

Preliminary Results of the 2003 Fieldwork

A. Coring at the Urpay Wachak Lagoon

With the participation of palynologist John Jones, we extracted three sediment cores from near the inferred center of the Urpay Wachak Lagoon, much of which is today not much more than a wetland overgrown by junco grass and reeds. Unfortunately, with the encroachment of modern settlements and intentional filling, the Lagoon is disappearing. The quality of core samples, however, is essentially unaffected by these modern changes. Two of the three cores are very good quality in terms of stratification and depth (ca. 2.8 m). The upper halves of these cores contain various layers with high peat content. Toward the lower ends, sediments become increasingly sandy. Thus far, Jones has examined the upper portions of 14 samples for Core 2 and reports some 30 different taxa having been identified, including a good deal of maize, some cotton, an yet unidentified Solanaceae species and guava. *Lomas* plants are absent - not surprising as they are insect pollinated and thus their pollens would not be expected to travel far from the plant. There is also a sand deposit that was very rapidly set down, perhaps associated with an El Niño event. What is emerging is a preliminary picture of economic plants cultivated around the lagoon and at the base of the site of Pachacamac. Complementary radiocarbon assaying and diatom analysis only began recently and we expect to have a much more complete picture of local cultivation and environmental history within a year.

B. GPR Survey and Attendant Test Excavations

For six weeks H. Watanabe in close coordination with Shimada conducted GPR survey of six dispersed areas of the site that were selected on the basis of our research objectives, existing archaeological knowledge and physical conditions. We will not describe the technical details of the GPR survey here. It is important to note, however, that (1) it was conducted in multiple stages, starting with field testing of the method in a previously excavated area (i.e., Adobito Group next to the Site Museum; Bueno 1982) with well-defined architecture, floor features and stratigraphy, and (2) spacing of survey transects and microwave wavelength were adjusted primarily in accordance with the nature and distribution of buried remains. We will note the importance of a multi-stage and contingency-based flexible approach and close coordination on and in and out of the field between the archaeologist and the radar specialist cannot be overstated in optimizing GPR survey. Overall, the GPR demonstrated amply its productivity not only in terms of the total area and distance covered but also in the quality and quantity of new data it yielded. The total surface area and linear distance covered by the GPR survey are ca. $106,000\text{m}^2$ (equivalent to an area 326×326 m) and over 16,700 m, respectively.

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The north shore of the Urpay Wachak Lagoon was the first area of our GPR survey, which was intended to test our working hypothesis that the Lagoon played an important, if not the critical, role in the establishment and growth of the site of Pachacamac; that it was both the symbolic and physical node of site growth that began around the lagoon and grew outward in a concentric pattern. Based on the preliminary study of the sediment samples and the nearby presence of an inferred ancient beach ridge, we suspect that the lagoon was initially a small coastal cove that was at some point closed off from the Pacific to become a lagoon.

The GPR survey detected a series of inferred walls and compacted layers that may represent floors and their foundations, perhaps as deep as 1.5 to 2.0 m below surface, close to or below the present day ground water level. Though no test excavations were conducted here, we suspect the inferred buried remains date back to the Lima culture of the Early Intermediate Period, if not earlier.

The GPR survey of the well-preserved Urpay Wachak temple mound and a 5 x 5m test excavation at its northeast base were intended to determine its architectural configuration and history and, in the process, test the inferred Lima date for its construction and orientation toward the Urpay Wachak Lagoon. The excavation area was selected on the basis of GPR data that indicated the presence of at least five distinct superimposed strata and no major constructions that might impede the planned, deep excavation.

Thirteen radial-pattern GPR transects from the mound top suggest that the mound had a relatively simple form resulting from three superimposed platforms roughly oriented along cardinal directions. Each platform appears to have had multiple superimposed layers and/or floors. In other words, the inferred temple had strong continuity in its basic form and a relatively long occupation. The test excavation showed that the basal platform had at least four associated, plastered floors each underlain by a carefully laid, solid adobito foundation, which in turn, rested on clean sand fill over 1 m thick. The loose sand fill and the limited size of our trench did not allow us to explore below the lowest floor at ca. 3 m below surface, although the GPR data suggest that this was in fact the earliest of the temple.

Both the floors and their sand fill had limited numbers of features and artifacts. All decorated sherds recovered were Lima in style and a few from the lowest levels could be attributed to a middle Lima phase with an estimated date of A.D. 300-400. Those from the uppermost fill (overlying Floor 1) pertain to late to final Lima with an inferred date of ca. A.D. 650-750; C-14 date of 1350 ± 70 BP [CE 580-790; 2 sigmas] for the final floor).

The Lima occupation at the site is likely to prove much more extensive than heretofore assumed. Our surface and GPR surveys both indicate that Lima occupations not only underlay the Site Museum, but also extended right up to the back of the Inkaic Mamacona Convent. Similarly, the GPR survey and a 3-m deep, 5 x 5m test excavation (T-2) at the base of the Urpay Wachak mound at the western edge of the site confirmed that this mound was an

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exclusively Lima construction (middle to final phases with an estimated date of A.D. 400-750). It appears that, at the end of the Early Intermediate Period, there were at least three Lima temples, i.e., Urpay Wachak, an un-named one below the Inkaic Sun Temple, and the Old Pachacamac or Lima Temple. These temples occupied the western and southern promontories overlooking the Urpay Wachak Lagoon, the Pacific, and the mouth of Lurin River, respectively, suggesting the importance of visual access to these bodies of water in locating the temples. The peculiar shape of the Old Pachacamac Temple with six protruding corners, we believe, represents a stylized *Spondylus princeps*, thereby reinforcing the above linkage with water.

Speaking of water, we will note briefly that the GPR survey also revealed the presence of at least two, large terraced pukios within the site; one some 140 m NE of the Urpay Wachak Temple and another close to the north end of the N-S Street. The latter is half-filled in with sand and Inkaic refuse and originally was some 3-4 meters deeper. A third *pukio* was found just north of the Pyramid with Ramp No. 1 that was cleared and reconstructed by Jiménez Borja. This *pukio* was largely filled in during the construction of the visitors' parking area. As noted above in reference to various key temples, we suspect these *pukios* also served to emphasize the critical symbolic linkage between the site and water.

The area that was most intensively surveyed by GPR is the Inkaic Pilgrim's Plaza, a rectangular area ca. 65 x 320m that was flanked on the south side by a platform housing an *ushnu*, which in turn was placed immediately in front of the Pachacamac Temple. This would have been "prime real estate" occupying much of what was arguably the most sacred zone of the site. The GPR survey and test excavation were intended to test the hypothesis that Plaza was a result of a large-scale Inkaic reconfiguration of the sacred landscape that buried many pre-Inkaic constructions.

The GPR survey results supported the hypothesis. Indeed, there are numerous constructions of varying density, size, and shape occupying much of the Plaza from less than 1 m to over 6 m below surface. We suspect the clustered constructions with relatively small partitions in the eastern half of the Plaza represent commoner's residences. The pattern and strength of signals from a spot in the eastern half may well be pyrotechnological features such as ceramic kilns, while small platforms with inset central chambers in the western half may be funerary structures.

The location our 5 x 5m test excavation was determined on the basis of GPR data and its spatial relationship to the aforementioned *ushnu* and the Pachacamac Temple. GPR indicated the presence of many superimposed deposits reaching over 6m below surface. The location was well suited to define the nature of occupation over a considerable span of time.

Our excavation reached a depth of only ca. 2 m below surface, due to the unexpectedly complex occupational history. We documented nine superimposed floor levels and 57 associated features and many *quincha* and adobe constructions that we infer to have spanned

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the final part of the Middle Horizon to the end of the Late Horizon with corresponding estimated dates of 1000 to 1533 CE.

Below the Plaza floor, we encountered over a meter of superimposed *quincha* constructions and associated occupational surfaces and abundant refuse and floor features. They were associated with LIP Ychsma ceramics and two C-14 dates of 540 ± 60 and 570 ± 50 B (CE 1300-1450 and 1300-1430; 2 sigmas). These LIP occupations were intensive and basically domestic in character. *Quincha* walls that demarcated rectangular rooms in the western half of our trench had been repeatedly rebuilt but, importantly, had maintained essentially the same orientations (ca. 30° west of the north), locations and dimensions (2.5 to 3.2 m to a side). Postholes and larger conical pits pockmarked associated floors. Some of these pits apparently served as toilets as they contained human feces. In general, much of the preserved floors had considerable quantities of fish bones and macrobotanical remains embedded in them, suggesting that remains from food preparation and/or consumption had been trampled over time.

The above picture of routine domestic activities must be seen together with primary and secondary context artifacts. Taken together, they point to nearby craft production, perhaps in part related to mummy bundle preparation. Evidence is strongest for weaving. In addition to a handful of broken and whole wooden needles, spindle weights in various stages of manufacture were recovered in abundance. They were made from body sherds of larger vessels and typically measured 5-7 cm in diameter and 7-12 mm in thickness, suggesting they were intended for working with relatively thick, coarse yarn. Some were rejects with apparent defects. The cloth and yarn fragments we recovered suggest that the primary fiber being spun was cotton.

Minute quantities of cinnabar and ochre paint were recovered in secondary contexts, as well as on the interiors of two shells. Just as intriguing as these shells was the discovery in other fill of a stone anvil and a number of hammerstones for metalworking. These discoveries seem disparate until we consider their broader context, including mortuary treatments seen in elite burials of the same period looted or excavated at Pachacamac, Purucucho-Huaquerones, and elsewhere on the central coast (e.g., Kaulicke 1997). Many mummy bundles have been found wrapped with layers of cotton cloth, with cinnabar-painted wooden or cloth faces and pectorals made with sheet metal pendants. During middle to late LIP, this area may have served as domestic quarters and refuse disposal areas of nearby weaving and metal workshops that produced, among other items, materials necessary for elite mummy bundles to be buried within the site.

Farther down in our excavation, at a level that corresponded to early LIP (estimated span of CE 1200-1300), this area appeared to have served as a setting for what we call "cántaro veneration and burials." By cántaro, we mean a large storage jar with short neck and flaring rim. One to three cántaros were carefully set upright or at a slant inside a specially built oval or rectangular enclosure (ca. 1.0 to 1.5 m across). Sometimes, the vessel was placed atop a tabular

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stone base at the center of the enclosure or even on a stone base covered with a decorated mat and cloth. The enclosing wall was built of carefully selected stones or shaped adobes, or a mix of both. The *cántaro* was gradually buried, at times with some offering placed inside and/or outside the vessel, with new course(s) added to the existing enclosure wall.

The observed variability in size, form, materials and manufacturing techniques of the ten enclosures and the associated *cántaros* suggest that distinct groups that shared certain basic beliefs conducted these burials and their subsequent care and/or veneration over a period of time. At the same time, there is one enclosure, which, even after the *cántaros* were completely buried, had new enclosure walls built atop the original one on at least three distinct occasions. This fact suggests that the symbolic significance of the loci where *cántaros* were buried persisted perhaps for several generations and that there was continuity in the social identity of the groups involved. The associated ceramics bridge early to late Ychsma.

But, what was the significance of the buried *cántaro*? Information derived from the 17th century “extirpation of idolatories” campaign offers plausible interpretations. In the Cajatambo region in the headwaters region of the Pativilca, there was a widespread cult focused on anthropomorphized feminine and masculine *cántaro* of different sizes and colors that represented the primogenial sister and brother (Duviols 1986:328-391). Another document again from the same region (Polia 1999:503-504) relates a similar adoration of ceramic vessels that were wrapped in llama hide or dressed as women and served as oracles that answered petitions and questions. One wonders if those who could not gain access to the oracle at the Pachacamac Temple made surrogate oracles using these *cántaro*. However suggestive the above information may be, this remains a speculative, analogy-based argument.

The above *cántaro* burials intruded into floors 1.8-2.0 meters below surface. An undecorated ceramic *ke-ro* was set in a cut in one of these floors together with a fetal llama body. Nearby, a partially exposed human burial appears to have been placed in a seated position facing the center of the Pachacamac Temple. These observations together with the presence of a few polychrome Epigonal style sherds argue for a terminal Middle Horizon date for these floors. We have a single associated C-14 date of 950±50 BP (CE 1000-1200; 2 sigmas). Deeper Middle Horizon and Lima levels still await our excavation.

Our combined GPR survey and test excavations also illuminated the nature and history of occupation in extensive sand-covered Sector III (ca. 850 m north-south x 1100 m east-west) located between the Second and Third Great Perimeter Walls. Since the days of Uhle, this area has been seen as the principal residential areas of pilgrims and service personnel during the Inka and Ychsma occupations of the site. In addition to a cluster of Inkaic adobe structures just east of the entrance to Sector II, some dozen low mounds of varying sizes and shapes as well as scatters of sun-bleached shells and other refuse were found along the south edge of the Sector and both sides of the North Street.

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GPR survey indicates that below these refuse scatters are one or two underlying compacted layers (floors?) down to a depth of perhaps a meter below surface. No substantial stone or adobe structures were found associated with them. On the other hand, the survey suggested that the low mounds that rise to a height of up to 2.5 m do have superimposed deposits and substantial constructions. We confirmed GPR indications in one 5x5m test excavation (T-4). Below ca. 1.5 m of a mixed LH deposit containing an impressive array of food, cloth and other organic and artifact remains, we encountered six superimposed floors and associated firepits, quincha walls as well as a wall segment made with recycled adobitos. One of the earliest floors in T-4 yielded a radiocarbon date of 580±50 BP (CE 1290-1430; 2 sigmas). It appears that what had been a modest LIP Ychsma residential structure was used as a refuse dump during the LH.

Another 5x5m test excavation (T-3) showed the presence of LH *quincha* domestic structures built close to the entrance to Sector II. The underlying remains of major LIP Ychsma constructions, together with GPR data, suggest that the Inka carried out a major reorganization of the entrance area but that in both Inka and Ychsma times, access to Sectors I and II was tightly controlled.

DISCUSSION AND CONCLUSIONS

It is quite apparent that the current vision of the site of Pachacamac has been overly shaped by ethnohistorical information and what is visible, i.e., late pre-Hispanic in date, monumental in scale, and religious and/or elite in nature. Our test excavations, in spite of their limited number and size, have effectively demonstrated that this is a highly skewed, static and simplistic vision. The Pilgrims' Plaza excavation, for example, illustrates not only the intensity and continuity of occupation probably spanning the EIP and LH, but also its dynamic, changing character. More extensive sampling may well show that in pre-Inkaic times the Plaza had a multi-functional character with coexisting residences, workshops, and ceremonial structures. Determination of the social identity and composition of the occupants there will require more extensive excavations, stylistic analysis and chemical characterization of artifacts, among other approaches. Eckhout's (2000) hypothesis of Pyramids with Ramps as Ychsma *kurakas*' palaces and mausoleums a la Chimú *Ciudadelas* raises the question of associated service activities and personnel. Excavations outside of these monumental enclosures as in the case of our test excavation in the Pilgrims' Plaza, we believe, will reveal their presence in various areas of the site, not all clustered in Sector III as has been thought. Overall, we need a much more holistic and dynamic perception and problem-oriented, extensive sampling to understand the social foundations of the site. In this regard, our GPR survey not only effectively demonstrated the value of the methodology in our research, but also provided us with a pool of promising areas for future excavations.

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