

Summary Report of the 2004 Season of the Pachacamac Archaeological Project

The Pachacamac Archaeological Project (PAP) under the co-direction of Izumi Shimada (Dept. of Anthropology, Southern Illinois University), Rafael Segura (Riva Agüero Institute, Catholic University of Peru, Lima), and Maria Rostworowski (Institute of Peruvian Studies, Lima) conducted its 2004 season of fieldwork from 16th of June until 14th of August at the preeminent pre-Hispanic religious center of Pachacamac on the central coast of Peru just south of the city of Lima. Our work was authorized by Resolución Directoral Nacional (National Directorial Resolution) No. 622 of the National Institute of Culture of Peru and involved the participation of three professional specialists and seven students representing diverse disciplines (botany, chemistry, geology, and remote sensing) and four countries (Germany, Japan, Peru, and the USA).

The 2004 fieldwork documented for the first time varied material evidence (artifacts, architecture and organic remains) of (1) the complex ritual practices, (2) intensity, and (3) continuity of pilgrimage to Pachacamac by members of varied communities on the central coast of Peru during a period spanning ca. A.D. 1000-1460. Additionally, we extracted sediments from a lagoon and a suspected well to verify and refine an emerging Holocene environmental sequence, the first of its kind for the Peruvian coast.

More specifically, this year's fieldwork continued our two-pronged, long-term effort to elucidate (1) the composition, role, and organization of the inhabitants who underwrote the daily operation, longevity, and power of Pachacamac, and (2) paleoenvironmental conditions that helped shape the nature, organization, extent and duration of human occupation of the site and its immediate surrounding.

For the first objective, we focused on Trench 1 excavation situated in the Pilgrims' Plaza just north of the Pachacamac Temple, widely regarded as the most revered temple at the site. This excavation that began in 2003 was expanded from the original 5x5 m dimension to 10x10 m so that the broader architectural organization and artifactual distribution could be better defined. The excavation was quite challenging but rewarding as we registered some 800 floor and architectural features within the depth of some 2 m (below the modern surface) corresponding to Ychsma and late Pachacamac occupations of the site, ca. A.D. 1000-1460.

Most of these features were diverse offerings including food items (from whole fish and guinea pigs to maize, peanuts, and *aji* peppers), figurines, ceramic vessels, textiles, and modified and natural stones. Predominantly, they were common day-to-day items, not the fancy, specialized and/or exotic artifacts that one might expect for offerings placed at this presumably

Pachacamac Archaeological Project

highly sacred location. Many food items such as maize and fish had been pressed into freshly laid circular clay patches and left exposed to the air, which explains why we found thousands of prehistoric maggot casings. While complete artifacts were quite rare, we encountered what appear to be intentionally broken artifacts carefully placed within conical pits of diverse sizes. Often, clusters of pottery fragments in pits contained only certain parts of vessels (e.g., rims and body parts but no bottoms), while other pits contained concentrations of those missing parts as if artifacts were broken and carefully bipartitioned into separate offerings. These intrusive pits were so numerous and ubiquitous that it was difficult to trace floors or define forms of adobe and *quincha* (wattle-daub) structures.

The above offerings were not randomly placed; rather, there was recognizable spatial clustering by kind and, to a lesser extent, in artifact style (particularly figurines and pottery). For example, guinea pigs were found only in the northeast sector of the excavation area, while stone and sherd clusters predominantly occurred in the western periphery of the excavation. Figurine and pottery fragments made with a distinct cream-colored paste characteristic of the Chancay culture (centered in the Chancay Valley just north of the city of Lima) were recovered only from the northern end of the excavation.

These clusters roughly correlate with the locations of small circular and rectangular adobe- or stone-lined sunken enclosures (ca. 3-4 m² in area); in other words, offerings and adobe and *quincha* rooms were placed atop and immediately around enclosures that were never intended as aboveground structures. These enclosures were carefully made. For instance, rectangular block adobes were modified to have a wedge-shaped cross-section and used to create out-flaring enclosing walls. Both the wall faces and floors were plastered. The deepest enclosures we documented lay nearly 2.5 m below surface and rest on the late Lima (ca. A.D. 550-650) constructions and deposits. At the center of some of these enclosures were one or more intact ceramic vessels with their lids and offerings inside and outside. We hypothesize that the vessels within these enclosures symbolized the *huaca* or sacred icon within its sacred enclosure, precinct or temple.

We found that the location and even the kind of offerings placed over generations were prescribed and went in hand in hand with the construction of new enclosures of the same style and materials that overlay partly or entirely the earlier one(s). It appears that the act of the inferred "renewal" of the sacred structure and associated offerings was more important than the actual enclosure built or the substance of the offerings made as earlier enclosure(s) and offerings were often damaged in the process. The documented persistence of the temple renewal and offerings over many generations seems to reflect the collective social identity, memory and obligation in pre-Hispanic societies of the central coast of Peru.

In essence, we documented for the first time (1) the ritual practices, (2) intensity, and (3) continuity of pilgrimage to Pachacamac by members of varied communities on the central coast of Peru during a period spanning ca. A.D. 1000-1460. To verify this conclusion, Dr. Ursel

Pachacamac Archaeological Project

Wagner sampled 139 sherds for a series of analyses to be conducted in Munich, Germany, in 2005 that will give us detailed information on clay mixtures and the firing processes used in their manufacture. Chemical elementary characterization of the same sherds for provenience determination will be done by Dr. Michael Glascock at the University of Missouri Research Reactor.

For paleoenvironmental reconstruction, the project team conducted a series of sediment coring at the *Urpi Wachak* Lagoon and an inferred well both situated near the *Urpi Wachak* Temple. Dr. Barbara Winsborough, diatom specialist, participated in the extraction and conducted a subsequent preliminary analysis of the extracted cores. This season's work at the Lagoon that has been regarded as sacred and rich in legends provided us with two cores that serve as comparative samples to the two cores extracted from the lagoon in 2003. This coring is especially urgent as the lagoon is disappearing as pumping of subterranean water for agriculture continues upvalley and adjacent land and house owners fill it in with soil and modern refuse.

Prior to the 2004 fieldwork, Dr. Barbara Winsborough, had completed analysis of diatoms in the 2003 cores. She documented over 2000 years of alternating dry and wet periods, as well as two major deposits of sand and clay that point to two major floods that may correspond to known late 6th and mid-11th century Mega ENSO (El Niño) events. When the ongoing analyses of pollens and plant remains in the cores are completed, we will achieve the first comprehensive environmental sequence for Peruvian coast.

The surprising discovery of two layers that appear to contain an extraordinarily high concentration of fat raises the possibilities of large-scale llama or human sacrifices. There is at least one early historical document that speaks of hundreds of llama sacrificed at Pachacamac during the Inka domination of the site. A gas chromatography-mass spectroscopic analysis of the suspected fat is planned with Dr. Ken Anderson, a geochemist, to determine its origin.

The 2004 coring at the inferred well also yielded a surprise. A core recovered a large portion of an adult human (male?) supra-orbital ridge some 50 cm below the bottom of the well. Apparently, the core cut through a human skull lying in the accumulated sediment. Again, this raises the possibility of human sacrifice at the site. Overall, the coring and associated multi-disciplinary analysis have provided and continue to provide important environmental data and insights, as well as some unexpected cultural insights.

The planned continuation of the ground-penetrating radar (GPR) survey with Hirokatsu Watanabe was rescheduled for the 2005 season due to a major equipment problem.