank was needed. We found the perfect solution with 160 liter pressurized aircraft tank from a Cessna plane.

Yes, they fly in that altitude over 10,000 feet. As a pilot I naturally had to try it out. The extra load of the tank also reduced the vehicles point of gravity. That was important, when crossing common landslides with a dangerous side angle. We further installed two instruments indicating the side and downhill angle to prevent loss of control.

Driving the normal 4x4 tires with 4 ply with many occurring flats was a time consuming problem. So, we got 8 ply super hard tires with a quick change steel ring. Finally, a super long telescope antenna was installed to have regular shortwave radio contact in the evening.

First Stage

We could have taken the route via Escoma on Lake Titicaca and passing the Cordillera Muñecas to the mountain village of Aucapata lying at 2,500 meters. It is the closest village to the ruins, but the steep descent on foot without trail over 1,000 meters difference in altitude and back again was posing too much risk for us.

Therefore, we choose the route of 150 km to Sorata on 2,700 meters altitude. This took us nevertheless over four hours. We were the only foreign faces in the quiet and picturesque rural town. After our overnight stop we started with the rising sun, but temperatures were still freezing.

Second Stage

The route through empty valleys was adven-





tures but passable. It was visible, that the track was not used regularly. As we did not see anybody, we asked ourselves where does this way lead to? The slopes were too steep for grazing animals. Incas did farm on the steepest slopes, but we did not see any terrasses here either. It took us eight hours to cover 50 km.

We had to stop often to check the narrow track on foot for stability and width before we could pass it. On long stretches there was no possibility to turn. So in case we got stuck we would have to drive all the way in reverse. A dangerous undertaking. But suddenly our guide indicated we had arrived. But we saw no ruins on the other valley side. He asked us to guess the distance and with 1 km we were far below. It was 5 km and with binoculars we finally recognized ruins everywhere across the mountain flank.

But the ruins were difficult to distinguish color wise from the rocky environment. It was difficult to get to sleep with these impressions and we hoped the Llica river would not swell up overnight due to rainfalls higher up in the mountains. We had once been held up by suddenly rising waters in sunny and dry weather. For two days we had to camp with various truckdrivers. Crossing rivers without bridges is a normal thing in Bolivia even on main roads. When the level dropped sufficiently for them the truckdrivers offered to chain the Jeep to a truck, in case it would drift away.

Third Stage

We got up early and started to descent 500 meters down to the river. We went super cautious,

because any injury would be fatal. We were lucky, that the Llica River had little water. By lunch time we carefully balanced our backpacks with sleeping bags wrapped in plastic bags barefoot through icy waters. The ascend on the sunshine side did warm us up again.

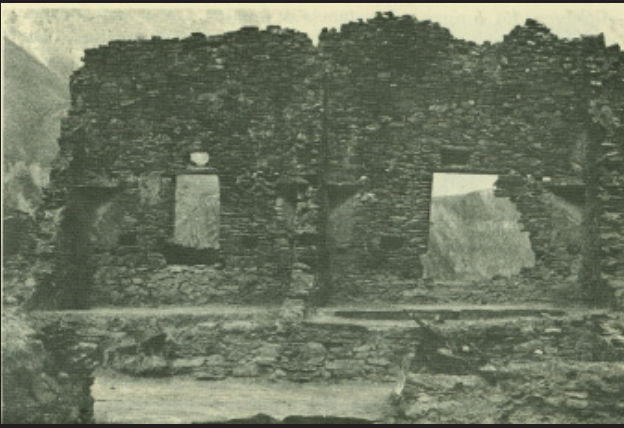
Finally, we arrived exhausted but stunned in this totally quiet endless ruined site. The warm wind blowing slightly past the slate walls and the numerous accumulated cactus was the only noise to be heard. We were astonished as painted pottery sherds were lying around, as if nobody had been here since the site was left some 500 years ago.

Iskanwaya Position

Looking at the map take the direct line east from Lake Titicaca at the altitude of 4,000 meters. Pass the Cordillera and follow Rio Locomayu and Rio Llica to arrive at an altitude of 1,700 meters. Iskanwaya is situated between 300 to 500 meters above the wide river bed. The slopes are steep as everywhere in this region. Therefore, the ancient settlement was erected on two plateaus and anywhere with enough space. But why was this isolated and difficult to reach place chosen? Was it the strategic position between the altiplano and tropic? Interestingly there was no lack of water at the time.

Iskanwaya Legend

An extraordinary legend is reported, that its inhabitants never saw the sun light and lived only with moon light. Where does this exceptional story originate from? Due to the lack of written script in the Andes verbal communi-



cation was a reliable historic source. There are many examples of surviving myths with true basic messages passed on over thousands of years. Nevertheless, this legend and its message is unique. What does it really mean? Let's remember that the Incas at the time of arrival of the Spanish conquistadores 500 years ago, did not have any written script. We will come back to this most interesting legend and try to shed more light on it.

Iskanwaya History

The age of this settlement was easily datable via its ceramic sherds. The first known excavations were done between 1974 and 1976. The oldest items found were dated 900 after Crist and identified to belong to the Mollo culture. After their early start they even existed contemporary to the Inca until 1425. Mollo was therefore much older than Inca. An interesting question is, were the Incas also in Is-



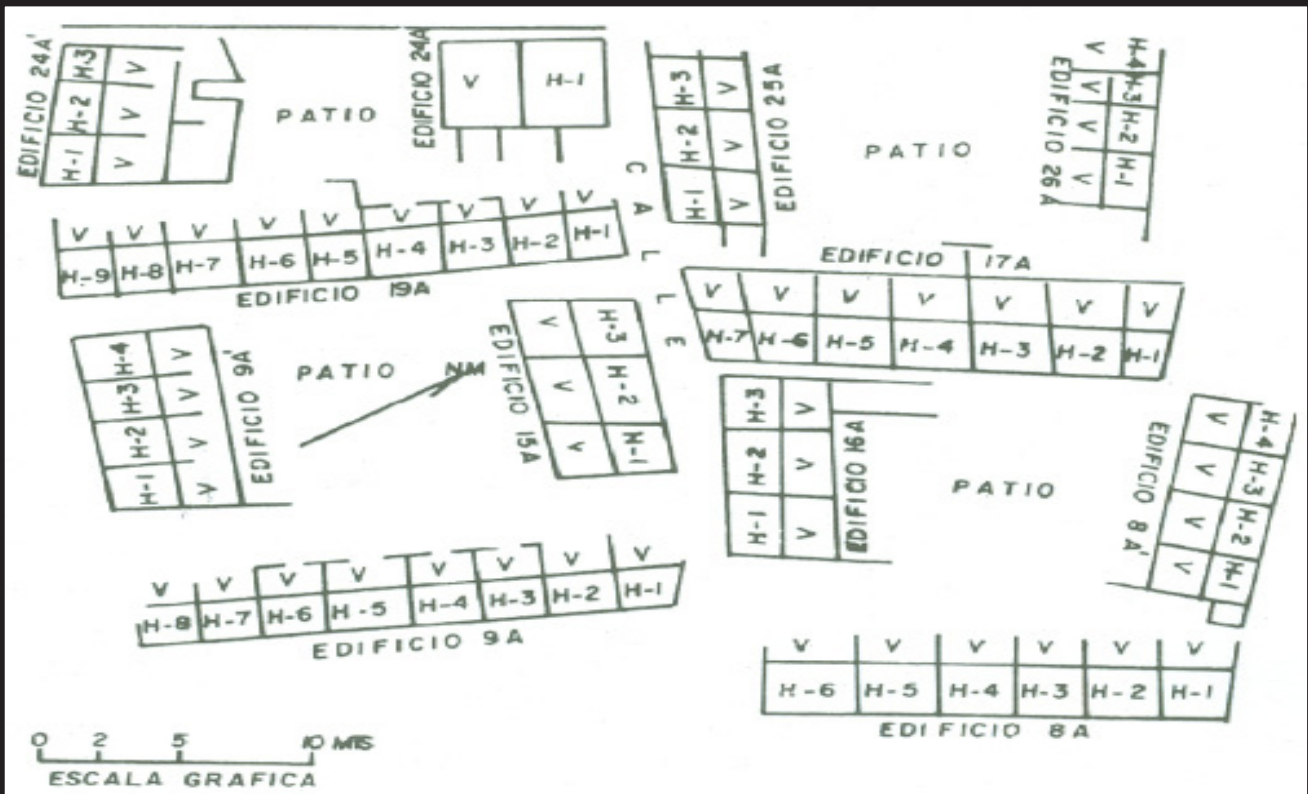
kanwaya? This can be assumed with certainty, as the Incas really explored all the valleys in the Andes and subdued all other cultures. They built a web of stone paved roads including bridges 12,000 km across the Andes with a well functioning messenger service.

The Incas started around 1200 to spread out from Cuzco and were beaten 1532 by Spanish Pizarro. Therefore, Iskanwaya is 500 years older than Machu Picchu. Unfortunately, it is less well preserved and only very limited vegetational cleaning and little conservational work had been done to date.

Missed Chance

A partial restructure like for the tourist magnet Machu Picchu in Peru has unfortunately not happened in Iskanwaya. Bolivia has a long history of political unrest until today. Therefore, little interest nor money has been available for touristic projects. The improper





reconstruction work done at Tiahuanaco is a good example. UNESCO has even threatened to withdraw its world heritage status. If we compare today's pictures of Tiahuanaco, we see that little was done during the last 40 years, when we have been there first time. So, an enormous chance of foreign income and job creation through tourism has been missed. And Iskanwaya has totally been left out.

Surprising Iskanwaya

Surprising is the enormous size of 60 hectares if one includes all ruins across the slopes and ravines. Iskanwaya is an astonishing five times larger than Machu Picchu.



So far over 100 houses on two plateaus connected with narrow passages and places in between had been documented. These alone cover an area of 14 hectares. Many living quarters had been erected in rows of about 10 rooms detached to one another around open courtyards. The room measure 2 x 2 meters and the store rooms have a size of 3 x 4 meters. Each room has a roofed vestibule, which front side was open. The structures are rectangular and were built of flat slate stones with mortar.

Unique Architecture

There are many surprises at Iskanwaya. For example, the layout of the rows of houses are not really rectangular. At a closer look all rooms,



places, windows, doors are slightly trapezoid. This is no coincidence and might have a ritual or magical purpose and meaning. Over the doors and windows small niches were built in. Were they created for idols to protect their inhabitants? But why were all door steps raised to a height of one meter? Should that keep snakes or domesticated animals outside? But a proof of animal husbandry has not been found here.

Further surprising is, that no temple structure has been found here either. That is uncommon for a settlement that size. Was this the reason for the niches in all buildings? Have small divine figures or stones been placed here for adoring? Or were they just places to keep tools or pottery containers for food storage? Another possibility is, that candles produced from llama grease were placed here to light up the rooms for the legendary night work. Slate as building material is naturally available. Interesting is the piling technique for corners as you can see in the pictures. For stability stones of different size were used in wall structures.

Large Number of Inhabitants?

Experts assumed that Iskanwaya was home to 3,000 people. They based their assumption on families with up to six children living here. We think they were far less inhabitants and no normal community with lots of family and will explain this later on.

Iskanwaya Menu

The main menu consisted of potatoes, sweet corn, quinoa and beans. Each valley in the Andes had a different kind of potatoes, which you can still see on the local markets today. In total 16,000 varieties have been counted so far. Few are round, but most are longish and look more like carrots. Potatoes since Inca times were dehydrated to preserve them for years in storage to prevent famine in years of lost harvests. They were left in open sun light and freezing night temperatures for weeks. These blackened chuños lost weight and size and could be transported with llamas, which only carried a few kilos. Soaked in water they became cookable again. The menu was further enriched with honey, cactus fruit and meat. Guinea pigs still today are a favorite on the menu plan and were bread in each house for that purpose.



Iskanwaya Agriculture

Irrigated farming on narrow mountain terraces existed long before the Incas and was used at Iskanwaya as well. But the limited amount surprised us and certainly were by far not sufficient for 3,000 inhabitants. The fertile earth was carried up from the river banks. Water for irrigation came via canals from mountain springs. The canals were built with slates in a V shape. But why were they ending at the housing plateaus? Llama and alpaca were domesticated about 6,000 years ago already. If they were held here is not certain. But normally they were kept for wool, meat, leather and grease for candles. Their excrements were perfect as cooking fuel.

Found Artefacts

Next to the usual Andean pottery tools excavators found also agricultural tools. The pottery tools were used for modeling, smoothing and polishing. The artefacts were made of stone, copper, bone and burnt clay. The discovered hunting weapons were pressure flaked flint stone arrow heads and sling shot balls, as they are still used today for competitions. As sling shot ammunition served small round stones or formed pottery balls. With these small animals and birds could be hunted with precise hits. The Indios have developed this technique to perfection. This was also used in case of conflicts.

The excavations also unearthed bone flutes with up to four holes. The common pan flutes made of reed were not found here. Interesting are the discoveries in southern Bolivia of pan flutes made of stone covered with lots of engravings. Further bone tools found here were used for weaving of fine llama and alpaca wool textiles and ponchos.

Mollo Culture

This culture followed on Tiahuanaco and its ceramic ware took over some of the motives, but were less decorated and simpler in design. Some experts see Mollo as a predecessor of the Inca culture. Please remember, that the Inca included cultures they conquered or took over peacefully into their own. For the Incas it was common practice to move the leaders and artisans of other cultures to Cuzco and object their children to Inca education in schools. The Mollo ceramics were produced of red clay and were painted with white and



black motives. One pottery form is rather specific. It includes on the outside a fixed drinking pipe like a modern straw.

Iskanwaya Ceramics

During excavations in the 70'ties over 35,000 pot sherds and 200 semi or totally entire pottery vessels have been found. During our visit in the 80'ties we still saw many painted sherds lying around. The motives included anthropomorph and zoomorphic decorations very similar to those we have seen originating from the tropic zone in Bolivia. Iskanwaya pottery items were pure household ware. They were found also in graves. But we doubt, that they were true funeral gifts and will explain our assumption further on.

Jaguar God and Gold

The Mollo people adored a specific jaguar deity. This divine ritual they might have taken over from Tiahuanaco. But different to Tiahuanaco they did not erect any temples at all. The niches in the Iskanwaya houses might be the only proof of religious beliefs. In the sparse literature about the Mollo culture only Khargi, Piniqo, Waman and Mallku Janalaya next to Iskanwaya are mentioned as settlement sites.

This culture was regionally limited to the eastern borders of Lake Titicaca and has not really been explored in depth. From Mollo times various areas of gold mining are known. They also searched for fluvial gold nuggets, which still today reach a rather high gold content of 60 to 70 % in this area.

Kallawaya Healers

This is a most interesting and rather unknown subject. They were also called Calabuaya. The name seems to originate from Quechua, because qulla-wayu means carrying medicine and is a perfect hint to the walking healers. Experts regard the Kallawaya healers worldwide as a special group due to their highly developed medical knowledge they had gathered already 1,300 years ago.

And they exist still today and were recognized as UNESCO cultural heritage in 2003. Many healers were at the time and still are today walking on foot through the entire South American continent to collect herbs and offer their services. Their holy mountain



is Akamani and their today's cultural center is the town of Curva. But in the past, it seems to have been Iskanwaya. The town of Charazani with its thermal springs also played an important role.

Serect Language?

The Kallawaya healers had their own language, which used many borrowed words from numerous other languages. The base language was the disappeared Puquina including Aymara and Quechua. As well as Uru only spoken by a few on the drifting reed islands in Lake Titicaca. They possibly wanted to guard their healing secrets and added words from all areas where they collected herbs.

This explains words from Kunza the Atacama language, or the lost Ese'ejja belonging to the Takana language group from the Amazon. Therefore, the theory of a created secret language could be true. Because no other language has such wide spanning and diverse origins. Or did other healers from those areas joined the Kallawaya with their specific knowhow of herbs and healing and imported parts of their own language to form a new Kallawaya language?

Largest Known Number of Herbs

Scientists found out that the ancient Kallawaya healers used an astonishing 980 herbs, animal substances and mineral powders for their medicines. They also carried out brain surgery on the open skull. Research on those skulls proved, that those patients lived well on and in one case even up to 20 years

thereafter. The large sawn holes were closed up afterwards with gold plates. They not only healed mental illnesses, but became known to have saved many lives of Panama Canal workers infected with deathly malaria. Kallawayas knew early on about the qualities of quinine and other remedies against this widely spread infection on their continent.

It was also reported, that they healed certain cancer patients, which was in few cases confirmed by modern doctors. But Kallawayas healers do not like publicity and few are known by their name. They also help with difficult births, child illnesses and treated children against sudden infant deaths. Let's remember an indigene practice at child birth on the Altiplano. Fathers put their new born into an icy river and if it survives it was strong enough and worthy to be raised.

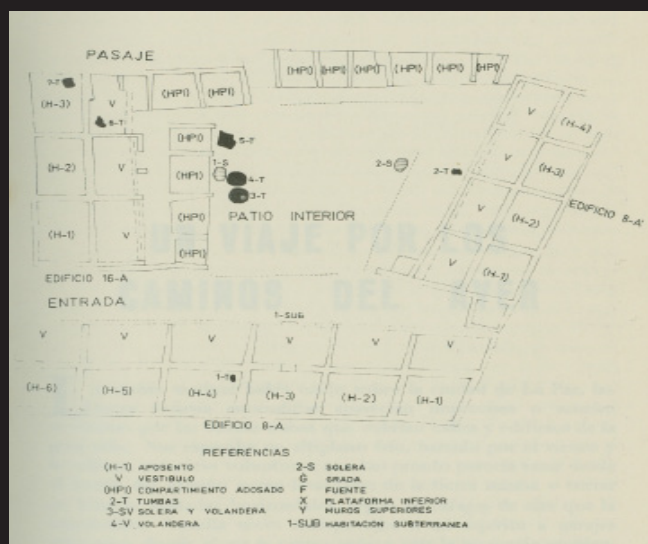
Types of Herbs

Some experts distinguish Kallawayas healers by their knowledge into three groups. Healers with high, medium and lower treatment knowhow. The latter group still knows and uses over 300 herbs. The healers classify their herbs into five sets with regards to their effects and healing purpose. These are hot, fresh, bony, hearty, venous and ritual herbs. The treatments include as well rituals, dances with singing and music called kantu plus the use of amulets or specific minerals. The dancing and singing are often accompanied by pan flutes.

The strong rooted believe of patients and their deep connection to nature play a vital role in the healing process. These Kallawayas rituals have resulted in that modern doctors in their view reduced them to inferior medicine men. Nevertheless, some experts are convinced, that they have equal medical knowledge and successes like modern doctors. They just heal in a totally different way and sometimes even more effective. One can best compare Kallawayas healers with Chinese medicine with a similar focus on reestablishing the necessary balance in a patient's body.

Kallawayas Medical Schools?

We know these healers passed on their gained knowledge and experience over time and did not only train a few gifted persons. This explains the enormous amount of Kallawayas healers. In traditional communities there ex-



isted one healer per settlement, but there were far more Kallawayas healers. This might explain the huge number of walking healers including a high percentage of female healers as well.

This poses the question, how was the knowledge passed on? Were there specific places where the teaching took place? We assume Iskanwaya was such a place. We believe there are many arguments, which speak for the university theory as we call it. We will explain the following points in more detail: isolated position, unique structure of rooms in rows, limited agricultural space for 3,000 inhabitants, graves with stone lid in vestibules, single human bones but no skeletons found, not enough graves for a population of 3,000, special mortars not fit for meal preparation and finally the legend of night workers.

Healer University

Compared to other early settlements in the Andes Iskanwaya lies particularly isolated and in an extreme steep slope position. We further do not see any similarity in the Andes with Iskanwayas unique living quarter architecture consisting of rows of single rooms. Families normally lived in houses with single roofs. Common living quarters under one roof were erected by the Incas for their soldiers. We have seen a few of those. But in Iskanwaya there is no proof of any military use.

In addition there is no other example for the typical Iskanwaya layout of one room with open vestibule all in multiple rows around a plaza. These structures would house about 300 healers and the limited agricultural terraces would have supported them. If we look at the

found small mortars, they were more apt to grind herbs than produce a meal.

With these arguments the university theory got more and more plausible. And we heard it also from some scholars. The Incas had a rather defined schooling system for elite children both boys and girls. Iskanwaya might well have been the place where experienced master healers passed on their detailed medical knowledge. The cell like rooms in a row arranged around an open courtyard were certainly ideal for this purpose. That there were three central plazas with surrounding student rooms and at one corner three larger rooms with storerooms in front for three master healers might be a coincidence or their true purpose.

Mortars and Grinders

The found mortars are too small and deep for food processing. But they were certainly perfect for grinding herbs, roots, nuts, fruit and minerals to produce medicine. Some mortars for food preparation were also found, but not in the rooms and in much fewer numbers. The material was granodiorite, quartzite and sandstone with different hardness. Hematite for example was grinded for medical purposes to heal blood diseases and to be used as amulet for that purpose. Bones were crushed to use their marrow for other illnesses.

Body Studies and Dissections?

There are further theories, but these are suppressed in a country, which became catholic with the arrival of the Spaniards 500 years ago. The question is, how did the healers gain their special knowledge about organs and their functioning or better malfunctioning? And why did they attempt to open skulls and treat living patients? Thousands of years before them the Egyptians undertook brain surgery, but via the nose.

We also have to remember that human sacrifices were common practice for the Incas and possibly already in Tiahuanaco. So why not dissect deceased persons to find out the cause of death and how to treat them against the illnesses which killed them? What speaks against this is the value system of the Kallawaya healers. But in converse conclusion dissections increased their knowhow and ability to heal and regain the needed bal-

ance of body and nature. We know that the ancient indigenous population in the Andes had a very natural approach to death, which is very different to ours today.

Legend of Night Workers

Iskanwaya might have been this place, where students could undisturbedly undertake their special studies in the half open vestibule. Does this explain the human bones discovered in the pits covered up by a stone slate. Surprisingly there were no common burials with mummy bundles and entire skeletons indicating a proper grave, just single bones some even crushed.

At this altitude the day temperatures reached 40 C°, but at night it cooled down some time to nil. That might be the reason why such studies were done at night and well explain the legend of the people, who do not know the sun light and work with moon light. We have a further reason for the university theory looking at the graves more closely.

Iskanwaya Graves

Since the 70'ties no true and extensive excavations have been done at Iskanwaya. During the limited work done in the past 36 small pit graves have been found in the vestibules. They all were rather small with a width of 50 cm and a depth of 50 to 70 cm. And therefore, they are much too small for a normal family grave. Why were there so few graves compared to other settlements, which normally had a cemetery.

These pits were covered by a slate and some even had a hole, which is very unusual for a grave. This poses the question, were these graves rather storage pits or even refuse



bins? The holes in the slate are a good argument. In 24 of the pits single human bones were found. Some were even broken to possibly use the bone marrow for medical treatments. And 12 pits did not contain any bones at all just some pottery containers. In addition, in many pits remains of food waste were discovered, which could not be identified as funeral gifts.

Were these pits in deed storage pits for research material to be dissected and finally refuse bins of healer students? So extraordinary this might sound, Iskanwaya is in many points so unique and puzzling site like no other in the Andes. But it makes a lot of sense with regards to Kallawayas healers. We would be pleased if local archeologists could in future answer these questions with certainty and accept the help of foreign experts.

Remarks

This time we have written this article in form of an archeological travel blog. Unfortunately, no major research was done and published in the last 50 years since the first cleaning up and limited excavations were done in 1976. This is when we became aware of it and visited Iskanwaya a few years later. It is not at all a tourist destination, but it can be reached by 4x4 via Aucapata outside the rainy season. Those who like adventures and have time and no objection to sleep in tents can book a tour with a special operator in La Paz. We only can recommend this extraordinary visit. It gives you the real feeling of discovering a lost mythical place.

Picture Credits

We thank the institutions, archeologists and photographers for making available some of their pictures and graphs.

