

Inca Mummies: Child Sacrifice on Andean Peaks

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High up on mountain peaks in the Andes – at some of the highest archaeological sites in the world – I have discovered remarkably well-preserved Inca mummies ceremonially buried in elaborate textiles and accompanied by rich offerings. These naturally frozen bodies provide startling insights into Inca human sacrifice and ritual.

The Incas began expanding their empire from their capital Cuzco, in modern Peru, around 1438, a process that continued until the Spanish Conquest in 1532. During this brief time, they built over 100 ceremonial centres on the summits of many of the highest mountains in the Andes. My interest in these sites was triggered in 1980 when I first visited the Andes and realized that there was no reference to the ruins in standard books on archaeology. No archaeologist had spent more than a few hours at any of them. I wondered about an unanswered question: *why* had people constructed buildings at such incredible heights five centuries ago?

Early Spanish writers were mostly unaware of these sites, but noted the importance of mountain deities throughout the Andes. My research revealed that mountains were worshipped in the belief that they controlled meteorological phenomena, especially the flow of water – and thus the fertility of crops and livestock. As Juan de Ulloa Mogollón wrote in 1586, the Indians worshipped the snow-capped mountains because they ‘provided the water that irrigated their fields’. When the Incas conquered

areas where these beliefs already existed, they constructed ritual sites on mountains that local people held in reverence but had never climbed. In this way, the Incas asserted greater economic, political and religious control over the people they had conquered.

The chroniclers described the offerings made to the mountain gods, including food, incense, alcoholic beverages and specially woven textiles and fine ceramics in distinctive Inca styles; intriguingly, they also remarked that offerings could involve human sacrifices. Between 1964 and 1985, a series of mummies had been found by accident, high in the Andes. These finds laid the foundation for my scientific excavations during the

below

View north from Llullallaco's summit towards the two-roomed 'priests' house' (lower centre) and the ceremonial platform (upper left).

opposite

Male (right) and female (left) gold statues from Llullallaco dressed in miniature clothing, similar to that worn in ceremonial contexts by Inca nobles.





1990s that resulted in the discovery of exceptionally preserved Inca mummies on the mountains of Ampato and Lulluailaco.

The Ice Maiden

Between 1995 and 1997, José Antonio Chávez and I directed a series of expeditions on the volcano Ampato, 6,312 m (20,708 ft) high, in southwest Peru. These began when my assistant and I first climbed the peak and spotted a mummy bundle lying on the ice. I was momentarily stunned when we lifted up the bundle. The head cloth had been torn open in its fall, and I found myself looking into the face of an Inca girl. Later called the Ice Maiden, this was the first frozen body of an Inca female ever discovered. I carried the mummy bundle off the mountain so that it could be conserved in a freezer for future study.

The Ice Maiden had been ritually sacrificed and buried with female figurines of gold, silver and spondylus shell (a sacred mollusc from the seas off Ecuador), as well as food, woven bags and pottery – all scattered around on the slope. The Inca believed that such a sacrifice brought honour on the parents

and a blissful afterlife for the victim. We later excavated a funerary site at 5,850 m (19,193 ft) on Ampato that contained the intact burials of two girls and a boy. The soft tissue of their bodies had been severely damaged by lightning after they had been interred, but the textiles around the females and other artifacts remained largely undamaged.

Lulluailaco

In 1999 the Argentine archaeologist Constanza Ceruti and I led an expedition to the summit of Lulluailaco, even higher than Ampato, at 6,739 m (22,109 ft). Excavations here of an Inca platform revealed three burials and several groups of offerings. The Incas had placed a 7-year-old boy on a folded tunic, together with a male figurine and one of a llama, and spare clothing, two pairs of sandals and two slings. We next found a feathered headdress on the head of a 15-year-old girl. A male tunic was draped over her right shoulder. Three female figurines made of gold, silver and spondylus shell lay next to her body. But it was the discovery of a third mummy that most affected me.

We excavated a mummy bundle, finding that it too had been hit by lightning while buried in its tomb. I saw the head cloth was loose. As I drew it back, I was astonished to be staring directly into a child's face. None of us had expected to see her face, much less that it would be so well preserved. I felt both deep sadness and a strong realization of her humanity. I was also pleased that she had not been totally destroyed by the lightning. The 6-year-old girl's internal tissues and organs, including her heart and brain, proved to be exceptionally preserved, despite the lightning having burnt a cavity in her chest. The Incas had placed textile and ceramic items around her, and four female figurines made of gold, silver and precious spondylus shell.

The Llullaillaco mummies proved to be a mine of bioanthropological information. Isotopic analysis of the older girl's hair showed that, a year before her death, her diet had changed dramatically to one rich in animal protein and plants such as maize. The other two children showed no such change in diet, suggesting that the older girl had the highest status of the three. Isotopes from the dead children's hair also revealed that they had chewed coca leaves, probably to numb their senses as part of the sacrificial ceremonies. Neutron activation analysis on the fabric of the pottery found with them showed that the classic Inca vessels had come both from Cuzco and from Lake Titicaca, a distance of more than 960 km (600 miles).

The Ampato and Llullaillaco mummies also provided fascinating clues from their DNA. The Ampato Ice Maiden's DNA showed that she had no relationship with modern villagers from Cabanaconde nearby. However, there was a relationship on the maternal side between one of the villagers and the oldest female on Llullaillaco. Eventually, we hope to establish the mummies' places of origin and identify their closest living relatives.

Bringing the past back to life

Unlike most frozen mummies found outside the Andes, very little time elapsed between the sacrifice of the Inca children and their burial. Thus, the bodies were deep frozen before much decomposition had taken place. Such mummies will never stop adding to our knowledge, since the technology for studying them is constantly evolving. The mummies and sumptuous offerings found on Ampato and Llullaillaco significantly increase our knowledge of Inca religious practices and beliefs, thanks to their excellent preservation and the fact that they were documented in their original contexts. These discoveries substantiate descriptions provided by early chroniclers and they also show that the Incas built structures at altitudes that would not even be reached again until nearly 400 years later. This must be considered one of ancient humanity's most awesome achievements.



left

The Llullaillaco boy wore a red tunic, leather moccasins, a silver bracelet and a headdress of white feathers.

opposite

The younger female from Llullaillaco was found wearing a silver plaque. Lightning had damaged the upper part of her body.

following pages

The hair of the older girl from Llullaillaco was braided, and she wore a dress and a shawl, with ornaments on her right shoulder. The exceptional conditions of preservation mean that she looks like she is simply asleep.





