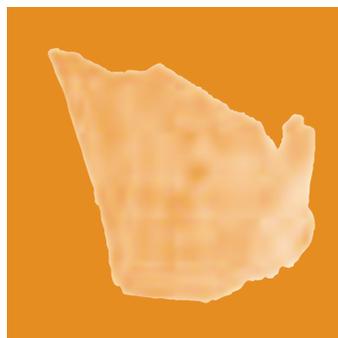


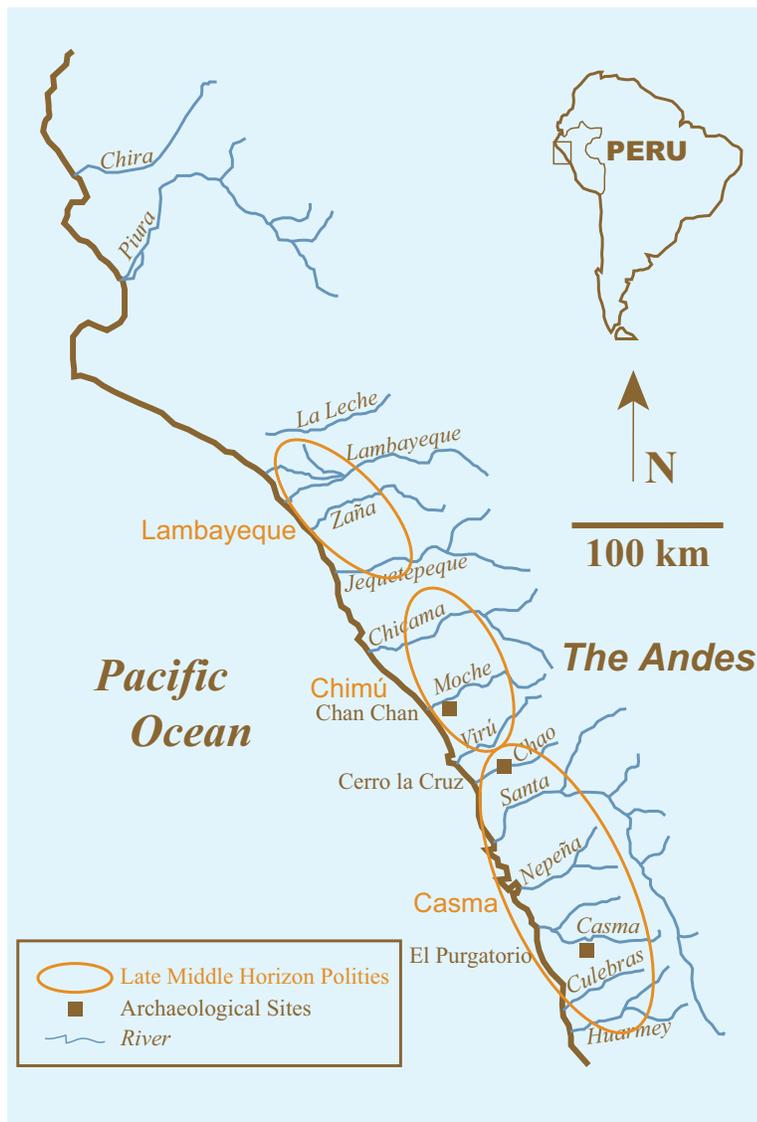
LIFE ON THE FRONTIER
IN ANCIENT PERU

Archaeological Investigations at Cerro la Cruz
BY MELISSA VOGEL



RECENT RESEARCH ON the north coast of Peru is provoking new interest in a little-known prehispanic culture, the Casma. In 1999, I journeyed to the Chao Valley to investigate the site of Cerro la Cruz. Although the site had only been briefly investigated by two earlier projects, the presence of walled compounds and some blackware ceramic sherds suggested to these archaeologists that the site was an Early Chimú settlement. This interpretation contradicts the radiocarbon dates placing the occupation of the site during the Middle Horizon (*ca.* AD 600–1000), before the Chimú expansion, which did not begin until at least AD 1200. If the site was not built by the Chimú, who built it? I set off to answer this question and learn more about everyday life in ancient Peru.

To my surprise, the next three years of our investigations showed that, based on ceramic style, architectural style, and radiocarbon dates, the site of Cerro la Cruz actually marked the northern frontier of the Casma polity. A polity—a politically independent society—is identified by archaeological indicators such as ceramic styles, architectural styles, and settlement patterns. The Casma—named for the valley to the south where their capital was located at El Purgatorio—were one of three polities vying for power along the Peruvian coast during the transitional period between the Middle Horizon (*ca.* AD 600–1000) and Late Intermediate Period (*ca.* AD 1000–1470). This transition has been interpreted as one of great political and social transformation as well as a time of increased cultural interaction between coastal and highland cultures. At this time, the Chimú state was forming in the Moche and Chicama Valleys to the immediate north, while the Lambayeque polity was already thriving on the far north coast, from the Jequetepeque Valley to north of the La Leche River. Although the Casma polity preceded the Chimú and Lambayeque in time, its contribution to state formation and cultural development in the region had yet to be studied. The possibility that the Casma had built Cerro la Cruz had never been tested, so one aspect of my research was to untangle the archaeological evidence and determine which polity occupied the site. More importantly, the archaeological remains from Cerro la Cruz give us a glimpse of what everyday life was like on the frontier between two large political powers struggling to dominate the north coast of Peru. This is the story of the Casma, the group that lost.



The North Coast of Peru at the end of The Middle Horizon showing the locations of sites and polities mentioned in the text.

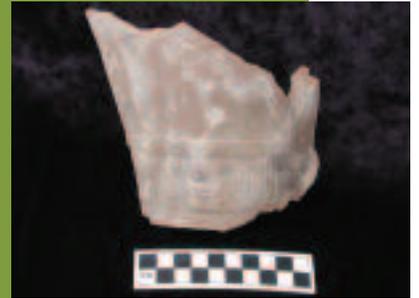
TIME PERIODS	North Coast	Central Coast	South Coast	Central Highlands	Southern Highlands
Late Horizon (AD 1470 - AD 1534)	Chimú-Inka	Inka	Inka	Inka	Inka
Late Intermediate Period (AD 1000 - AD 1470)	Chimú	Chancay	Ica	Chancay	Killke Lucre
Middle Horizon (AD 600 - AD 1000)	Casma Lambayeque	Pachacamac	Tiawanaku	Wari Tiwanaku	Tiwanaku
Early Intermediate Period (200 BC - AD 600)	Gallinazo Moche	Lima	Nazca	Recuay	Huarpa
Early Horizon (900 BC - 200 BC)	Cupisnique	Chavín	Paracas	Chavín	Pukara

Peruvian Culture History and Major Andean Ceramic Styles (900 BC–AD 1534), after Keatinge. Dates for these periods are frequently critiqued and revised, and they may differ slightly across geographic regions. Most cultural groups share a name with a ceramic style.

WHO WERE THE CASMA-POLITANS?

Reports on Casma sites are rare. Before we conducted this research, only surface survey and test excavations had been completed at any Casma site. In 1977, Fung and Williams suggested that the Casma culture could be identified on the basis of its ceramic style and its architectural elements. The latter included multiple, carefully planned compounds with internal subdivisions, various platforms, and rectangular patios connected by a system of terraces. They also noted several construction techniques at Casma sites, including thick stone walls or adobe with stone foundations. While their settlement patterns are not currently well understood, they seem to include defensively located and fortified sites, often on terraced hillsides.

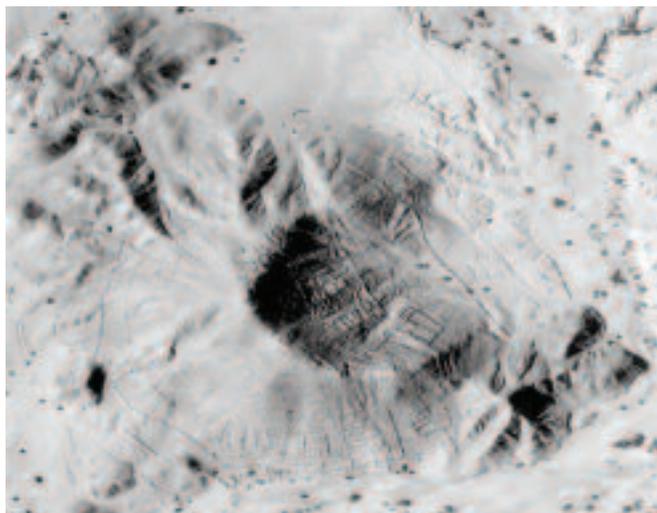
Fung and Williams suggested that the Casma culture began in the second half of the Early Intermediate Period (approximately AD 200–600), persisted through the Middle Horizon (AD 600–1000), and extended into the first half of the Late Intermediate Period (AD 1000–1470), until they were conquered by the Chimú state. Their primary period, the Middle Horizon, corresponds to the transition between two major north coast polities: the Moche and the Chimú. Geographically, Mackey and Klymyshyn proposed in 1990 that the Casma polity extended about 300 km along the coast from the Chao Valley south to the Huarney Valley. Recent archaeological work supports this hypothesis, showing a multi-valley distribution of Casma-style ceramics. Our research at Cerro la Cruz found that the dominant ceramic style, the architectural style, the settlement's location, and its radiocarbon dates (*ca.* AD 890–1290) all link the site firmly to the Casma polity.



Neck and rim of blackware jar with a molded face.



The town of Buenavista from the top of Cerro la Cruz.



Aerial photograph of Cerro la Cruz in 1969, showing perimeter walls, compound walls, terraces, and canals.

A DESERT LANDSCAPE

Most of the Peruvian coast consists of an arid, treeless desert. This certainly describes the tiny Chao Valley, one of the driest on the north coast. It is both the shortest and the narrowest valley in the region, allowing for quick passage from the coast to the highlands (west to east) and from the Virú Valley to the Santa Valley (north to south). The site of Cerro la Cruz is situated in a strategic position beside the Chao River at the intersection of prehispanic routes, approximately half way between the Pacific Ocean and the Andes. Encompassing an area of approximately 40 hectares, the hill of Cerro la Cruz rises 100–150 m from the floodplain of the valley floor. Its slopes are steep, and they require terracing in order to support structures. Farming on these terraces was not feasible due to the lack of rainfall or other means of irrigation, and we found no evidence for cultivation there. The major investment of labor focused on creating flat space on these terraces for various activities, rather than drastically modifying the hill, whose crescent shape is still quite apparent. Nevertheless, the terraces themselves are dramatically visible from a distance, and they transform the natural slope of the hillside into a stepped pattern.

When the Casma chose the location for the site of Cerro la Cruz, they probably considered four primary factors: control, protection, visibility, and subsistence. Control of the area involved monitoring the passage of people and goods through the valley for purposes of trade and taxation. Protection of the site included both defense from invaders such as the Chimú and protection from the excessive rainfall and flash flooding caused by the recurring El Niño phenomenon. Cerro la Cruz's



Local teenager Lida Lopez-Neyra provides scale for a fallen terrace wall during the preliminary survey and reconnaissance of Cerro la Cruz.



Cerro la Cruz from the south, showing terraces and compound walls. Modern agricultural fields now extend to the base of the hill.

prominent position on a large hill provided excellent visibility, commanding a view of the surrounding area and allowing the site to be seen from some distance away, creating a grand impression on visitors. Finally, subsistence needs required the availability of water resources near arable land. The location of the site on the hillside left the flat arable land free for farming. In an area with unreliable water resources—the Chao river is

seasonal and dependent on the level of rainfall in the highlands, which can vary significantly from year to year—and where irrigable land is at a premium, this was a wise choice.

LIFE ON THE FRONTIER

We were very excited by the high degree of preservation evident at the site and the information this gave us about the lives of its inhabitants. One of the greatest benefits of working in such a dry climate is that it preserves everything from desiccated seeds and fruits, textiles and hair, to plaster and paint.



Wooden harpoon found in a ceramic workshop at Cerro la Cruz. This weapon was either ceremonial or a model, since this type of wood (*zapote*) was not strong enough to penetrate the skin of sea mammals.



Straw mat from Compound B3.

The architecture still visible on the surface includes nine compounds (groups of rooms, patios, and/or plazas enclosed by a large exterior wall), four hilltop ceremonial structures, and numerous small residential terraces where commoners lived. Class distinctions between the site's residents are evident in the differential size and durability of construction, the type and quantity of ceramics present, and even in the types of artifacts found in elite and commoner dwellings. For example, while we found a plain ceramic spindle whorl (used for spinning llama

IN SMALL THINGS REVEALED

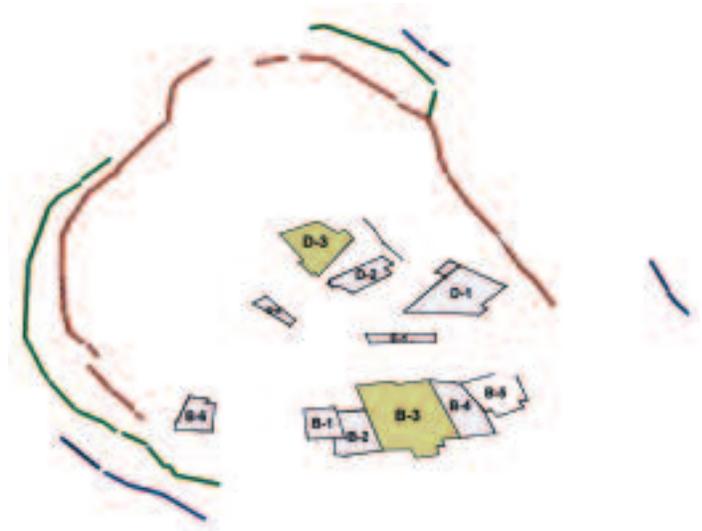
The archaeological record at Cerro la Cruz provides a superb example of how the smallest artifacts can reveal important clues to past lifeways. A small offering of corn and cotton can indicate the focus of household ritual and what was important to a farming people. A single *mishpingo* seed tells us that coastal people traded with people on the other side of the Andes, since these plants only grow in tropical forests. A small packet of human hair suggests that people at Cerro la Cruz may have held superstitious beliefs similar to their modern counterparts. Collecting and guarding the hair from your brush and your nail clippings is thought to protect you from the black magic of witches. In other words, it is not always spectacular tombs and pyramids that teach us the most about the past.



The style of this small stone pendant in the shape of a spotted feline suggests that it may have been traded from Peru's far north coast.



Contents of a small offering found wrapped in cloth included maize, string, and raw cotton.

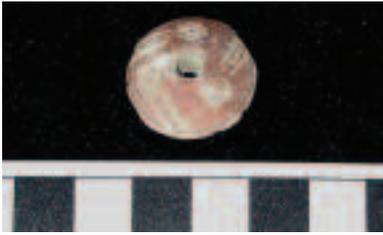


Perimeter walls and compounds at Cerro la Cruz. Excavations were located in the shaded compounds.

wool or cotton into yarn) in a commoner house terrace, the spindle whorl we found in an elite compound was highly decorated and made of stone.

The compounds at the site of Cerro la Cruz are clearly multifunctional, incorporating space for public, domestic, and ritual activities. As the largest and most impressive of the compounds at the site, Compound B3 is clearly more focused on public activities and appearances. On the other hand, Compound D3, located in a higher, less-accessible position on the hillside, encompasses half the area of B3, and was occupied for a shorter period of time. It represents a smaller labor output not only in size but also in the quality of the building materials (more rock than adobe). Yet the basic organization of space within D3 mimics that of B3 and probably served similar functions, on a less-grandiose scale.

The relationship between the compounds and the other architecture at the site most likely indicates the social hierarchy of the inhabitants. High compound walls, plastered floors, baffled entryways, and plastered roofs tend to be associated with elites rather than commoners. Therefore, higher-status families would have resided in compounds, while lower-status families would have made their residences on the outlying terraces. Just as the compounds contained areas for various functions (domestic, administrative, and ritual), so the outlying terraces may have served varied purposes such as areas for sleeping, workshops, and activity areas for the production of textiles, tools, and foodstuffs. The placement of a ceramic workshop at the base of the compounds in Sector D may indicate that this industry was controlled by elites who could easily supervise the work from uphill. Or it may be that certain aspects of ceramic production, such as the burning of hot fires in ovens, were considered inappropriate inside a compound and were preferably accomplished in an open, flatter area. Regardless, a clear distinction appears to have been made between activities that took place inside compounds and those that took place outside.



Spindle whorl decorated with incised design found in an elite compound. These weights are placed on small sticks and used to spin wool into yarn.

The people of Cerro la Cruz continued the longstanding Andean tradition of trade between farmers and fisherman. Although the site is located about 15 km from the sea, we recovered abundant remains of marine resources, including a number of mollusk species, fish, crab, and sea urchin. We also recovered agricultural remains, including such staples as maize, squash, avocado, and cotton. Although local farmers may have occasionally ventured out to the sea for a day of fishing, most shellfish were probably traded in by fisher folk living closer to the ocean. While small mussels are frequently used to make soups, one larger mussel (*Concholepas concholepas*) also produces a purple liquid that can be used to dye textiles. We found remains of sardines, which travel in schools in the high seas, and required boats and nets to catch. We also found tiny fish bones that may have come from anchovies, used commonly as food and fertilizer in the Andes. Small fish could be dried whole or after being ground into meal for storage. The presence of sea urchin spines indicates that these animals arrived at Cerro la Cruz whole for later processing.

In terms of domesticated animals, we recovered camelid (llama or alpaca) bones, teeth, and coprolites (fossilized dung), suggesting that llamas or alpacas were either raised at the site or had passed through with trade caravans. Camelid dung may have been used as fuel, while camelid meat may have been eaten or used for sacrifices. The only other clear evidence for domesticated animals was the dog fur (*Canis familiaris*) found in an elite compound, though the breed of dog could not be determined.

One of the most interesting rooms in Compound D3 was the small front plaza. Based on abundant food remains, the presence of serving vessels, and the open form of the space, it appears to have been used for feasting. Feasting was an important aspect of pre-Columbian Andean public life and was closely tied to political and religious events. Remains of maize, chili pepper, squash, guava, gourd, wild greens, and algarrobo form a complete meal, typical of the Peruvian coast. There were 16 maize cobs in the sample from this room alone, and the presence of chili pepper suggests that the maize was consumed with chili as a condiment, as it still is today. The gourds may have been used as containers to serve food or drink. Two other plant species, “flor de arena” (*Tiquila paranychioides*) and “grama” (*Paspalum peruvianum*), are known for their medicinal use as diuretics. The cotton, agave, and ciperácea species also found in this room were and are used to produce

textiles, baskets, and ropes, respectively. Other fruit remains found at the site included guanabana, paca, and lúcuma.

The presence of both domesticated and wild plants is especially important for understanding the magnitude of agricultural activity undertaken around Cerro la Cruz. Domesticated species indicate that the site’s residents grew typical Andean crops. In addition, weed species found at the site (*Pseudolephantopus spiralis*, *Neptunia* sp., and *Echinochloa* sp.) are plants that commonly invade agricultural fields. Since these weeds were also gathered and brought to the site with the cultivated species, this might indicate that they were used as guinea pig and llama fodder.

In addition to procuring their own food, the people of Cerro la Cruz made their own cloth and at least some of their ceramics. Evidence for textile production included copper needles, spindle whorls, raw cotton, spun threads, and fragments of cloth. There was even a small ceramic workshop located on the east side of the site where excavations revealed four ovens, several molds, polishing stones, and wasters (poorly fired ceramics). Makers’ marks on the inside of some vessels suggest that labor was recruited from different social groups. These simple symbols have been interpreted as indicators of distinct work groups who contributed ceramic vessels or, in other cases, adobe bricks, as a form of taxation.

AND THEN THERE WERE NONE

In addition to the many artifacts that helped us reconstruct the everyday lives of people at Cerro la Cruz, we also found indications of the larger political struggle between the Casma and their neighbors. As the Chimú state grew in power and began to expand, the Casma frontier settlement at Cerro la Cruz became the border zone between the Casma and Chimú territories. In the end, the Casma appear to have lost the political battle, and perhaps an actual military battle as well.

The site appears not only to have been abandoned but also officially closed and ritually cleansed by a burning event. Due to the nature of the construction materials (stone and adobe), which are generally not flammable, and the widespread evidence for burning throughout the compounds, this does not appear to be an accidental fire. The primary support for the performance of some kind of termination event lies in the presence of ash and burn marks on the top surface of nearly every floor we uncovered. This was not a pattern repeated during the various construction phases, for indications of this practice were not found between each floor level. However, the lack of proof for burning in some rooms does appear to be linked to differential preservation, since the better-preserved rooms are more likely to show an ashy burn layer. This suggests either that the inhabitants decided to flee the advancing armies of the Chimú state rather than fight, or that they indeed

lost the battle implied by the stockpiles of slingstones. We cannot state with certainty which group conducted the ritual closing events but it seems unlikely that the Chimú forces would take the time and effort for such rites at a site occupied by an opposing polity. Instead, the leaders of the site of Cerro la Cruz either had time to close the site before they left or were granted permission to do so by the conquerors. The most plausible explanation is that the Casma either chose or were forced to leave, most likely by the Chimú advance southward, and Cerro la Cruz was never occupied in the same way again. The site does not appear to have been settled by the Chimú or the Inka. Thus this periphery became incorporated into the core of the Chimú empire during the first wave of expansion, which reached south past the Chao to the Santa Valley. The second wave then encompassed the remaining Casma territory, reaching south of the Huarmey Valley.

MORAL OF THE STORY

This is an excellent example of both the importance of details to archaeological interpretation and the spectacular degree of preservation available on the Peruvian coast. Recovering such fragile remains as a woven mat, the fringe from a textile, or a packet of human hair is simply unheard of in many parts of the world. While looting is common in Peru and virtually no site is left untouched, the archaeological context remains essential for understanding how people survived and prospered in the Andean past. To some, gold and silver may be more exciting finds, but such objects reveal much less about ancient people than the mundane objects that remain from their everyday life. Certainly there is much to be learned from these ancestors that could enrich the lives of their descendants today, whether through the renewed implementation of ancient agricultural techniques or the development of sites for local tourism. No less importantly, the knowledge and understanding modern



Buenavista townspeople on a tour of the site.

Melissa Vogel

Peruvians gain about their predecessors may foster a sense of pride in their prehispanic heritage and help them to forge a brighter future for the next generation. 

MELISSA VOGEL is currently a Research Associate at UCLA's Cotsen Institute of Archaeology. She received her B.A. in Anthropology from UCLA in 1995 and completed her Ph.D. in Anthropology at the University of Pennsylvania in 2003. Dr. Vogel has worked in various parts of Latin America over the last 10 years, including Nicaragua, Belize, and Peru. Her research on the Casma polity continues with a new project at the site of El Purgatorio.



Acknowledgments

Project Cerro la Cruz was funded by generous grants from the National Science Foundation, the Fulbright-Hays U.S. Department of Education, and the University of Pennsylvania Department of Anthropology. I would like to offer special thanks to my dissertation committee: Clark Erickson, Wendy Ashmore, Carol Mackey, and Robert Preucel. I would also like to thank my Peruvian colleagues: Prof. Luis Coronado Tello, Prof. Victor Vasquez Sanchez, and Prof. Teresa Rosales Tham; the students who volunteered on the project: Zachary Christman, Jessica Henderson, David Pacifico, Nancy Perschbacher, Patrick Brett, and Elizabeth Baker; and the residents of Buenavista and Chao for their warmth, hospitality, and interest in our project.

For Further Reading

Cardenás, Mercedes. *Informe Preliminar del Trabajo de Campo en el Valle de Chao*. Lima: National Institute of Culture, 1976.

Collier, Donald. "Archaeological Investigations in the Casma Valley, Peru." In *Akten Des 34. Internationalen Amerikanistenkongress, Wien, 1960*, pp. 411-17. Vienna: Verlag Ferdinand Berger, Horn, 1962.

Fung Pineda, Rosa, and Carlos Williams León. "Exploraciones y Excavaciones en el Valle de Sechin, Casma." *Revista el Museo Nacional* 43 (1977):111-55.

Keatinge, R. W., ed. *Peruvian Prehistory: An Overview of Inca and Pre-Inca Society*. Cambridge: Cambridge University Press, 1988.

Mackey, Carol J., and A. Ulana Klymyshyn. "The Southern Frontier of the Chimu Empire." In *The Northern Dynasties: Kingship and Statecraft in Chimor*, edited by Michael E. Moseley and Alana Cordy-Collins, pp. 195-226. Washington, DC: Dumbarton Oaks, 1990.

Silva Vigo, Edgardo. "Cerro la Cruz: Asentamiento Chimú en el Sector Medio del Valle de Chao." *Gaceta Arqueológica Andina* VI-22 (1992):35-49.

Tello, Julio C. *Culturas: Chavín, Santa o Huaylas Yunga y Sub-Chimú*. Lima: Editorial San Marcos, 1956.