

## **A Brief Overview of the Proyecto Arqueológico Norte Chico**

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### Prelude

Our presentation of some project results in this webpage format is somewhat unconventional. It is not peer-reviewed, nor do we consider it formally “published”. There are fewer and fewer outlets today for the publication of field results, and fewer still venues for paper publications. Yet we believe we are ethically obliged to disseminate the results of our excavations and surveys, and this is an economical way to accomplish that objective. We are not waiting until the last bits of data are analyzed and synthesized, but have chosen to make parts available as they are complete. There will be new additions made on an annual basis. It is our explicit goal to write up the results of all excavations not otherwise published in journal or thesis format by ourselves and graduate students. In addition to reporting on individual excavation units, there will be cross-unit analyses of lithics, botanical remains, pollen, shell, other kinds of artifacts, and chronology. We welcome comments by email.

### Overview

The Proyecto Arqueológico Norte Chico (PANC) is a long-term project investigating the origins and development of emergent complex society on the coast of Peru. The project had its origins in a visit Haas and Creamer paid in 1999 to Dr. Ruth Shady Solis at the site of Caral in the Supe Valley of Peru. In addition to a tour of Caral, they briefly visited the nearby sites of Lurihuasi, Miraya, and Era de Pando, all in the Supe Valley. At the time, Shady was convinced that the Caral and the other sites were preceramic and dated to the 3<sup>rd</sup> millennium B.C. during what is generally called the Late Archaic Period in Peruvian archaeology (Shady 1997). There were, at that time, no radiocarbon dates to confirm the early occupation of Caral. In the course of that visit, Shady, Haas, and Creamer decided to pursue a loose collaboration that at least initially was designed to generate a suite of radiocarbon dates that would confirm the direct placement of Caral, and indirectly the other Supe Valley preceramic sites, in the regional chronology.

Creamer and Haas returned for a longer visit in 2000. Haas spent two months with Alvaro Ruiz, a student of Shady’s, investigating the other potentially early sites in the Supe Valley as well as looking for other preceramic sites in the neighboring valleys of Huaaura, Pativilca, and Fortaleza. At the end of the season, Creamer and Haas, working with Shady and her excavation supervisor, Marco Machacuay, extracted a series of suitable samples for radiocarbon dating. These samples were all taken from secure,

undisturbed locations previously excavated by Shady and Machacuay and focused on annual plant fibers, e.g. grasses, reeds and leaves. Creamer received a small grant from Northern Illinois University to process these samples and obtain dates. They were sent to three different radiocarbon laboratories to avoid possible lab bias. The results, ranging from  $3640 \pm 50$  to  $4090 \pm 90$  RCYBP, calibrated to 2020 to 2627 years B.C. (Shady, et al. 2001), thus confirming Shady's assessment of the early chronology of Caral.

Creamer, Haas, and Ruiz worked together again in 2001 with a small group of students. It was during that time that the project was given the title Proyecto Arqueológico Norte Chico (PANC) following the local reference to the four valleys of Huaura, Supe, Pativilca, and Fortaleza as the "Norte Chico" or "Little North". The team spent two months visiting sites, taking notes on known sites, taking measurements on sunken circular courts (resulting in a Master's Thesis for Theresa Chun [Chun 2003] and recording the locations of other sites in the Pativilca and Fortaleza valleys that had characteristics of the Late Archaic (monumental architecture and lack of ceramics on the surface or in visible cuts in disturbed areas. All of these sites had been recorded earlier but had not been identified as Late Archaic by earlier researchers in the area (Williams and Merino 1979; Vega-Centeno, et al. 1998).

The first major field seasons of PANC in 2002 and 2003 were supported by a grant from the National Science Foundation as well as private funding sources. In 2002, seven sites were targeted for testing in the Pativilca Valley: Huayto, Pampa San Jose, Punta y Suela, Upaca, Vinto Alto, Carretería, and Potao (see Creamer, et al. 2007; Ruiz, et al. 2008 for a comprehensive report on these excavations). In 2003, six sites were targeted for testing in the Fortaleza Valley: Porvenir, Caballete, Cerro Blanco 1, Cerro Blanco 2, Huaricanga, and Shaura (see Creamer, et al. 2013). All of these sites had been identified in 2001 as having potential for belonging to the Late Archaic Period between 3000 and 1800 B.C. The primary characteristics were a dearth of ceramics on the surface and in cuts left by looters or construction, the presence of *shicra* bags (loose woven bags of reeds used to hold cobble-sized stones (Asencios 2009), and large-scale communal architecture constructed out of either river cobbles or quarried volcanic rock. Four of the Pativilca sites - Carretería, Punta y Suela, Pampa San Jose, and Upaca - and five of the Fortaleza sites - Porvenir, Caballete, Cerro Blanco 2, Huaricanga, and Shaura - also had sunken circular courts. Such courts are a prominent feature at Caral and other sites in the Supe Valley, though not definitive of the Late Archaic.

At each of these sites, multiple testing strategies were pursued. Test pits, 1X2 m, were situated in places where there were indications of subsurface trash deposits. Existing looters pits or trenches were scraped, cleaned and profiled. New trenches were excavated into the sides of communal architecture to reach lower and earlier construction phases. The two primary objectives of these excavations were to obtain suitable material for radiocarbon dates and samples of domestic trash that would reflect diet and native environment. Where possible, annual plant fibers were submitted for analysis, though 20 of the 93 samples processed were charcoal fragments. A total of 93 radiocarbon dates were obtained from the 13 sites and these dates confirmed that 12 of them were constructed and occupied in the Late Archaic Period. Only the site of Potao fell outside the range of 3000 to 1800 B.C. with a single date with a calibrated weighted average of

1480 calBC. Again, three different laboratories were used to process the samples to avoid any possible lab bias. Significantly, the labs all delivered comparable results. (See Creamer, et al. 2007, 2013, for further information.)

In 2003, with private funding from PANC, the Field Museum entered into an agreement with Universidad Peruana Cayetano Heredia (UPCH) to outfit and implement a pollen laboratory equipped for the processing and identification of prehistoric pollen samples. The laboratory director, Luis Huamán Mesía, is the foremost expert on the pollens of Peru. Huamán traveled to the United States for training in the extraction and analysis of prehistoric pollen at the laboratory of Vaughn Bryant at Texas A&M University, a leading palynological laboratory in the US. Huamán also visited the Field Museum in Chicago to make collections of pollen samples from the extensive Peruvian plant collections made by Michael Dillon, Botany curator at the Museum. The UPCH laboratory was expanded over the years to include analysis of coprolites, starch grains, phytoliths, macrobotanical remains, fish bones, and shell. Due to the diligence of Huamán it stands today as one of the top biological/archaeological laboratories in South America. Comprehensive presentation and analysis of pollen results will be presented in the future on this web page. Preliminary analyses have been presented in Haas, et al. 2013.

The PANC team initiated new excavations, under the direction of Creamer, Haas and Manuel Perales Munguía, at the site of Caballete in the Fortaleza Valley in 2004 with private funding. Caballete is one of the largest Late Archaic sites in the Norte Chico region and also one of the best preserved. There are relatively small looting holes in several of the platform mounds, and an unsuccessful attempt to irrigate an area of several thousand sq m disturbed the surface with mechanized plowing. Caballete was targeted for more extensive excavations mainly because of the wide diversity of architecture visible on the surface and its comparatively undisturbed condition. The primary objective of these excavations was to come to a better understanding of the relationship between surface indications and subsurface remains and architecture. Two different 5 X 5 meter units were opened and 5 additional 1 X 2 meter test units were excavated. These latter test pits are described in Creamer, et al. 2013. The two 5 X 5s were not completed until the 2006 season and are to be reported in the future.

2004 also marked the initiation of a systematic survey of archaeological sites in the Huaura, Pativilca and Fortaleza Valleys. The Supe Valley had previously been surveyed by Williams and Merino (1979) and resurveyed by Shady (1997). The PANC surveys has a dual purpose: specifically to insure the identification and location of all Late Archaic sites in the Norte Chico; generally record the location and characteristics of all prehistoric and historic sites in these three valleys to allow for a general reconstruction of the history of occupation of the Norte Chico region from the time of the first immigrants to the Colonial Era. The Huaura Valley was surveyed in 2004 and 2005 under the direction of Kit Nelson and Alvaro Ruiz with support from a National Geographic grant to Haas as well as private funds. The Pativilca valley was surveyed in 2005 and 2006 and the Fortaleza Valley was surveyed in 2006 and 2007 both under the direction of Manuel Perales. Nathan Craig and Nicholas Tripcevich played central roles in developing the strategy for digital recording of all sites, mapping each site using ArcMap and Trimble

submetric GPS recorders, and pinpointing each site and archaeological feature on GIS registered aerial photographs using these same tools. Post-processing correction of GPS data was provided by a GIS base station established at the PANC headquarters in Barranca. 534 sites were recorded in the Fortaleza Valley, 449 sites in the Pativilca Valley and 555 sites in the Huaura Valley. Specific data on all three surveys is available through project reports filed with the Instituto Nacional de Cultura, now incorporated into the Ministerio de Cultura (Nelson and Ruiz 2005; Perales 2006, 2007). (English language versions of these reports will be posted on this website in the future. The data are available on request to qualified researchers on the Registro Nacional de Arqueólogos of Peru.)

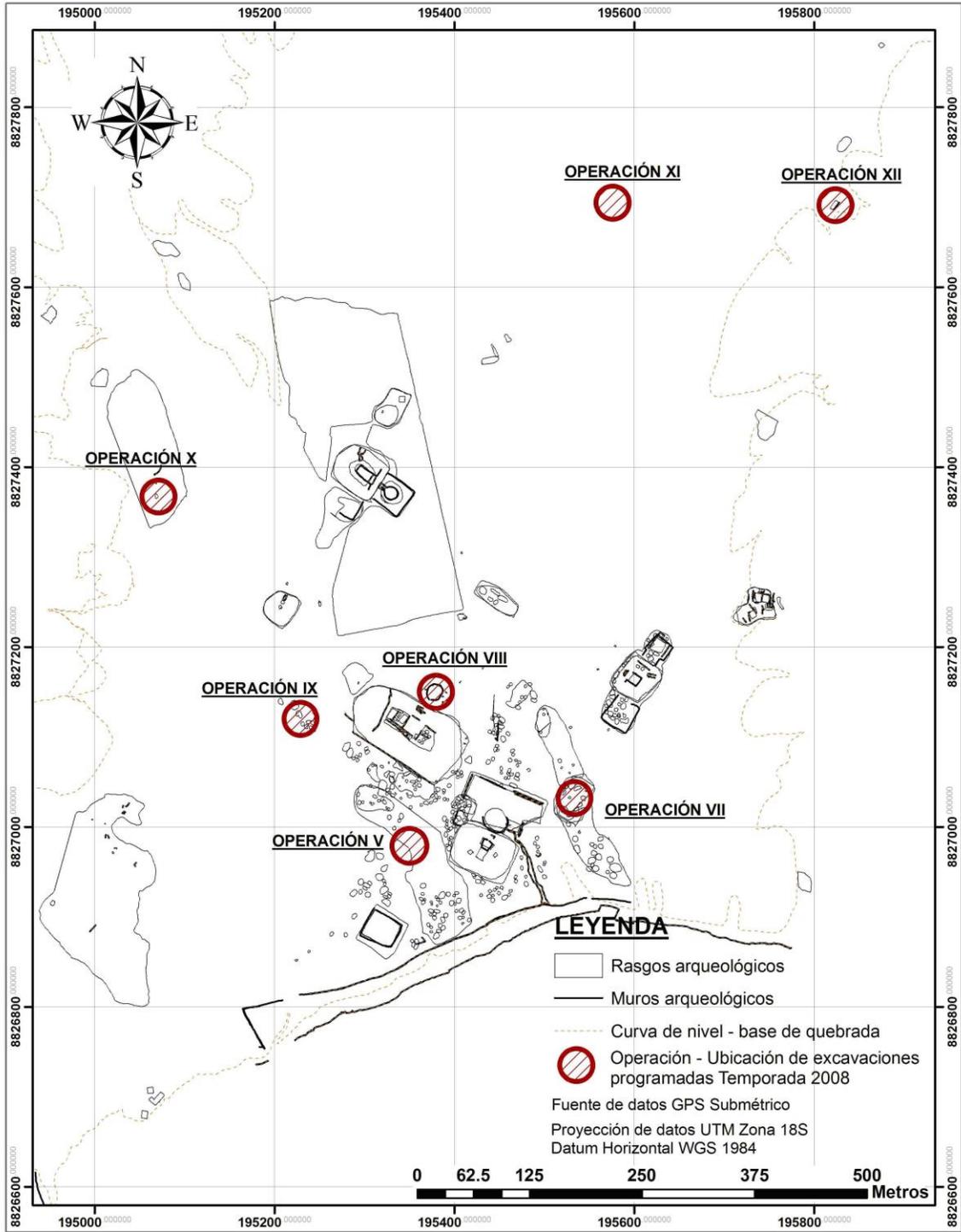
The next excavation field season was 2006 when the PANC team returned to Caballete with a grant from the National Science Foundation. The purpose of this grant was to look at variability in residential architecture as one measure of cultural complexity in the Norte Chico region. This year also marked a shift in excavation classification by the PANC team. Previously, the larger sites had been divided into general sectors - A, B, C, etc. – with test units within these sectors. However, upon further work at the sites, it was concluded that “sectors” could not be clearly defined by objective criteria. In place of this sectorization of the sites, individual excavation units were each identified by an Operation number - I, II, III, etc. – and each Operation had its own internal numbering sequence for layers, levels, walls, floors, features and such. In the 2006 excavations work continued on the two 5 X 5 m operations (Ops I and II) initiated in 2004; an additional 5 X 5 m operation (Op. IV) was excavated outside the northern edge of the central plaza area.

This area was selected as being representative of a vast area extending out to the north from the central zone of monumental architecture. The area is marked by a light scatter of sea shells (clams, mussels, limpets, etc.) and lithics, and the Operation was excavated to determine the nature of subsurface occupation (if any) beneath this light surface scatter of cultural material. The results of the excavation, reported in Wulffen 2009, showed that there were multiple layers of ephemeral occupations below the surface characteristic of temporary campsites with small hearths, floor surfaces, post holes, and signs of wattle and daub structures. Operations I and II, initiated in 2004, were taken down to sterile soil in 2006 and will be reported in a future report. One distinctive discovery came from Op I, where at the lowermost level, Capa 3, Niveles 9c and 9e, two samples of annual plant fibers (leaves) returned radiocarbon dates of 5303± RCYBP, 4100 CalBC (AA84546) and 5271 RCYBP, 4140 CalBC (AA84547). Pollen from Nivel 9 included molle, cotton, possibly beans, and a single pollen grain of maize. Neither of these two dates is associated in any way with the monumental constructions at the site; however, the significance of these two dates is that they clearly indicate there were people settled at the site of Caballete at the beginning of the 5<sup>th</sup> millennium B.C. Excavations in Operation VI opened up an extensive area of what appeared on the surface to be a separate, distinct and formally laid out residential complex. (See Winker 2011 for an analysis of Op VI.) On the south side of the principal platform mound there is a large area (approximately 200 X 150 M) of irregular surface with what appear to be walls, platforms, and room outlines. To assess the subsurface architecture a 5 X 5 area, Operation V, was opened up in 2006. This first season revealed the predicted series of walls, enclosures, formal and informal

floors, hearths and domestic refuse. Op V was expanded in 2008 and will be reported on in the future.

PANC shifted focus in 2007 from Caballete to Huaricanga another very large site 23 km inland in the Fortaleza Valley. Under the same grant from the National Science Foundation and private funding, three extensive areas were investigated. One, Operation II, was in the north side of the west end of the main mound. This excavation revealed a circular plaza with a sequence of carefully prepared floors, previously unidentified. Operation VI was at the far northern edge of the site just before the cut of a large historic arroyo or “huaico”. This area had one small platform mound cut by erosion and a large area of low rubble and apparent evidence of walls and enclosures. Operation VI exposed an area of 229 sq m and uncovered a complex of clearly lower status residences with quincha (wattle and daub) walls, simple mud and stone walls, informally prepared floors, hearths, “pachamancas” (hot stone cooking pits or earth ovens) and domestic trash. Operation VII was placed on top of a low mound which had been transected by a modern irrigation canal that revealed a cross section of stone and clay walls and a sequence of carefully prepared floors. Excavation on top of this mound identified two large room complexes that bore the hallmarks of Kotosh temples that have been found in Late Archaic and Initial Period sites in the highlands immediately to the east of the Norte Chico. Fiber samples dates taken from floors in the profile of the mound yielded radiocarbon dates of 2400 and 2500 calBC, earlier than existing dates for highland temples. Additional excavations in this mound complex were conducted independently by Matthew Piscitelli and published in his dissertation (2014). Intrusive Initial Period and Early Horizon burials found in Ops II and VII as well as an intrusive Early Horizon burial found at Caballete were reported on by Bazan (2012).

The final season of PANC returned to Caballete to continue excavation of Op V, and open new Operations – IX and X – outside the great plaza area surrounded by the mounds, Op VII was situated adjacent to one of the smaller mounds in the main U-shaped complex and Op XI was a small test pit excavated in an area cut by modern construction where it appeared there might be trash predating the Late Archaic. Operations VII, IX and X are reported here.



**OPERACIÓN X**

**OPERACIÓN XI**

**OPERACIÓN XII**

**OPERACIÓN IX**

**OPERACIÓN VIII**

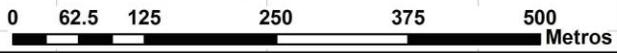
**OPERACIÓN VII**

**OPERACIÓN V**

**LEYENDA**

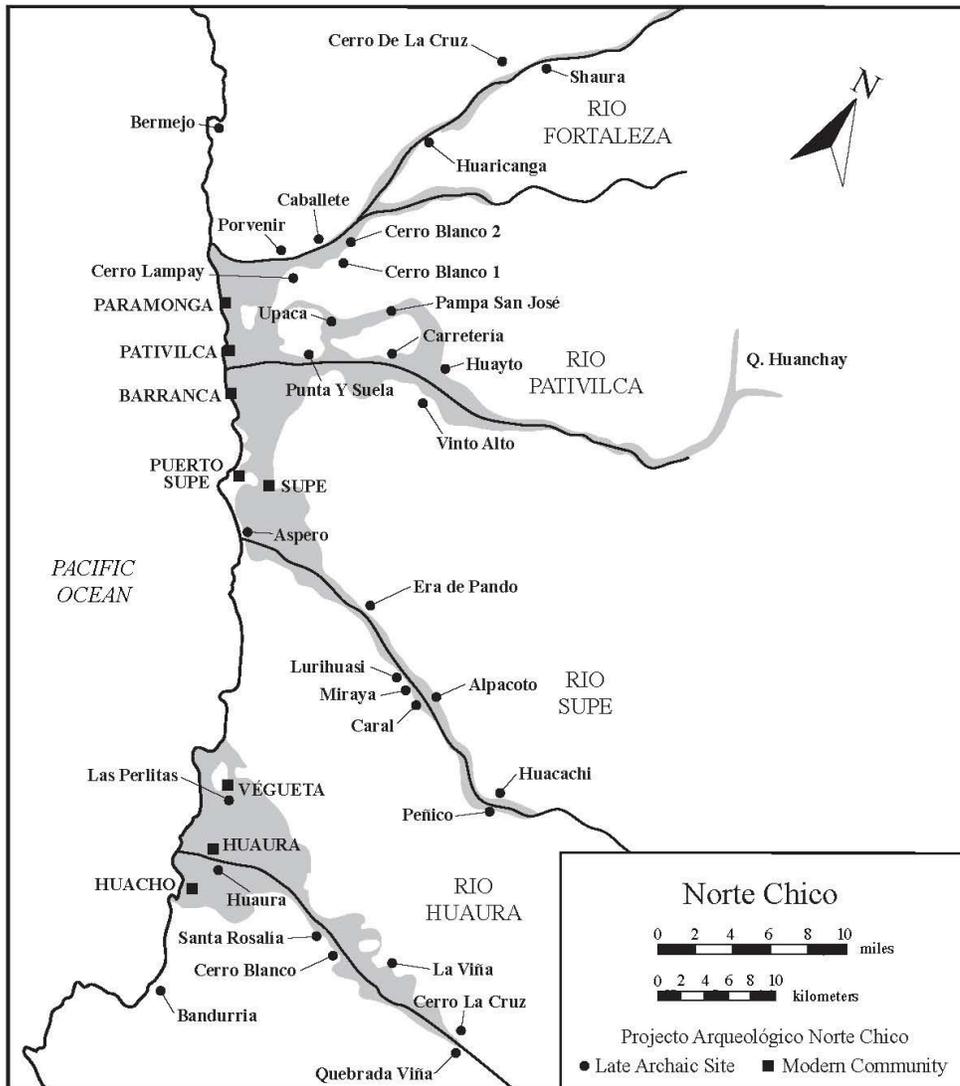
-  Rasgos arqueológicos
-  Muros arqueológicos
-  Curva de nivel - base de quebrada
-  Operación - Ubicación de excavaciones programadas Temporada 2008

Fuente de datos GPS Submétrico  
 Proyección de datos UTM Zona 18S  
 Datum Horizontal WGS 1984



## Context

The results of the PANC surveys and excavations are enhancing our understanding of how and why complex polities first arose in the Andean region. One area where there seems to be the most resistance to change is in the acceptance that the Late Archaic occupation of the Norte Chico region was not only vastly different from any other Late



Archaic occupation in the Andes, but that it was different from any of the later polities that evolved out of these early roots. All polities in the Andean region from Tiwanaku in the South to Lambayeque in the north can historically trace their roots back to the Norte Chico. Amongst the 1500+ sites recorded in the Huaura, Pativilca, and Fortaleza valleys the teams recorded a total of 22 Late Archaic sites with large scale communal architecture: 7 in Huaura, 6 in Pativilca, 9 in Fortaleza. These 22 sites, coupled with 8 sites in the Supe Valley that have either radiocarbon dates or classic Late Archaic characteristics, establish that **there were at least 30 sites in this one small cluster of valleys that were occupied between 3000+ and 1800 years B.C.** We emphasize this number as it is being systematically ignored in the current literature on Andean archaeology. Publications are making note only of the presence of Caral, Aspero, and perhaps one or two other sites in the Supe Valley. None, however, are acknowledging a pattern that is extraordinary and unique in Andean prehistory. In a space of time lasting over 1200 years – longer than any of the later horizons and intermediate periods – there were 30 sites with remarkably similar styles of large-scale architecture and ritual spaces all clustered in four small valleys on the north central coast of Peru (See Map 1). To our knowledge, such a pattern of a dense distribution of sites with public architecture in such a small area doesn't exist elsewhere in Peru, nor in any other world area as well. There is broad significance to this pattern in that much of Peruvian archaeology is “site-based”, meaning that time periods, cultures, horizons, and similar concepts are discussed mostly in terms of individual sites, e.g. Chavín de Huantar, Cahuachi, Caballo Muerto, Chan Chan, Tiwanaku, Cerro Baul, Caral, Kotosh, etc. This is not an unreasonable approach when considering more complex polities with regional centers, capitals, states and such. But it does not work with a decentralized system such as that found in the Norte Chico. Despite unsupported proclamations to the contrary, there is no scientific evidence that Caral was the capital of a “Caral-Supe” state, or that there was a lord of the valley who ruled over a wide domain. Caral was not the largest of the Late Archaic sites in the Norte Chico, nor did it have the largest volume of monumental architecture. There are equally large and monumental sites in the adjacent valleys of Huaura, Pativilca and Fortaleza and a singular lack of any evidence that there was any kind of political centralization either within or across valleys (Creamer, et al. 2014; Haas and Creamer 2006, 2012). It may be convenient to ignore the cluster of Late Archaic sites in the Norte Chico, but it will never be possible to understand the early development of civilization in the Andean region without considering this unique interwoven emergent phenomenon.

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