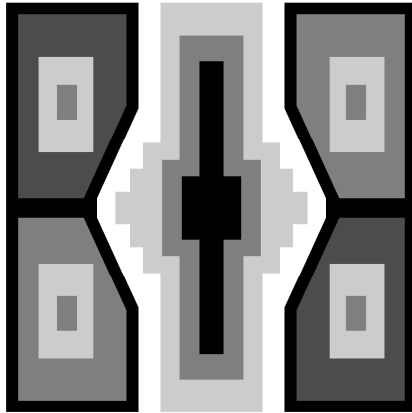


INSTITUTE
of
ANDEAN STUDIES



55th
Annual Meeting

JANUARY 9-10, 2015
BERKELEY, CALIFORNIA

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(1918–2004), who founded it in 1960.*

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Friday, January 9th

FRIDAY MORNING 8:30-9:15

Registration

FRIDAY MORNING 9:15-11:30

Session chair: ERIK MARSH, *CONICET. Laboratorio de Paleo-Ecología Humana, Universidad Nacional de Cuyo, Mendoza, Argentina*

CHRISTINE A. HASTORF, *University of California Berkeley*; MARIA BRUNO, *Dickinson College*; RUTH FONTENLA, *Universidad Mayor de San Andres*; GEOFFREY TAYLOR, *University of California, Berkeley*

The continuing debate of raised fields: a study at “Formative” Chiripa on the Taraco Peninsula, Bolivia

SARA L. JUENGST, *University of North Caroline, Chapel Hill*

Long-distance travelers in the Titicaca basin during the Formative Period

Break 10:15–10:30

ABIGAIL LEVINE, *Cotsen Institute of Archaeology, University of California, Los Angeles*

A new model for early complexity in the northern Lake Titicaca basin, Peru

CHARLES R. ORTLOFF, *CFD Consultants International, Ltd. and University of Chicago*

The BCE 300–1100 CE Tiwanaku perimeter canal: its dual ceremonial and hydrological function

FRIDAY AFTERNOON 1:00-1:45

Poster session, Wurster Hall foyer

FRIDAY AFTERNOON 1:45-5:15

Session chair: ABIGAIL LEVINE, *Cotsen Institute of Archaeology, UCLA*

NICOLE M. SLOVAK, *Santa Rosa Junior College*

Cranial modification and shifting identities at Ancón, Peru

LIZ GONZALES RUIZ, *Independent Scholar*

Nuevas propuestas sobre el uso de las cabezas humanas aisladas halladas en el sitio arqueológico de Cahuachi, Nasca-Perú

Break 2:45–3:00

PETER R. FUCHS, RENATE PATZSCHKE, *Institute of Prehistoric Archaeology, Free University of Berlin*; JESUS BRICENO, *Ministerio de Cultura, Trujillo*

From the Archaic to the Formative: monumental architectural tradition at Sechin Bajo, Casma, Peru

JEFFREY QUILTER, *Peabody Museum of Archaeology & Ethnology, Harvard University*

Chronology, climate, and culture change on the North Coast of Peru: A reevaluation

Break 4:00–4:15

BRIAN R. BILLMAN, *MOCHE, Inc. and University of North Carolina-Chapel Hill*; JESÚS BRICEÑO ROSARIO, *ICPAC and El Ministerio de Cultura, Perú*; JULIO RUCABADO-YONG, *Pontificia Universidad Católica del Perú and MOCHE, Inc.*

New light on the Late Moche phase in the Moche Valley: results of recent excavations and settlement pattern analysis

GABRIEL RAMON, *Pontificia Universidad Católica del Peru and Leiden University*

Potters from the *puna*: reconsidering the evidence

FRIDAY EVENING 5:30

Annual Business Meeting (IAS members only)

Saturday, January 10th

SATURDAY MORNING 8:30-9:15

Registration

SATURDAY MORNING 9:15-11:30

Session chair: NICOLE M. SLOVAK, *Santa Rosa Junior College*

ANN POLLARD ROWE, *George Washington University Museum and The Textile Museum, Washington, D.C.*

Defining the beginning of the Chancay textile style

GRACE KATTERMAN, *California Institute for Peruvian Studies (CIPS)*

Tunics, cloaks and loin cloths: male style and design at South Coastal Inca outposts

Break 10:15–10:30

ANN PETERS, *Consulting Scholar, University of Pennsylvania Museum of Anthropology and Archaeology*

Paracas Necropolis: “outsider” textiles

DAWN LOHNAS, *Brooklyn Museum*; ELLEN HOWE, *Metropolitan Museum of Art*; JUDITH LEVINSON, *American Museum of Natural History*; ADRIANA RIZZO, FEDERICO CARÒ, *Metropolitan Museum of Art*

A technological study of post-fire painted Paracas ceramics

SATURDAY AFTERNOON 1:00-1:45

Poster session, Wurster Hall foyer

SATURDAY AFTERNOON 1:45-5:15

Session chair: JUSTIN JENNINGS, *Royal Ontario Museum*

MARIUSZ ZIÓŁKOWSKI, *Centre for Precolumbian Studies, University of Warsaw*;
JAROSLAW ARABAS, *Institute of Electronic Systems, Warsaw University of Technology*

From image to statistics: recent studies on “tocapus” signs

MARIO A. RAMOS VARGAS, *Proyecto Integral Huaycán de Cieneguilla, Proyecto Qhapaq Ñan – Sede Nacional, Ministerio de Cultura, Peru*

Hallazgo singular de un grupo de quipus Inca en Huaycán de Cieneguilla, Costa Central de Perú

Break 2:45–3:00

BILL SILLAR, *Institute of Archaeology, University College London*; MELISSA CHATFIELD, *Santa Barbara Trust for Historic Preservation*; ROB IXER, SARA LUNT, *Institute of Archaeology, University College London*; GORDON MCEWAN, *Wagner College*; DENNIS OGBURN, *University of North Carolina, Charlotte*

Becoming empire: social, economic and material changes at the start of Inka imperial expansion

RODOLFO MONTEVERDE SOTIL, *Pontificia Universidad Católica del Perú*

Esculturas zoomorfas y ritualidad Inca en el Cuzco-Perú

Break 4:00–4:15

VERÓNICA ISABEL WILLIAMS (IAS 2015 TRAVEL GRANTEE), *National Council of Scientific and Technological Research (CONICET) / University of Buenos Aires*

Social landscape during Inca dominion in Northwest Argentina

LARRY COBEN, *University of Pennsylvania*

Conquest, incorporation or...? The Inka, the Huarco and the Canete valley

SATURDAY EVENING 8:15 (Open to the public)

HENRY TANTALEÁN, *Escuela Superior Politécnica del Litoral*; CHARLES STANISH, *Cotsen Institute of Archaeology, University of California, Los Angeles*

The ritual offerings in the sunken patio at Cerro del Gentil, Chincha

SATURDAY EVENING 9:15

President's reception, Archaeological Research Facility

POSTERS

Posters will be on display throughout the conference in the Wurster foyer. Poster authors will be available between 1:00 pm and 1:45 pm daily.

HANS BARNARD, *Cotsen Institute of Archaeology, University of California, Los Angeles*;
AUGUSTO CORDONA ROSAS, *Centro de Investigaciones Arqueológicas de Arequipa, Peru*;
MARÍA CECILIA LOZADA, *University of Chicago*

Wari presence in the Vitor Valley (Arequipa, Peru)

CHRISTIANE CLADOS, *Philipps University Marburg*

Beyond music: non-musical uses of music instruments in Paracas and Nasca iconography

JAMES DAVENPORT, *University of New Mexico*

Provisioning state-sponsored ceremonies in the provinces: neutron activation analysis of Inka and pre-Inka ceramics from the Temple of the Sun, Pachacamac

GIACOMO GAGGIO, PAUL S. GOLDSTEIN, *University of California, San Diego*

The role of plants in a Tiwanaku temple: results of a paleoethnobotanical analysis from Omo M10, Moquegua, Peru

AGNES AIKO HORIMOTO, GUILLERMO CAMPOS, WOON MAN TANG, ALEXEI VRANICH, *University of California, Los Angeles*

Reconstructing architecture through 3D printing

JASON KJOLSING, PAUL S. GOLDSTEIN, *University of California, San Diego*

Coastal resources at an inland temple: analysis of the marine assemblage of the Tiwanaku Omo Temple

KARL LA FAVRE, *University of California, Los Angeles*

A late prehispanic ceremonial-mortuary landscape in the eastern slopes near Lake Titicaca

GUIDO LOMBARDI, ALCIDES RICARDO ALVAREZ VERA, TERESA HOGAN, MORGAN DREESBACH, JENNIE GREGORY, TYREL SORESENSEN, JEREMIAH CAMP, *Metropolitan State University of Denver*

Evidence for undocumented cultural occupations in the Lurin-Rimac divide

GUIDO LOMBARDI, ALCIDES RICARDO ALVAREZ VERA, KATYA VALLADARES, AARON BURCH, HEATHER HILL, TYREL SORESENSEN, TERESA HOGAN, MORGAN DREESBACH, JEREMIAH CAMP, LEAH SWETT, *Metropolitan State University of Denver*

Architecture in the CA8 complex of Huaycán de Pariachi: reflections of cultural interactions on the central coast

JULIA LONGO, *MOCHE, Inc.*; CYRUS BANIKAZEMI, *University of North Carolina, Greensboro*; BRIAN BILLMAN, *University of North Carolina, Chapel Hill*; PATRICK MULLINS, *University of Pittsburgh*

Modern settlement patterns and site preservation in the Middle Moche Valley

ERIK J. MARSH, *CONICET, Laboratorio de Paleo-Ecología Humana, Universidad Nacional de Cuyo, Mendoza, Argentina*

Accelerating history in the Lake Titicaca basin: the rapid emergence of agropastoralism and the state

LAURA G. MARSH, *Stanford University*

Examining variability and provenance through ceramic petrography at Chavín de Huántar

SHAINA MOLANO, *University of California, Merced*; REBECCA BRIA, *Vanderbilt University*

Exploring variation in cranial modification at Hualcayán, Ancash highlands, Peru

LUIS MURO, NICHOLAS BROWN, *Stanford University*

Community archaeology at San José de Moro, Peru

COLLEEN O'SHEA, *State University of New York, Buffalo*; JACOB BONGERS, *University of California, Los Angeles*; HENRY TANTALEÁN, *Escuela Superior Politécnica del Litoral*

Conserving and interpreting two bird pendants from the mid-Chincha Valley, Peru

EMILY A. SHARP, *Arizona State University*; REBECCA E. BRIA, *Vanderbilt University*

An analysis of trepanned crania in highland Ancash, Peru

MATTHEW SITEK, PAUL S. GOLDSTEIN, *University of California, San Diego*

Preliminary research at the site of Cerro San Antonio in the middle Locumba Valley, Peru

MACIEJ SOBCZYK, *Centre for Pre-Columbian Studies, University of Warsaw*

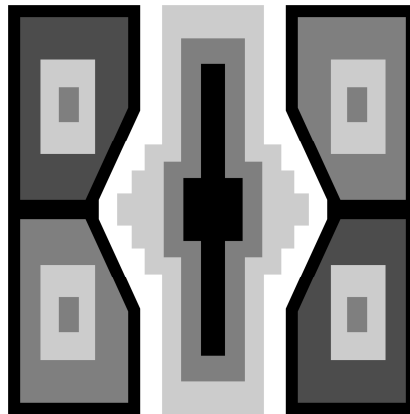
Maucallacta – an Inca ceremonial center in Cuntisuyu

SADIE WEBER, *Harvard University*

Feeding the gods: microbotanical analysis at Chavín de Huántar

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~ *Abstracts* ~



55th
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Friday, January 9th

CHRISTINE A. HASTORF, *University of California Berkeley*; MARIA BRUNO, *Dickinson College*; RUTH FONTENLA, *Universidad Mayor de San Andres*; GEOFFREY TAYLOR, *University of California, Berkeley*

The continuing debate of raised fields: a study at “Formative” Chiripa on the Taraco Peninsula, Bolivia

Several studies of raised fields in the Lake Titicaca Basin have debated the scale, date, produce and political authority of these intensive agricultural systems. In 2013 the Taraco Archaeological Project revisited the raised fields southeast of the Chiripa settlement and part of the larger sacred landscape of the site. While the site is known as an important Formative place, the absolute dates of the fields are later, suggesting that this part of the agricultural landscape was not only small-scale but post-Tiwanaku in age. On-going micromorphological studies will also shed light on what was produced in them.

SARA L. JUENGST, *University of North Carolina, Chapel Hill*

Long-distance travelers in the Titicaca basin during the Formative Period

The Formative Period (1500 BC-AD 200) in the Titicaca Basin of Peru and Bolivia was clearly a transformative time, shown by the domestication of plants and animals, creation of long-distance trade routes, and the emergence of a regional ritual tradition, Yaya-Mama. Less clear is these economic changes impacted the social relationships of lake basin residents. I tested burials from four temples on the Copacabana Peninsula for strontium isotopes in order to determine where people lived prior to death. I found four outlying individuals, indicating early long-distance movement around the Andes, perhaps connected to the emergence of the Yaya-Mama Religious Tradition.

ABIGAIL LEVINE, *Cotsen Institute of Archaeology, University of California, Los Angeles*

A new model for early complexity in the northern Lake Titicaca basin, Peru

Taraco was a major regional center in the northern Lake Titicaca Basin during the Formative Period (ca. 1300 BC-AD 400). Excavations in 2013 focused on Sector I, a sunken court site adjacent to the principal mound. Results suggest that the earliest public activities in the area centered around communal craft production—specifically intensive lithic production—which likely had a ritual or ceremonial character. These cooperative behaviors were ultimately formalized in the sunken court complex built during later phases. The results further indicate that the earliest use of ceramics in the Basin may be later in time than originally believed.

CHARLES R. ORTLOFF, *CFD Consultants International, Ltd. and University of Chicago*

The BCE 300–1100 CE Tiwanaku perimeter canal: its dual ceremonial and hydrological function

Acquisition of 1930's Tiwanaku aerial photographs reveals new details of surface canal systems intersecting the perimeter canal surrounding the city's ceremonial core. From aerial photographs, excavation data and GE imagery, knowledge of the entirety of Tiwanaku's water system now permits investigation of the hydrological function of the perimeter canal and its interconnected surface/subterranean canals. CFD calculations indicate the perimeter canal collected/draind rainy-season runoff, promoted rapid ground drying through aquifer seepage/drainage to the nearby Tiwanaku River and provided canal flushing-water to subterranean piping draining Putuni structures. Wet-season surface/aquifer drainage into/from the perimeter canal and dry-season spring fed canal and seepage flow into the canal stabilized the deep groundwater level providing foundation stability limiting structural settling/distortion of the Akapana and core structures. Beyond its ceremonial function, the perimeter canal was the hydrological linchpin regulating water supply/drainage to maintain Tiwanaku's hygienic, monument structural stability and interior-city agricultural areas.

NICOLE M. SLOVAK, *Santa Rosa Junior College*

Cranial modification and shifting identities at Ancón, Peru

Cranial modification, the practice of modifying the human skull during infancy to achieve a desired form, has a long and varied history in the Andes. This paper explores the absence and subsequent presence of cranial modification among a sample of Middle Horizon individuals from Ancón, Peru. The appearance of this form of bodily modification in the latter half of the Middle Horizon potentially suggests a renewed emphasis on coastal group identity and affiliation and a reestablishment of coastal connections between Ancón and its neighbors toward the end of the Middle Horizon.

LIZ GONZALES RUIZ, *Independent Scholar*

Nuevas propuestas sobre el uso de las cabezas humanas aisladas halladas en el sitio arqueológico de Cahuachi, Nasca-Perú

El objetivo de esta investigación fue ofrecer nuevos aportes sobre el uso de las llamadas “Cabezas Trofeo”, sustituyendo dicho término por el de “Cabezas Humanas Aisladas” (CHA). Usando evidencias arqueológicas contextualizadas, bioantropología e iconografía, así como fuentes etnohistóricas y etnográficas se ha intentado reconstruir la concepción de la muerte de la sociedad Nasca (época Temprana) que ocupó Cahuachi. La importancia del sacrificio humano para la regeneración cósmica (medio ambiente), la cacería humana y las batallas rituales como actos consensuados por los grupos intervalles de esta misma sociedad, la concentración masiva cíclica en los espacios públicos y la administración de la muerte como fuente de poder para legitimar el dominio político-religioso centralizados en Cahuachi.

PETER R. FUCHS, RENATE PATZSCHKE, *Institute of Prehistoric Archaeology, Free University of Berlin*; JESUS BRICENO, *Ministerio de Cultura, Trujillo*

From the Archaic to the Formative: monumental architectural tradition at Sechin Bajo, Casma, Peru

Recent investigation in Sechin Bajo resulted in the discovery of a building tradition of more than 2000 years, evidencing a sequence of four constructions, supported by more than 50 radiocarbon dates. The First Building, a simple platform that underwent several extensions and additions of several Circular Sunken Plazas was erected and used over more than 600 years during the Fourth Millennium B.C. and subsequently backfilled and built over by a Second Building, expressing a change in size, building techniques, function and use. The filling of an earlier construction represents a “Temple Entombment”, documented years ago at Kotosh and other sites in northern Peru. A Fourth Building, representing the most monumental construction of the sequence was erected on top of a Third Building in another process of “Temple Entombment” attended by extensive feasting. This last building demonstrates the most elaborated architecture and walls decorated with clay-reliefs exhibiting a complex iconography.

JEFFREY QUILTER, *Peabody Museum of Archaeology & Ethnology, Harvard University*

Chronology, climate, and culture change on the North Coast of Peru: A reevaluation

The collapse of the Moche state under environmental stress was a keystone for interpreting culture change in much of Peru for decades. Recently, however, the abandonment of the (Larco) relative dating system and other reevaluations has undermined the concept of a Moche state. This paper explores these issues and focuses on the third leg of the theoretical model – the evidence for climatic events and their timing and impact on societies on the North Coast as explored by The Peru Human Ecodynamics Project. As might be expected, the more we know, the more complicated our picture of the past becomes.

BRIAN R. BILLMAN, *MOCHE, Inc. and University of North Carolina-Chapel Hill*; JESÚS BRICEÑO ROSARIO, *ICPAC and El Ministerio de Cultura, Perú*; JULIO RUCABADO-YONG, *Pontificia Universidad Católica del Perú and MOCHE, Inc.*

New light on the Late Moche phase in the Moche Valley: results of recent excavations and settlement pattern analysis

Is the Late Moche phase a valid time period? Were the sites of Moche and Galindo contemporary throughout most of their occupation? What happened during the AD 800s and 900s on the north coast of Peru? We present a new look at this crucial period through the analysis of radiocarbon dates, Moche Valley settlement pattern data, and recent rural household excavations. Analysis of these new data indicates a dramatic shift in population to fortified settlements in the middle valley in the Late Moche phase after the abandonment of Huaca de la Luna. Recent revisionist reconstructions are not consistent with these new data.

GABRIEL RAMON, *Pontificia Universidad Católica del Peru and Leiden University*

Potters from the puna: reconsidering the evidence

The puna is the highest altitude zone regularly inhabited by humans in the Andes. Historically, puna people have been considered pastoralists. Given the mobile nature of the livelihood of many puna residents, they are rarely associated with pottery production. Therefore, within puna archaeology, the potential for pottery manufacture has been particularly neglected. However, a growing corpus of evidence is showing that ceramics have been produced at this high ecological level. This presentation reviews the archaeological and ethnographic evidence of potters from the puna, focusing on key cases to show that in the Andes pottery production at those high altitudes is not exceptional but one of the many subsistence strategies used by puna people.

Saturday, January 10th

ANN POLLARD ROWE, *George Washington University Museum and The Textile Museum, Washington, D.C.*

Defining the beginning of the Chancay textile style

Chancay-style textiles are more abundantly preserved than any other archaeological Peruvian textile style. Yet little documentary information is available on them and consequently their chronology has not been understood. Nevertheless, assembling associations from a variety of sources enables me to formulate for the first time a definition of what appears to be the earliest textile style that could be called Chancay, probably datable to Middle Horizon 3-4. The resulting style can be seen to be a forerunner of later more familiar Chancay textile styles.

GRACE KATTERMAN, *California Institute for Peruvian Studies (CIPS)*

Tunics, cloaks and loin cloths: male style and design at South Coastal Inca outposts

A study of repeated male garment types from several South Coastal sites with an Inca presence suggests a hierarchical arrangement among those who served the government at their provincial outposts.

ANN H. PETERS, *Consulting Scholar, University of Pennsylvania Museum of Anthropology and Archaeology*

Paracas Necropolis: “outsider” textiles

Reconstruction of Paracas Necropolis gravelot assemblages permits identification of garment types and image styles that recur in contemporary tombs. In each mortuary bundle one or two “home” styles dominate the textile assemblage, while a range of other “visitor” styles, more typical of other bundles, may be present. We have also identified “outsider” textiles, distinct in form, technique and style from the embroideries typical of Paracas Necropolis, which appear in small quantities among the larger bundles. What may these garment forms indicate about the social group(s) that carried out mortuary rites at the Necropolis of Wari Kayan and their evolving sociopolitical alliances?

DAWN LOHNAS, *Brooklyn Museum*; ELLEN HOWE, *Metropolitan Museum of Art*; JUDITH LEVINSON, *American Museum of Natural History*; ADRIANA RIZZO, FEDERICO CARÒ, *Metropolitan Museum of Art*

A technological study of post-fire painted Paracas ceramics

While Peruvian ceramic traditions have received much scholarly attention, technological aspects of Paracas pottery warrant further investigation. As part of a two-year study completed on collections at the American Museum of Natural History and the Metropolitan Museum of Art, conservators and conservation scientists conducted a material and technical analysis of the Paracas post-fire painted ceramics (ca. 800-100BCE). Using X-Ray Fluorescence Analysis, Polarized Light Microscopy, Raman and Fourier-Transform Infrared Spectroscopy, Scanning Electron Microscopy-Energy Dispersive X-Ray Spectroscopy and Pyrolysis-Gas Chromatography/Mass Spectrometry, important discoveries have been made about temporal and geographic changes and continuities in pigment and binder use and manufacture.

MARIUSZ ZIÓŁKOWSKI, *Centre for Precolumbian Studies, University of Warsaw*; JAROSLAW ARABAS, *Institute of Electronic Systems, Warsaw University of Technology*

From image to statistics: recent studies on “tocapus” signs

(Presented in English) Uno de los temas muy debatidos en los estudios andinos es el problema de la existencia (o ausencia) de un sistema gráfico, prehispánico, de transmisión de informaciones, o : de algún tipo de escritura, en el sentido amplio de este término. Desde 2006, se lleva al cabo un proyecto de estudios, basado en una documentación de ca. 500 queros. Los especialistas involucrados representan la lingüística, estadística, etnohistoria, historia del arte. El análisis estadístico de un grupo de ca. 1200 signos tocapu demostró el carácter premeditado y organizado de las “inscripciones”. En la ponencia se presentaran el resultado de similar análisis de asociación entre categorías de escenas y signos.

MARIO A. RAMOS VARGAS, *Proyecto Integral Huaycán de Cieneguilla, Proyecto Qhapaq Ñan – Sede Nacional, Ministerio de Cultura, Peru*

Hallazgo singular de un grupo de quipus Inca en Huaycán de Cieneguilla, Costa Central de Perú

El hallazgo de un grupo de quipus Inca en la Zona Arqueológica Huaycán de Cieneguilla de la Costa Central de Perú, recuperados de un contexto de tumba saqueada por el Proyecto Integral Huaycán de Cieneguilla, del Proyecto Qhapaq Ñan - Ministerio de Cultura, se torna muy singular y significativo, al haber estado contenidos en un paquete textil junto a otros materiales, entre ellos un cesto de costurero con todos sus implementos, evidencia que retoma la posibilidad de que los mismos especialistas en la lectura de los quipus también confeccionaban sus propios instrumentos de registro.

BILL SILLAR, *Institute of Archaeology, University College London*; MELISSA CHATFIELD, *Santa Barbara Trust for Historic Preservation*; ROB IXER, SARA LUNT, *Institute of Archaeology, University College London*; GORDON MCEWAN, *Wagner College*; DENNIS OGBURN, *University of North Carolina, Charlotte*

Becoming empire: social, economic and material changes at the start of Inka imperial expansion

This paper presents an analysis of changes in settlement organization, ceramics, stone-working and architecture before and after the Inka conquest of the region associated with the Pinagua ethnic group in the area around Lake Muina and Lucre. Through Petrography and X-ray Fluorescence we show how the materials, technical know-how and labour for some of the most iconic “Inka” pottery and stonework only became available after the Inka expanded into this region. Analysis of the origin and development of specific design elements, materials and technical skills shows how the production of hybrid objects combined Cuzco and Lucre regional elements. We argue that the experience of conquering the Lucre area influenced subsequent Inka imperial policy as similar methods of annexing conquered resources, extracting labour from subjugated ethnic groups and creating objects with hybrid local+Inka styles was to become a characteristic feature of the Inka Imperial economy of “supply on command”.

RODOLFO MONTEVERDE SOTIL, *Pontificia Universidad Católica del Perú*

Esculturas zoomorfas y ritualidad Inca en el Cuzco-Perú

Cuatro temporadas de campo en el Cuzco, de 2 semanas cada una, nos permitió registrar importante cultura material inca (1400-1532 dC.), como la existencia de esculturas zoomorfas (felinos, aves y serpientes) talladas en grandes rocas adosadas a estructuras arquitectónicas, que en conjunto son los componentes de las huacas (lugar sagrado) del sistema de Ceques que organizaba espacial y ceremonialmente la capital incaica. Esta evidencia arqueológica no ha sido analizada arqueológica ni etnohistóricamente por las investigaciones que nos precede.

VERÓNICA ISABEL WILLIAMS (IAS 2015 TRAVEL GRANTEE), *National Council of Scientific and Technological Research (CONICET) / University of Buenos Aires*

Social landscape during Inca dominion in Northwest Argentina

Among the ways that the Inca Empire adopted to rule its territory included actions into ideological, economic, and political sphere which explain in part the diversity and disparity that the state presence reached. Constructions like roads, tampus, pukaras, administrative centers, storage buildings, agricultural works, among others, were common in the entire annexed areas, but it is evident that its architecture, dimensions, monumentality and spatial density show contrasting regional differences. New evidence regarding Inca occupation in Northwest Argentina, especially in mid- central Calchaqui valley, shows different situations along the period of Inca conquest and domination itself. According to the evaluation of data from a couple of archaeological sites, all of them characterized by Inca features, varied chronologies, and archaeological contexts like burial sites, production or agricultural sites, administrative, and fortified sites are examples of the complex process of population assimilation in Northwest Argentina.

LARRY COBEN, *University of Pennsylvania*

Conquest, incorporation or...? The Inka, the Huarco and the Canete valley

The Cañete Archaeological Project (CAP) is investigating the Inca incorporation of the Cañete Valley. Our systematic survey and excavations suggest a complex interaction between the Inca and those who occupied the valley before them. We identified sites and features traditionally associated with the Inca, such as agricultural terraces, storage structures, and large rectangular plazas and rooms with niches in their walls, as well as two quipus. Other sites and features appear to have no Inca association, and others appear to have both Inca and non-Inca characteristics. In this paper, we discuss the imperial strategies of incorporation and local responses to them.

SATURDAY EVENING 8:15 (Open to the public)

HENRY TANTALEÁN, *Escuela Superior Politécnica del Litoral*; CHARLES STANISH, *Cotsen Institute of Archaeology, University of California, Los Angeles*

The ritual offerings in the sunken patio at Cerro del Gentil, Chincha

We present the materials found in ritual interments in a Paracas patio in at the site of Cerro del Gentil in Chincha from two seasons of work. This sunken patio was built in Late Paracas circa 400-200 BCE. There is evidence of repeated interments of materials, including pottery, gourds, textiles, mummy bundles, baskets, plants and animals. The patio was also covered with layers of mixed soil and plant materials, particularly maize. A late event, most likely the last, includes mummy bundles in classic Paracas tradition. We explore the possibility that the repeated reinterments and multiple uses at this patio were rituals surrounding the creation of a huaca by elites in the middle and lower valley in Chincha.

Posters

Posters will be on display throughout the conference in the Wurster foyer. Poster authors will be available between 1:00 pm and 1:45 pm daily.

HANS BARNARD, *Cotsen Institute of Archaeology, University of California, Los Angeles*; AUGUSTO CORDONA ROSAS, *Centro de Investigaciones Arqueológicas de Arequipa, Peru*; MARÍA CECILIA LOZADA, *University of Chicago*

Wari presence in the Vitor Valley (Arequipa, Peru)

During the Middle Horizon (around 600–1000 CE), the Vitor Valley, near Arequipa in southern Peru, was inhabited by a group identified as the Ramadas with its own distinctive material culture mostly known from funerary contexts. There are also clear indications for a Wari presence in the valley, mostly in architectural details, but also in the form of Wari pottery and local imitations thereof. We present the preliminary results of our research into this Wari presence in the Vitor Valley.

CHRISTIANE CLADOS, *Philipps University Marburg*

Beyond music: non-musical uses of music instruments in Paracas and Nasca iconography

The poster discusses some non-musical uses of the music instruments seen in representations of the ancient societies of Paracas and Nasca. This analysis focuses on representations on ceramics and textiles in which the protagonists are shown in different relationships to music instruments. Ceramics and textiles provide a detailed iconography that is occasionally confirmed by the archaeological evidence. This evidence allows to examine an extra-musical aspect of Paracas and Nasca music instruments, particularly as used as ritual paraphernalia, parts of dress, and sacrificial offerings.

JAMES DAVENPORT, *University of New Mexico*

Provisioning state-sponsored ceremonies in the provinces: neutron activation analysis of Inka and pre-Inka ceramics from the Temple of the Sun, Pachacamac

Inka presence at Pachacamac represents a high level of investment by the Inka in transforming the site to serve the imperial agenda, including the construction of the Temple of the Sun, where state-sponsored rituals and feasts were held. Differences in chemical composition, as determined by Instrumental Neutron Activation Analysis, provide evidence for the local reproduction of imperial style pottery. Additionally, compositional data provide evidence for the importation of serving vessels and aríbalos. Through importing imperial material culture, the Inka drew deliberate connections between the important ritual center of Pachacamac (and the rituals that took place there) and other imperial centers.

GIACOMO GAGGIO, PAUL S. GOLDSTEIN, *University of California, San Diego*

The role of plants in a Tiwanaku temple: results of a paleoethnobotanical analysis from Omo M10, Moquegua, Peru

Much is known nowadays about the role of plants in Tiwanaku households and political economy, yet, their function in ceremonial contexts is still unclear. Excavations of Tiwanaku sites in the hyper-arid environment of the Moquegua valley in southern Peru have resulted in the recovery of a wide array of ancient organic finds, including botanical remains. Omo M10 features the only Tiwanaku temple found outside the Altiplano. Based on the systematic collection, analysis and study of spatial distribution of the paleoethnobotanical samples collected from the temple's three excavated platforms we present an interpretation of the plants recovered in this ceremonial context.

AGNES AIKO HORIMOTO, GUILLERMO CAMPOS, WOON MAN TANG, ALEXEI VRANICH, *University of California, Los Angeles*

Reconstructing architecture through 3D printing

The Pumapunku at Tiwanaku, Bolivia, a temple complex considered the apogee of pre-Colombian architecture and construction. The shattered remains of an impressive andesite building set on huge stone slabs has been the subject of admiration since it was first described in 1539. Unfortunately, artist's reconstructions range from the uninformed to the bizarrely speculative. In this presentation, the fragmentary remains of the Pumapunku are modeled on CAD and printed in three dimensions a reduced scale to capitalize on archaeologist's training to think in three dimensions and refit broken objects. This method is applicable to any heavily damaged architectural setting. (This "poster" will consist of the pieces of architecture generated by the 3D printer.)

JASON KJOLSING, PAUL S. GOLDSTEIN, *University of California, San Diego*

Coastal resources at an inland temple: analysis of the marine assemblage of the Tiwanaku Omo Temple

Despite lying 90 km from the Pacific Ocean and an absence of Tiwanaku sites on the coast, numerous types of marine specimens have been recovered from the inland Tiwanaku communities of the Middle Moquegua Valley, Peru. Consumed as food, utilized as tools, worn as adornment, and offered as ritual objects, marine goods were dynamic resources for the Moquegua Tiwanaku. This poster presents recent analysis of the marine assemblage from the Omo temple (M10A) and examines how diasporas from the highland Tiwanaku state integrated coastal resources into their religious lives and political economy as they built communities in Moquegua, Peru.

KARL LA FAVRE, *University of California, Los Angeles*

A late prehispanic ceremonial-mortuary landscape in the eastern slopes near Lake Titicaca

During reconnaissance in 2012 in Carabaya, Perú, I identified a previously unknown Altiplano/Inca landscape with interconnected mortuary and corporate ritual areas. A particularly notable 2-km. stretch includes 3 chulpa clusters and a corporate ritual area with fine architecture and a dense Altiplano/Inca ceramic scatter. The corporate ritual architectural style is reminiscent of the earlier sunken courts of the Titicaca highlands, suggesting an additional earlier occupation and/or the greater longevity of this style in the forested slopes. The mortuary areas include familiar stone chulpas as well as a unique style of joined adobe compartments with impressed and painted geometric designs.

GUIDO LOMBARDI, ALCIDES RICARDO ALVAREZ VERA, TERESA HOGAN, MORGAN DREESBACH, JENNIE GREGORY, TYREL SORENSEN, JEREMIAH CAMP, *Metropolitan State University of Denver*

Evidence for undocumented cultural occupations in the Lurin-Rimac divide

In July 2014, MSU Denver field school participants joined Dr. Guido Lombardi and Dr. Alcides Alvarez in investigating undocumented archaeological sites within the Lurin and Rimac divide. The expedition observed structures, ceramics, petroglyphs, and geoglyphs of unknown cultural affiliation and use. Documentation of these sites is important for the preservation of Peru's cultural heritage as they are currently threatened by modern development that endangers further study of the area. This poster will present an overview of the sites, their environmental surroundings, their value to the Huaycán community, and their contribution to understanding inter-valley interactions between the Lurin and Rimac valleys.

GUIDO LOMBARDI, ALCIDES RICARDO ALVAREZ VERA, KATYA VALLADARES, AARON BURCH, HEATHER HILL, TYREL SORENSEN, TERESA HOGAN, MORGAN DREESBACH, JEREMIAH CAMP, LEAH SWETT, *Metropolitan State University of Denver*

Architecture in the CA8 complex of Huaycán de Pariachi: reflections of cultural interactions on the central coast

Initial work in Conjunto Arquitectónico 8 at the site of Huaycán de Pariachi by Metropolitan State University of Denver focused on establishing a typology of the architecture based on building materials and discernible chronology regarding occupational shifts and realigned territories between the Ychma, the Inca, and Incan allies. Utilizing topographic maps of the complex, this study interprets the observed architecture in the context of other known Ychma/Inca sites on the Central Coast. These comparisons yield valuable information regarding potential room functions, cultural affiliation, and contribute to current understandings of the diverse and possibly tumultuous culture history of Peru's Central Coast.

JULIA LONGO, *MOCHE, Inc.*; CYRUS BANIKAZEMI, *University of North Carolina, Greensboro*; BRIAN BILLMAN, *University of North Carolina, Chapel Hill*; PATRICK MULLINS, *University of Pittsburgh*

Modern settlement patterns and site preservation in the Middle Moche Valley

In the Moche Valley, Peru, the authors conducted a survey of sites within two proposed reserves. GPS data was collected for comparison with previously recorded site boundaries, offering insight into the threat of modern encroachment on sites. Using GIS and statistical analysis, the authors identified areas of site degradation, categorized each site in terms of endangerment, and determined patterns of encroachment. Furthermore, the authors assessed how modern settlement patterns compared to those of the pre-Columbian era. The insight gained through the authors' analysis shows potential for using such studies in effective prioritization of endangered areas in future site preservation efforts.

ERIK J. MARSH, *CONICET, Laboratorio de Paleo-Ecología Humana, Universidad Nacional de Cuyo, Mendoza, Argentina*

Accelerating history in the Lake Titicaca basin: the rapid emergence of agropastoralism and the state

During the 10,000-year human occupation of the Lake Titicaca Basin, two transitional periods were particularly poignant: the emergence of agropastoralism (~1590–1170 cal BC) and the Tiwanaku state (cal AD ~430–590). I suggest that history accelerated during these centuries, based on a series of Bayesian analyses of more than 250 radiocarbon dates, many produced through substantial efforts by researchers over the last decade. These two examples highlight past Titicaca inhabitants' capacity to actively generate rapid, profound regional changes, a view of the Andean *longue durée* that stands in contrast to evolutionary models' expectations for gradual developments.

LAURA G. MARSH, *Stanford University*

Examining variability and provenance through ceramic petrography at Chavín de Huántar

In order to better understand the variability and complexity of the site of Chavín de Huántar, in the Peruvian Andes, ceramic fragments from the site were sampled for paste analysis. Of the fragments analyzed macroscopically, 75 were chosen for thin sectioning and petrographic analysis, to confirm the results of the macroscopic analysis and to source the samples by comparison with geological samples from the area and petrographic analyses from previous studies and other sites. This research provided insights into the variability within Chavín and the site's relationship with contemporaneous sites.

SHAINA MOLANO, *University of California, Merced*; REBECCA BRIA, *Vanderbilt University*

Exploring variation in cranial modification at Hualcayán, Ancash highlands, Peru

Long-term excavations at Hualcayán in highland Ancash, Peru have produced a substantial number of modified crania dating to the Early Intermediate Period and Middle Horizon (1-1000 CE). Visual and metric analyses were employed to determine modification types, differences between the modified types, and classify crania of unknown shapes. Metric analysis also quantified the degree of deviation from normal skull shape. These deviations were significant, revealing intentional modification practices were used. Our analysis also reveals surprising diversity within three distinct modification types: annular, bilobate, and occipital flattening. The results are discussed in terms of local customs, group membership and social identity.

LUIS MURO, NICHOLAS BROWN, *Stanford University*

Community archaeology at San José de Moro, Peru

Recently, Peruvian archaeology has witnessed a growth in community-based projects representing a departure from a purely scientific archaeology towards one more engaged with people. This shift has allowed increased awareness of the discipline's role in socio-economic development of contemporary populations. This work aims to explore the complex dynamics between development–archaeology and community–patrimony. To this end, interviews were conducted by the San José de Moro Archaeological Program within the community surrounding the archaeological site of San José de Moro, Peru. This preliminary study revealed the plurality of perspectives existing about the place of archaeology in education, development, and conservation.

COLLEEN O'SHEA, *State University of New York, Buffalo*; JACOB BONGERS, *University of California, Los Angeles*; HENRY TANTALEÁN, *Escuela Superior Politécnica del Litoral*

Conserving and interpreting two bird pendants from the mid-Chincha Valley, Peru

This poster investigates the material composition and cultural significance of two bird pendants from the mid-Chincha Valley, Peru: one recovered from a platform mound dating to the Late Paracas Period (400-100 B.C.) and the other from a semi-subterranean, collective tomb, or chullpa, likely dating from the Late Intermediate Period (A.D. 1000-1476) to the Late Horizon (A.D. 1400-1532). These artifacts provide insight into local mortuary customs and practices. Here, we present a detailed look at the materials analysis of the bird pendants, discuss their conservation treatment, and offer preliminary interpretations of these artifacts in their respective cultural contexts.

EMILY A. SHARP, *Arizona State University*; REBECCA E. BRIA, *Vanderbilt University*

An analysis of trepanned crania in highland Ancash, Peru

Recent research in the Callejón de Huaylas, Peru, has recorded at least eight trepanned crania from the archaeological sites of Hualcayán and Aukispukio. The rates of trepanation and the types of this surgical procedure are not well-known in the north-central Andes. As such, this study provides much needed contextual information regarding the burial context and demographic profile (predominately adult males) of affected individuals. The observed samples likely date to the Early Intermediate Period and the Middle Horizon (AD 1-1000). Each case will be examined in light of trepanation technique, location on cranium, extent of healing, and associated trauma.

MATTHEW SITEK, PAUL S. GOLDSTEIN, *University of California, San Diego*

Preliminary research at the site of Cerro San Antonio in the middle Locumba Valley, Peru

The middle Locumba Valley on the far southern coast of Peru lies between two very different peripheral regions of the Tiwanaku state and may be a crucial case study for exploring the timing and direction of state expansion and collapse. Ethnohistoric sources suggest limited agrarian potential, yet the site of Cerro San Antonio shows evidence for over 150 hectares of occupation dating from the Archaic through Inca Periods. The site has never been subject to problem-oriented research and is endangered by looting. We discuss the extent of Middle Horizon occupation based on a preliminary reconnaissance and outline future research.

MACIEJ SOBCZYK, *Centre for Pre-Columbian Studies, University of Warsaw*

Maucallacta – an Inca ceremonial center in Cuntisuyu

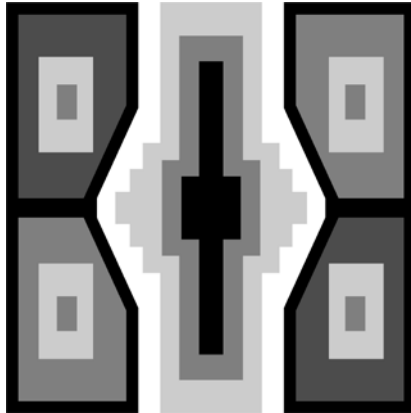
The Maucallacta architectural complex, located in Arequipa Department in south-central Peru at 3700 m a.s.l., consists of over 250 stone buildings and tombs. The site was one of the most important settlements in Cuntisuyu, one of the four parts of the Inca Empire, and was also the main religious and administrative center related to the cult of the Coropuna volcano, a mountain described by many Spanish chroniclers in the 16th and 17th centuries as a deity and an oracle worshipped in pre-Columbian times. The main purpose of the archaeological project commenced in 2006, (As part of the operating since 1996, the Condesuyos Project) carried out by the Center for Pre-Columbian Studies of Warsaw University (Poland) and the Catholic University of Saint Mary in Arequipa (Peru), is to explore and restore the most important architectural structures documented in Maucallacta. As a result of that work, the intensive destruction of some important structures has been stopped, and some very interesting details of burial rites and the ways offerings were made to the sacred mountain have been discovered. As well as partially reconstructed ceremonial landscape of the region.

SADIE WEBER, *Harvard University*

Feeding the gods: microbotanical analysis at Chavín de Huántar

Chavín de Huántar is well known for its ritual significance in the Andean world, however the nature of daily subsistence and temple offerings remains unclear. Though previous research has been carried out on the Chavín de Huántar botanical assemblages, much remains obfuscated due to poor preservation of carbonized remains. In order to obtain a more complete understanding of Formative subsistence, residues extracted from potsherds within Chavín contexts were analyzed for starch and phytoliths. Analysis revealed previously unidentified food resources including *Maniot esculenta* and *Dioscorea sp.*, as well as *Zea mays* which is uncommon in the Chavín de Huántar macrobotanical record.

INSTITUTE
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54th
Annual Meeting

JANUARY 10-11, 2014
BERKELEY, CALIFORNIA

*The Institute of Andean Studies was the vision of John H. Rowe
(1918–2004), who founded it in 1960.*

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Friday, January 10th

FRIDAY MORNING 8:30-9:15

Registration

FRIDAY MORNING 9:15-11:30

Session chair: SCOTT SMITH, *Franklin & Marshall College*

LARS FEHREN-SCHMITZ, *University of California, Santa Cruz*

A palaeogenetic investigation into the population history of Andean South America

HENRY TANTALEAN, *Universidad Nacional San Marcos and Cotsen Institute*; CHARLES STANISH, *Cotsen Institute*; MICHIEL ZEGARRA, *Universidad Nacional San Marcos*; BEN NIGRA, *University of California, Los Angeles*; KELITA PEREZ, *Proyecto Arqueologico Chincha*

Excavations in a Paracas monumental platform mound

Break 10:15-10:30

HENDRIK VAN GIJSEGHEM, *Université de Montréal*; KEVIN J. VAUGHN, *Purdue University*

The uses and re-uses of Mina Primavera, Ingenio, Nasca: Place and diversity of meanings in political and ritual landscapes

VERITY H. WHALEN, *Purdue University*; CORINA M. KELLNER, *Northern Arizona University*

New perspectives on regional cohesion in Late Nasca society

FRIDAY AFTERNOON 1:00-1:45

Poster session, Wurster Hall foyer

FRIDAY AFTERNOON 1:45-5:15

Session chair: DONNA NASH, *University of North Carolina at Greensboro*

ANDRÉS LAGUENS, *Instituto de Antropología de Córdoba, Universidad Nacional de Córdoba, Argentina*

Llama and corn productive practices in the Ambato Valley, Southern Andes, Argentina

BENJAMIN VINING, *Wellesley College*; BILL SATURNO, *Boston University*

Multispectral satellite remote sensing of latent archaeological landscapes in the Chicama Valley, Peru

Break 2:45–3:00

LUCERO ARISTIZABAL, *Universidad de los Andes, Bogotá, Colombia*; MELANIE MILLER, *University of California, Berkeley*; SABRINA AGARWAL, *University of California, Berkeley*; CARL LANGEBAEK, *Universidad de los Andes, Bogotá, Colombia*

The Muisca of Colombia: Investigating social relationships through stable isotope studies

BRIAN BILLMAN, *MOCHE, Inc. and University of North Carolina-Chapel Hill*; DANA BARDOLPH, *University of California, Santa Barbara*; JEAN HUDSON, *University of Wisconsin-Milwaukee*; JESÚS BRICEÑO ROSARIO, *ICPAC and Ministerio de Cultura, Peru*

Chimu household economic and political strategies: A view from Cerro La Virgen, a rural community in the hinterland of Chan Chan

Break 4:00–4:15

ANDREW TURNER, *University of California, Riverside*

Ancestry and agricultural fertility in Moche Phase IV pottery

JANUSZ WOŁOSZYN, *Institute of Archaeology, Centre for Pre-Columbian Studies, University of Warsaw, Poland*

Same-sex relationships in Moche art – Sodomites, Siamese twins and scholars

FRIDAY EVENING 5:30

Annual Business Meeting (IAS members only)

Saturday, January 11th

SATURDAY MORNING 8:30-9:15

Registration

SATURDAY MORNING 9:15-11:30

Session chair: KATHERINE L. CHIOU, *University of California, Berkeley*

JOHN W. JANUSEK, *Vanderbilt University*; CHARLES R. ORTLOFF, *CFD Consultants International, Ltd.*

Water management at Tiwanaku: Revisiting the urban “moat” and its hydraulic features

MAURICIO URIBE, *Universidad de Chile*; CAROLINA AGÜERO, *Instituto de Investigaciones Arqueológicas y Museo, Universidad Católica del Norte*

La cuestión Tiwanaku en San Pedro de Atacama (Norte de Chile):
Nuevas impresiones a partir de estudios actuales de cerámica, textiles, y bioarqueología (436-990 d.C.)

Break 10:15–10:30

NICOLA SHARRATT, *American Museum of Natural History and the Bard Graduate Center*;
MARK GOLITKO, *Field Museum of Natural History*; P. RYAN WILLIAMS, *Field Museum of Natural History*

Pottery production and ceramic circulation during the Middle Horizon:
LA-ICP-MS analyses of Tiwanaku pottery from the Moquegua Valley, Perú

GIANCARLO MARCONE, *Proyecto Qbapaq Ñan - Ministerio de Cultura, Peru*; KIRK E. COSTION, *Oglala Lakota College*; ULRIKE MATTHIES GREEN, *University of California, San Diego*

How did locals react to external political changes at the onset of the Middle Horizon? Investigating the interplay of feasting and ancestor veneration at Lote B, Lurín Valley, and among the Huaracane of the Middle Moquegua Valley

SATURDAY AFTERNOON 1:00-1:45

Poster session, Wurster Hall foyer

SATURDAY AFTERNOON 1:45-5:15

Session chair: ABIGAIL LEVINE, *Cotsen Institute of Archaeology, University of California, Los Angeles*

HEIDI KING, *The Metropolitan Museum of Art*

Corral Redondo: More evidence that the site was a huaca for the Wari and Inca

DENNIS E. OGBURN, *University of North Carolina, Charlotte*

Labor tribute accounting encoded in a set of related khipu from Ica

Break 2:45-3:00

PETER FROST, *Independent scholar*; KEVIN FLOERKE, *Independent scholar*

Investigations of the Yanama River Valley: Contextualizing the Inca presence at Choquequirao

SOFÍA CHACALTANA CORTEZ, *University of Illinois at Chicago, Pontificia Universidad Católica del Perú*; CLAUDIA NUÑEZ FLORES, *Pontificia Universidad Católica del Perú*

Para vivir, no hay que dejarlos morir: Tacahuay, an altiplanic enclave in coastal Colesuyo

Break 4:00-4:15

FERNANDO ASTETE VICTORIA, *Parque Arqueológico Nacional de Machu Picchu, Dirección Regional de Cultura, Cusco*; MARIUSZ ZIÓŁKOWSKI, *Centro de Estudios Precolombinos, Universidad de Varsovia, Polonia*; JACEK KOSCIUK, *Laboratory of 3D Scanning and Modelling, Institute of History of Architecture, Arts and Technology, Wrocław University of Technology*

El Mirador: New research at Machu Picchu

MATTHEW SAYRE, *University of South Dakota*

Domestic life and socioeconomic variability at Chavín

SATURDAY EVENING 8:15 (Open to the public)

JOHN W. RICK, *Stanford University*; ROSA M. RICK, *Stanford University*

Recent advances in the archaeology of the monumental center of Chavín de Huántar

SATURDAY EVENING 9:15

President's reception, Archaeological Research Facility

POSTERS

Posters will be on display throughout the conference in the Wurster foyer. Poster authors will be available between 1:00 pm and 1:45 pm daily.

SARAH ABRAHAM, *Collasuyu Archaeological Research Institute*; CAMILA CAPRIATA, *Proyecto Qbapaq Ñan, Ministerio de Cultura, Peru*

Ground stone destruction and site abandonment at Pulapuco, Peru

CYRUS BANIKAZEMI, *University of North Carolina Greensboro*

Reconsidering residential activity using pXRF at Cerro Mejía, Moquegua, Peru

STEFANIE L. BAUTISTA, *Stanford University*; PATRICIA QUÍÑONEZ CUSCANO, *Universidad Nacional Mayor de San Marcos*

Shell we eat? An analysis of the malacological remains from Uchuchuma, Aja Valley, Nasca – Peru

NICHOLE BETTENCOURT, RICHARD CONREY, WILLIAM NANAVATI, JOHN WOLF, MELISSA GOODMAN ELGAR, *Washington State University*

Fingerprinting Andean construction materials by X-ray fluorescence and laser diffraction

JEREMIAH CAMP, *Metropolitan State University of Denver*; CATHERINE GAITHER, *Metropolitan State University of Denver*; FERNANDO HERRERA, *Ministerio de Cultura, Peru*; EMILIE ARNDT, CHRISTIANE B. BAIGENT, JACK BISH, NICK REPKA, BRANDON THEIGE, LAUREN WALTHER, *Metropolitan State University of Denver Human Identification Laboratory*

Analysis of human remains from Tupac Amaru B: A working class perspective

PATRICIA CHIRINOS OGATA, *University of California, Santa Barbara*; DANIEL D. SAUCEDO SEGAMI, *National Museum of Ethnology, Japan*; JOSÉ A. OCHATOMA CABRERA, *Pontificia Universidad Católica del Perú*

The Wari occupation of Cajamarca: Preliminary excavation results from the site of Yamobamba, Namora Valley, Peru

JAMES M. CRANDALL, *University of Florida*

Spatial relationships between living and deceased communities of the Chachapoya

MATTHEW J. EDWARDS, *HDR Environmental, Operations and Construction, Inc.*;
PATRICIA QUIÑONEZ CUZCANO, *Proyecto de Caminos Antiguos en los Andes Centro-Sur*;
WESTON MCCOOL, *University of California, Santa Barbara*

Wari and Inca roads of the Pampa Galeras: Results of the South Central Andes Ancient Roads Project

KALENA GIESSLER, *University of Southern California*

Examining obsidian provenance and procurement: a pXRF analysis of obsidian artifacts found at Chavín de Huántar, Peru

JASON KJOLSING, GIACOMO GAGGIO, ERIN RODRIGUEZ, PAUL S. GOLDSTEIN,
University of California, San Diego

Color-coded pathways and restricted spaces: Analysis of the use of color and surface textures in the central altar complex at the Omo Tiwanaku temple (M10)

LAURA MARSH, *Stanford University*

Sampling paste for thin section: The initial steps of petrographic research in archaeological ceramics at Chavín de Huántar

ANDREW RODDICK, *McMaster University*

“Somos olleros”: A preliminary study of a modern potting community in the Southern Lake Titicaca Basin

INGE R. SCHJELLERUP, *National Museum of Denmark*

Posic, a pre-Hispanic ritual centre, Huallaga, Peru, 500–1500 AD

MATTHEW J. SITEK, PAUL S. GOLDSTEIN, *University of California, San Diego*

Taypi, Why the middle matters: Duality and mediating space in Tiwanaku monumental architecture

SCOTT C. SMITH, *Franklin & Marshall College*

Tiwanaku political strategy in the Upper Desaguadero Valley, Bolivia

MATTHEW C. VELASCO, *Vanderbilt University*; DAVID RODRÍGUEZ SOTOMAYOR,
Pontificia Universidad Católica del Perú

Tombs of Yuraq Qaqa: Architecture and development of a Collagua cemetery in the Colca Valley, Peru

KENNETH WRIGHT, RUTH WRIGHT, *Wright Paleohydrological Institute*; ARMINDA MARGUERITE GIBAJA OVIEDO, *Ministerio de Cultura, Peru*

Inkamisana cliff carvings

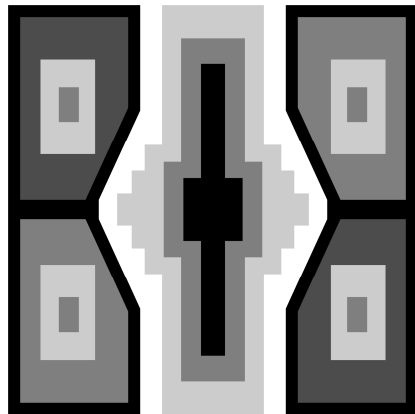
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~ *Abstracts* ~



54th
Annual Meeting

JANUARY 10-11, 2014

BERKELEY, CALIFORNIA

Friday, January 10th

LARS FEHREN-SCHMITZ, *University of California, Santa Cruz*

A palaeogenetic investigation into the population history of Andean South America

Here, I present a study focusing on changes in the patterns of genetic diversity coincident with episodes of cultural and environmental change by analyzing DNA from human skeletal remains from several archaeological sites in the Central Andean area. The results verify that there are episodes in the Central Andean prehistory accompanied by population discontinuities. Moreover, we reveal that while populations from different geographic regions seem genetically distinct in the early periods, there is a process of homogenization in the Central Andes starting at least with the advent of the first Highland Empires in the Middle Horizon.

HENRY TANTALEAN, *Universidad Nacional San Marcos and Cotsen Institute*; CHARLES STANISH, *Cotsen Institute*; MICHIEL ZEGARRA, *Universidad Nacional San Marcos*; BEN NIGRA, *University of California, Los Angeles*; KELITA PEREZ, *Proyecto Arqueológico Chíncha*

Excavations in a Paracas monumental platform mound

We report on two seasons' excavations at the site of Cerro del Gentil, a Paracas mound in the upper Chíncha Valley. Cerro de Gentil was first reported by Wallace and investigated by Lumbreras and Canziani. We excavated one of three looted depressions on the mound. Our excavations reveal a series of sunken patios constructed of plastered and decorated walls. The patio was filled with stunning Paracas materials including textiles, pottery, gourds, cane objects, mummies, wooden and vegetal offerings. Along with survey data, this work better defines the Paracas occupation in the region and suggests that Chíncha was a regional political center in the later EH.

HENDRIK VAN GIJSEGHM, *Université de Montréal*; KEVIN J. VAUGHN, *Purdue University*

The uses and re-uses of Mina Primavera, Ingenio, Nasca: Place and diversity of meanings in political and ritual landscapes

We outline two millennia of changing uses of Mina Primavera, a human-made cavern that once was an important source of hematite for the people of the Nasca culture. Recent evidence has allowed documentation of ritual practices both in the context of mining and once the mine was no longer under exploitation, when it remained a place of symbolic significance in the landscape. We review this evidence in the context of Andean cosmology and ritual practice. Moreover we present evidence regarding the mine's more recent uses during the colonial period.

VERITY H. WHALEN, *Purdue University*; CORINA M. KELLNER, *Northern Arizona University*

New perspectives on regional cohesion in Late Nasca society

The end of the Early Intermediate Period (ca. AD 450-650) on the south coast of Peru marked a key historical moment of rapid social change, yet it remains poorly understood. In this paper, we evaluate the nature of regional cohesion in Late Nasca society based on recent research in the Nasca drainage and at the settlement of Cochuischo. Using data from architectural analysis, house excavations, and ceramic, lithic, mortuary, osteological, and isotopic analysis, we examine the traditional reconstruction of Late Nasca sociopolitical organization and identity, and reconsider some of the prior assumptions about Late Nasca society.

ANDRÉS LAGUENS, *Instituto de Antropología de Córdoba, Universidad Nacional de Córdoba, Argentina*

Llama and corn productive practices in the Ambato Valley, Southern Andes, Argentina

It is argued that around Xth century AD at the Ambato Valley, in the Southern Andes at Argentina, foodstuff productive practices included and articulated simultaneously corn cultivation and camelid breeding within one and the same space and infrastructure of corrals, terraces and water management devices, which were merged in a unique agro-pastoral practice of animal, vegetable, and fodder production. This contribution focuses on the analysis of their material evidence from different lines of inquiry with the aim of understanding the logic behind this economic practice as well as the underlying modes of relationships between human and llamas.

BENJAMIN VINING, *Wellesley College*; BILL SATURNO, *Boston University*

Multispectral satellite remote sensing of latent archaeological landscapes in the Chicama Valley, Peru

We describe anthrosols and archaeological features in the Chicama Valley, from the Moche – Chimu periods (ca. AD 300 – 1400) as evident in multispectral satellite remote sensing. Extensive sugarcane cultivation in Chicama affords the opportunity to analyze anthropogenic stress in vegetation landcover, at various life stages from emergence to senescence. Using extant archaeological survey data, we relate this to anthropogenic features, including prehispanic agricultural and settlement systems. Previously undocumented sites are also recorded. This approach helps identify latent archaeological features with low obtrusiveness in densely-vegetated agricultural areas, and complements conventional pedestrian survey approaches. In addition to obvious implications for archaeological analyses, we describe the legacy-effects of prehispanic land use on modern environmental systems.

LUCERO ARISTIZABAL, *Universidad de los Andes, Bogotá, Colombia*; MELANIE MILLER, *University of California, Berkeley*; SABRINA AGARWAL, *University of California, Berkeley*; CARL LANGEBAEK, *Universidad de los Andes, Bogotá, Colombia*

The Muisca of Colombia: Investigating social relationships through stable isotope studies

The Muisca culture of the Colombian Andes provides a unique opportunity to study complex interactions between social relationships and human diet during an important period of Colombian history. The excavation of the Muisca site of Tibanica, located in the Sabana de Bogotá, Colombia (1200 AD – 1550 AD), recovered over 500 human skeletal remains. We analyzed a sample of human skeletons (for bone collagen and apatite carbonate) for carbon, nitrogen, sulfur, and oxygen stable isotope data to investigate the potential roles that food may have played in the social relationships for the Muisca.

BRIAN BILLMAN, *MOCHE, Inc. and University of North Carolina-Chapel Hill*; DANA BARDOLPH, *University of California, Santa Barbara*; JEAN HUDSON, *University of Wisconsin-Milwaukee*; JESÚS BRICEÑO ROSARIO, *ICPAC and Ministerio de Cultura, Peru*

Chimu household economic and political strategies: A view from Cerro La Virgen, a rural community in the hinterland of Chan Chan

Situating the roles of hinterland communities is crucial to understanding the dynamic political and economic interactions of prehispanic complex societies. We report the excavation of household middens at Cerro La Virgen, a coastal settlement 6 km north of Chan Chan, the Chimu capital (AD 1000-1460). Through analysis of household economic activities including fishing, farming, and cotton cloth manufacture, we critically examine the role the community played in the provisioning of Chan Chan. Analysis of fish bone and shell also allowed us to associate specific strata with El Niño events, opening the possibility of examining household responses to those events.

ANDREW TURNER, *University of California, Riverside*

Ancestry and agricultural fertility in Moche Phase IV pottery

A series of poorly understood Moche Phase IV vessels portrays a deity referred to as “Wrinkle Face” engaged in sexual activity. Iconographic analysis of the vessels and comparison to funerary practices and the functions of huaca centers suggest that ancestor veneration was a probable basis of Moche religion, and Wrinkle Face was associated with regeneration and agricultural fertility. Huaca centers may have consolidated power among disparate lineage groups by asserting that Wrinkle Face was a progenitor of coastal peoples and by presenting a model for the workings of a vital cosmos in which human reproduction played a central role.

JANUSZ WOŁOSZYN, *Institute of Archaeology, Centre for Pre-Columbian Studies, University of Warsaw, Poland*

Same-sex relationships in Moche art – Sodomites, Siamese twins and scholars

Moche erotic vessels are often referred to in the literature on anthropology, gender studies and archeology of identity as being among the most important and reliable pieces of evidence of the presence of institutionalized same-sex sexual behavior in prehistoric societies. But are the references made to this example well-founded? The currently available material is exceptionally sparse; the majority of the “homosexual” sex pots have been eliminated from the world’s collections, and the hypotheses to date have mainly been based on far-fetched interpretations of the rare and highly controversial depictions and even modern forgeries. This paper describes the history of research into such representations, analyzes the shortcomings of the hypotheses contained in the literature, and finally presents examples that can actually be interpreted as images of same-sex relationships, which have intentionally or unintentionally been overlooked in research to date.

Saturday, January 11th

JOHN W. JANUSEK, *Vanderbilt University*; CHARLES R. ORTLOFF, *CFD Consultants International, Ltd.*

Water management at Tiwanaku: Revisiting the urban “moat” and its hydraulic features

Early research at the Middle Horizon site of Tiwanaku indicated that its core is at least partially surrounded by a circumferential hydraulic feature. Alan Kolata referred to this feature a ‘moat.’ Drawing on Posnansky, Kolata argues that it constituted a concentric boundary between sacred and secular areas of the city. We investigate the hydraulic purposes of the ‘moat,’ which we term Tiwanaku’s perimeter canal. We agree that the canal served to differentiate social and spatial segments of Tiwanaku, while arguing that it simultaneously served as the axial feature in an encompassing hydrological system that regulated rainy season flooding while enhancing dry season water input. It was also the axis of a hydraulic system that fed abundant intra-urban agropastoral systems, putting into critical relief traditional notions of prehistoric urbanism.

MAURICIO URIBE, *Universidad de Chile*; CAROLINA AGÜERO, *Instituto de Investigaciones Arqueológicas y Museo, Universidad Católica del Norte*

La cuestión Tiwanaku en San Pedro de Atacama (Norte de Chile): Nuevas impresiones a partir de estudios actuales de cerámica, textiles, y bioarqueología (436-990 d.C.)

En las últimas décadas los arqueólogos han tendido a examinar la problemática Tiwanaku principalmente en términos de acceso a recursos y/o complementariedad ecológica. Sin embargo, estas reconstrucciones adolecen de reduccionismo económico en perjuicio del entendimiento de las prácticas políticas e ideológicas que caracterizaron esta clase de fenómenos, preconcebidos como estados o imperios. Dentro de esta problemática, retomamos la supuesta relación entre Tiwanaku y San Pedro de Atacama, específicamente a través del caso de la emblemática cerámica negra pulida de los cementerios de Solcor 3 y Coyo Oriental, dos de los sitios que se consideran representativos del impacto altiplánico en la región. Este análisis en conjunto con los estudios textiles y la reciente data bioarqueológica, nos permiten cuestionar este vínculo y avanzar hacia la comprensión de una realidad social mucho más heterogénea y desigual. La cual, más que responder a una entidad política superior, se gestaría en una fuerte tensión entre los grupos dominantes y subordinados que habitaron los oasis del desierto de Atacama.

NICOLA SHARRATT, *American Museum of Natural History and the Bard Graduate Center*; MARK GOLITKO, *Field Museum of Natural History*; P. RYAN WILLIAMS, *Field Museum of Natural History*

Pottery production and ceramic circulation during the Middle Horizon: LA-ICP-MS analyses of Tiwanaku pottery from the Moquegua Valley, Perú

Production and circulation of goods were important to Tiwanaku state craft. However, studies of the movement of Tiwanaku vessels across the South Central Andes have largely relied on regional stylistic differences. In this paper, we compare compositional data derived from recent LA-ICP-MS analyses of Tiwanaku pottery from the Moquegua Valley with chemical data on locally available clays. Incorporating ceramics dating to the height of Tiwanaku authority and to the aftermath of state collapse (c.a. AD 1000), we examine the nature and extent of non-local pottery in the Moquegua province and the impact of collapse on long-distance exchange networks during the Middle Horizon.

GIANCARLO MARCONE, *Proyecto Qbapaq Ñan - Ministerio de Cultura, Peru*; KIRK E. COSTION, *Oglala Lakota College*; ULRIKE MATTHIES GREEN, *University of California, San Diego*

How did locals react to external political changes at the onset of the Middle Horizon? Investigating the interplay of feasting and ancestor veneration at Lote B, Lurín Valley, and among the Huaracane of the Middle Moquegua Valley

Indigenous elites employed numerous strategies in taking advantage of new political situations brought on by the expanding Middle Horizon states. In this paper we examine the interplay between commensal politics and mortuary practices wherein feasting increased when local elite priorities emphasized the enhancement of status. Similarly when local elites emphasized territorial claims in the face of colonial advancement, ancestor veneration intensified. Recent data from the Lurín and Moquegua valleys illustrate this pattern and point toward a favoring of public feasting accompanied by a decrease in the visibility of ancestor veneration by local populations at the onset of the Middle Horizon.

HEIDI KING, *The Metropolitan Museum of Art*

Corral Redondo: More evidence that the site was a huaca for the Wari and Inca

In the conclusion of my article *The Wari Feathered Panels from Corral Redondo, Churunga Valley: A re-examination of context* published in NP 2013:33 I suggested that the site may have been a huaca where the Wari and Inca performed rituals that may have included human sacrifice. A recent visit to the site, discussions with local people and archaeologists in Arequipa, and most importantly access to the roughly fifty Inca style objects—most of them miniatures—excavated at Corral Redondo by locals at the same time the Wari feather panels were unearthed, strengthen my argument.

DENNIS E. OGBURN, *University of North Carolina, Charlotte*

Labor tribute accounting encoded in a set of related khipu from Ica

Analysis of data records for three khipu from Ica reveals extraordinary mathematical and organizational connections between them, including exact addition of very large numbers between khipu and consistency of proportions and color coding across levels. These indicate an accounting hierarchy, which may be best explained as recording regional labor tribute assignments under broad categories, thus allowing us to read these khipu to a certain level. Additional evidence comes from the structures of the khipu, which can be shown to be consistent with Inca principles of hanan/urin division, decimal political organization, and fairness in division of labor assignments.

PETER FROST, *Independent scholar*; KEVIN FLOERKE, *Independent scholar*

Investigations of the Yanama River Valley: Contextualizing the Inca presence at Choquequirao

Choquequirao is a major palatial complex overlooking the Apurimac and Yanama Rivers in the Vilcabamba region of the Andes. Despite its status as a prominent Inca site, its context and place in a larger settlement pattern in the region are as yet poorly understood. Recent expeditions in the Yanama Valley to the north of Choquequirao have uncovered new and unexpected additions to the archaeological record in the area, and warrant further investigation and discussion in order to better understand this imperial site in the context of both local populations and the Vilcabamba as a whole.

SOFÍA CHACALTANA CORTEZ, *University of Illinois at Chicago, Pontificia Universidad Católica del Perú*; CLAUDIA NUÑEZ FLORES, *Pontificia Universidad Católica del Perú*

Para vivir, no hay que dejarlos morir: Tacahuay, an altiplanic enclave in coastal Colesuyo

In 2010, during excavations at the Late Intermediate Period/Late Horizon site of Tacahuay located in Coastal Colesuyo, members of Programa de Investigaciones Tacahuay found two chullpas, one disturbed, and one intact. The intact chullpa contained more than 20 individuals and a varied range of local, regional, and Inca style objects. When coupled with structures reminiscent of Inca spaces, the material culture found inside chullpas suggests that inhabitants of Tacahuay were embedded in complex local and regional interaction networks. Approaching the chullpas at Tacahuay as spaces of articulated interaction between the living and the dead allows us to examine collective memory and the role of material culture in this altiplanic enclave.

FERNANDO ASTETE VICTORIA, *Parque Arqueológico Nacional de Machu Picchu, Dirección Regional de Cultura, Cusco*; MARIUSZ ZIÓŁKOWSKI, *Centro de Estudios Precolombinos, Universidad de Varsovia, Polonia*; JACEK KOSCIUK, *Laboratory of 3D Scanning and Modelling, Institute of History of Architecture, Arts and Technology, Wrocław University of Technology*

El Mirador: New research at Machu Picchu

In a paper presented at the SEAC 2012 conference held at Ljubljana the authors have demonstrated that Intimachay in Machu Picchu, was an astronomical observatory far more complex and precise than it has been previously believed. It was most probably an “astronomical instrument”, intended for use by a narrow group of Inca priests-astronomers, mentioned in some sources. The present paper is dedicated to another, very interesting structure, called “El Mirador”, located on the slopes of Huayna Picchu. It was probably another “astronomical instrument”, for precise observations of a very narrow part of the Sky. A hypothesis concerning the practical function of this structure will be presented.

MATTHEW SAYRE, *University of South Dakota*

Domestic life and socioeconomic variability at Chavín

The monumental center at Chavín de Huántar has been the focus of much of the archaeological research conducted at the site. However, the La Banda domestic settlement area located across the Mosna River from the main temple complex is the subject of ongoing research and it provides the unique opportunity to analyze domestic life and socioeconomic differentiation. Here we find evidence of distinct architectural and ceramic use patterns. This evidence, combined with finds of a bone tool and marine shell production area, allow for initial insights into status difference amongst the Formative Period inhabitants of Chavín.

SATURDAY EVENING 8:15 (Open to the public)

JOHN W. RICK, *Stanford University*; ROSA M. RICK, *Stanford University*

Recent advances in the archaeology of the monumental center of Chavín de Huántar

The last two years of intensive fieldwork in the monumental center of Chavín de Huántar by an international and interdisciplinary team have clarified aspects of Chavín art, architecture, and chronology. In particular, the underground canals, previously thought to be primarily drains, have proven to also include water supply, and ritual function. We now know that the canal system was very extensive, with dense networks of canals underlying most recently explored areas of the site. The canals are proving to be exceptional contexts for the recovery of surprisingly dense pockets of very well-preserved associations of elaborate, sacrificed materials, including highly refined and decorated pottery assemblages. Similarly, the discovery of four new galleries within a relatively small area shows that these subterranean structures are found in a variety of contexts, and for the first time we have evidence of sequences of galleries in succeeding architectural layers.

Posters

Posters will be on display throughout the conference in the Wurster foyer. Poster authors will be available between 1:00 pm and 1:45 pm daily.

SARAH ABRAHAM, *Collasuyu Archaeological Research Institute*; CAMILA CAPRIATA, *Proyecto Qhapaq Ñan, Ministerio de Cultura, Peru*

Ground stone destruction and site abandonment at Pulapuco, Peru

Like most Late Horizon settlements in Peru, Pulapuco was abandoned when the Spanish arrived in the 16th century. Archaeological investigations at the site, located in southwestern Ayacucho, have yielded evidence of the purposeful destruction of material culture around the time of abandonment. In particular, analysis of ground stone revealed that many of these artifacts were intentionally destroyed just prior to abandonment. This poster will present data on the spatial distribution and breakage patterns of the intentionally broken ground stone and demonstrate how this often ignored artifact can shed light onto processes of site abandonment in the Andes.

CYRUS BANIKAZEMI, *University of North Carolina Greensboro*

Reconsidering residential activity using pXRF at Cerro Mejía, Moquegua, Peru

This study aims to analyze geochemical composition of archaeological floors, in order to detect activity areas in residential structures at the Wari-affiliated site of Cerro Mejía (600-1000 CE) in Moquegua, Peru. The use of portable X-Ray Fluorescence spectrometry (XRF) allows for the analysis of the elemental composition of soil samples. This data can then be used to compare chemical signatures to determine how the soil compositions correlate with predicted usage patterns of associated surfaces based on artifact distribution. This study examines a new line of evidence to enhance archaeological interpretations of activity areas and the use of space.

STEFANIE L. BAUTISTA, *Stanford University*; PATRICIA QUIÑONEZ CUSCANO, *Universidad Nacional Mayor de San Marcos*

Shell we eat? An analysis of the malacological remains from Uchuchuma, Aja Valley, Nasca – Peru

Recent excavations at Uchuchuma (200 B.C. - A.D. 1000), a prehispanic village located in the *chapiyunga* zone of the Aja Valley, Peru, have revealed evidence of malacological remains. Considering that Uchuchuma is quite a distance from the littoral zone (70km), the presence of these malacological remains suggests that the inhabitants of this village had, in some way, access to marine products. This poster synthesizes the analysis conducted on these remains in relation to their archaeological contexts. The results of this study contributes to the understanding of how marine resources were consumed and/or used in sites far away from the coast.

NICHOLE BETTENCOURT, RICHARD CONREY, WILLIAM NANAVATI, JOHN WOLF, MELISSA GOODMAN ELGAR, *Washington State University*

Fingerprinting Andean construction materials by X-ray fluorescence and laser diffraction

We present the results of experiments that tested the efficacy of X-ray Fluorescence (XRF) geochemistry and laser diffraction particle size analysis (PSA) protocols on archaeological sediments from the Taraco Archaeological Project, Titicaca Basin. We found that standard PSA protocols produced spurious particle size determinations on our soils, and present an alternative protocol here. We tested geochemical methods on Andean soils in quantitative experiments. Using Wavelength-Dispersive XRF experiments as baseline data, we calibrated a Bruker Tracer IV pXRF within acceptable uncertainty limits. We conclude that PSA and XRF fingerprinting can be successful for anthropogenic sediments in the Andes under experimentally determined conditions.

JEREMIAH CAMP, *Metropolitan State University of Denver*; CATHERINE GAITHER, *Metropolitan State University of Denver*; FERNANDO HERRERA, *Ministerio de Cultura, Peru*; EMILIE ARNDT, CHRISTIANE B. BAIGENT, JACK BISH, NICK REPKA, BRANDON THEIGE, LAUREN WALTHER, *Metropolitan State University of Denver Human Identification Laboratory*

Analysis of human remains from Tupac Amaru B: A working class perspective

Unlike the well-documented Inca culture, a great deal of research remains to be done on some of the lesser-known pre-Incan sites in Peru. In February 2013, salvage excavations at the site of Tupac Amaru B in Lima, Peru uncovered several human skeletal remains associated with the Yschma culture (ca. AD 1100-1400). Osteological analysis demonstrated evidence of biological stress, including vertebral anomalies, periostitis, anemia, and healed fractures. The nature and frequency of these lesions are consistent with a labor-intensive lifestyle. This poster will present the results of the analyses and discuss the biocultural significance within the framework of their archaeological context.

PATRICIA CHIRINOS OGATA, *University of California, Santa Barbara*; DANIEL D. SAUCEDO SEGAMI, *National Museum of Ethnology, Japan*; JOSÉ A. OCHATOMA CABRERA, *Pontificia Universidad Católica del Perú*

The Wari occupation of Cajamarca: Preliminary excavation results from the site of Yamobamba, Namora Valley, Peru

This poster summarizes the findings from the first season of research at Yamobamba, an extensive site in the Namora valley in Cajamarca. Preliminary excavations revealed a typical Wari formal layout, with square patios, peripheral galleries, and long narrow corridors. However, while the Wari secular elements are predominant at the site, small platform mounds and checkpoints suggest functional and cultural diversity. In addition, ceramic vessels found at Yamobamba correspond to local styles, while only limited numbers of non-local ceramics have been recovered. Together, the findings suggest a complex scenario of power relations between Wari and Cajamarca during the Middle Horizon.

CHRISTIANE CLADOS, *Institute of Andean Studies* (**Cancelled; not presented**)

From *Zackenstabdämon* to Wari Stinger Animal

Since Eduard Seler's article on Nasca iconography the term *Zackenstabdämon* refers to a mythical character that is among the best known of the Nazca pantheon. Especially the profile variety of the Jagged-Staff God shows a wide range of contexts that cannot be reduced to themes like (head-)hunting or warfare. In contrast to the frontal variety this specimen emerged much earlier than suggested, being already depicted in Necropolis tabbed borders of the final Early Intermediate Period 2. This essay will discuss its representation in context with Chicha consumption and battle scenes, as well as its role as a precursor of the Wari Stinger Animal.

JAMES M. CRANDALL, *University of Florida*

Spatial relationships between living and deceased communities of the Chachapoya

Within the Utcubamba Valley of northern Peru, ritual treatments of the dead were expressed through the construction of decorated sarcophagi or elaborate chullpas. The public display and representation of ancestors as reconstructed persons suggest that bodies maintained active relationships with communities of the living and were actively engaged as social agents. Chachapoya mortuary patterning indicates 1) The material reconstitution of Chachapoya mortuary bodies and spaces defined living communities' association to the ayllu, a practice that likely predates the Inka conquest 2) Viewshed analyses of these ancestral communities show that these spaces were segregated from the visual perception of living communities.

PABLO ANDRES DE LA VERA CRUZ CHÁVEZ, ANDREA LUCIA OCAMPO MACEDA, *Universidad Nacional de San Agustín de Arequipa, Peru* (**Cancelled; not presented**)

El maíz como vehículo de integración: Análisis desde el Valle del Chili al contexto regional

El maíz del valle del Chili, motivó la explotación de este ecosistema específico que favoreció la formación de diferentes maneras de relación entre los pueblos de la puna y los valles, muchas veces ajenos entre sí, para el beneficio económico mutuo en torno a este recurso.

En el valle del Chili la población local Churajón (S. XII – XV) admite la presencia e integración con sociedades altiplánicas como los Collas y las de los valles altos como Chuquibamba del valle del Colca, y otros pueblos; a lo largo de los periodos Medio, Tardío e inclusive el Colonial Temprano.

La administración Inca de esta región, estimuló este patrón previo, pero bajo un modelo centralizado y de dos maneras: uno, el control directo desde su capital Cuzco-Valle del Chili, encargando la producción a las poblaciones de Chuquibamba y Colca – Valle del Chili; y el segundo indirectamente a través de las poblaciones del Altiplano.

Existieron además de los mecanismos estatales incaicos, otras redes de obtención y producción del maíz, a través del desarrollo de nuevos vínculos y alianzas puna-valle. También resurgen formas de interacción ancestrales desde Tiwanaku, que coexisten con el modelo económico Inka de tributo, que estaba dirigido al consumo local.

Esta movilidad persistió en el periodo colonial temprano y la producción de maíz continúa fuertemente desarrollada.

La reevaluación de las evidencias y colecciones de excavaciones arqueológicas hechas en el valle del Chili desde los años 1960, sumadas a la búsqueda reciente de información documental en los archivos de Arequipa, nos permiten sostener el presente argumento.

MATTHEW J. EDWARDS, *HDR Environmental, Operations and Construction, Inc.*; PATRICIA QUIÑONEZ CUZCANO, *Proyecto de Caminos Antiguos en los Andes Centro-Sur*; WESTON MCCOOL, *University of California, Santa Barbara*

Wari and Inca roads of the Pampa Galeras: Results of the South Central Andes Ancient Roads Project

It has long been suspected that portions of the Inca road network were first built by the Wari (A.D. 650–1000). Fieldwork completed in the Leoncio Prado district of Lucanas in southern Ayacucho during the 2013 field season of the South Central Andes Ancient Roads Project yielded interesting new evidence that this was the case. The project resulted in the documentation of four interconnected road segments that connect the tributary valleys of the Nasca region with the high grasslands of the Pampa Galeras. This poster reports these findings and presents the evidence for a relative chronology of the identified routes.

KALENA GIESSLER, *University of Southern California*

Examining obsidian provenance and procurement: a pXRF analysis of obsidian artifacts found at Chavín de Huántar, Peru

The site of Chavín de Huántar contains many artifacts and materials, such as obsidian, that suggest that residents of Chavín engaged in long-distance trade relationships. After analyzing 616 obsidian artifacts found during the 2012 field season at Chavín using portable X-Ray fluorescence spectrometry (pXRF) as a sourcing technique, the obsidian artifacts appeared to include two distinct sources; 95.5% matched the Quispisisa source, while the remaining 4.5% matched the Alca source. Further analysis into the context, form, and identifying elements of the obsidian will allow for a more complex understanding of the use of this material at Chavín.

JASON KJOLSING, GIACOMO GAGGIO, ERIN RODRIGUEZ, PAUL S. GOLDSTEIN, *University of California, San Diego*

Color-coded pathways and restricted spaces: Analysis of the use of color and surface textures in the central altar complex at the Omo Tiwanaku temple (M10)

Excavations at the Tiwanaku ceremonial structure of Omo M10, in Moquegua, Peru uncovered a room complex housing a U-shaped altar that overlooked the temple's sunken court. Using photographs, soil and micromorphology analysis, and excavation data, this poster reconstructs the temple core's symbolic color-coded pathways. The complex's colorful red and green entryway suggests it was an extension of the similarly-painted sunken court. The inner U-shaped structure lacks this color scheme, instead surrounded by organic floor matting. If movement of temple pilgrims was demarcated by a painted pathway, temple-goers would have been denied approaching this inner structure and its protected floor.

LAURA MARSH, *Stanford University*

Sampling paste for thin section: The initial steps of petrographic research in archaeological ceramics at Chavín de Huántar

Thin-section analysis yields information about the manufacture and origin of archaeological ceramics, and careful selection of sherds plays a large role in determining the quality of the analysis. At the monumental center of Chavín de Huántar, Peru, choosing key contexts for macroscopic analysis, analyzing the sherds for form, decoration, and other basic attributes, and photographing and grouping pastes with a digital USB microscope, were the first steps of componential ceramic analysis that will be followed up with thin-section analysis of certain sherds, in order to learn more about the origins and connections of ceramic material at the site.

ANDREW RODDICK, *McMaster University*

“Somos olleros”: A preliminary study of a modern potting community in the Southern Lake Titicaca Basin

In 1987 Karen Mohr Chavez reported on a modern potting settlement between Lake Titicaca and Cuzco. Andeanists have since developed a rich scholarship on specialized potting villages, yet strangely they have neglected the Southern Lake Titicaca Basin. I report on recent work of the Proyecto Olleros Titicaca (POT) in Chijipata Alta. This community of specialized olleros, located between La Paz and Copacabana, produce standardized forms and exchange them throughout the altiplano. I discuss the material traces (in ceramics but also on the landscape) that are produced by potters' choices, and highlight our current ethnographic, historic and archaeological avenues of research.

INGE R. SCHJELLERUP, *National Museum of Denmark*

Posic, a pre-Hispanic ritual centre, Huallaga, Peru, 500–1500 AD

A Danish-Peruvian archaeological expedition into the Ceja de Montaña in North-eastern Peru July 2013 has revealed unknown ruins at Mashuayacu river with monoliths and an extensive collection of twenty seven rocks with petroglyphs. Extensive building complexes with ritual installations and other structures from the Chachapoyas culture and subsequent from the Incas are situated on both sides of the river. The Inca site is situated near former procession ramps with traditional Inca architecture. Uniquely are preserved two Intihuatanas. Overall the site covers a comprehensive area of at least 300 x 1200 m in a dense rainforest used for centuries for religious and political assemblies. It is thus one mayor settlement in a hitherto largely unknown territory provisionally dated to the 6th - 16th century.

MATTHEW J. SITEK, PAUL S. GOLDSTEIN, *University of California, San Diego*

Taypi, Why the middle matters: Duality and mediating space in Tiwanaku monumental architecture

Taypi, the mediating space in which two complementary sides come together, has represented an integrative concept in Andean society. Through our re-interpretation of the uniquely well-preserved Tiwanaku monumental structure at Omo M10 we argue that action in the Tiwanaku ritual landscape, while reinforcing a dual model of ritual and society, also featured a central axis and mediating pathways and spaces. Focusing on the middle court portion of the structure, we will analyze access patterns, architectural features and artifactual evidence to illustrate how ritual movement in the middle court interwove a central and two lateral pathways through this mediating space.

SCOTT C. SMITH, *Franklin & Marshall College*

Tiwanaku political strategy in the Upper Desaguadero Valley, Bolivia

This poster synthesizes recent research in the Upper Desaguadero Valley of Bolivia to explore the timing, extent, and nature of Tiwanaku expansion into this region. Data from the Iruhito, Khonkho Wankane, and the recently surveyed site of Cerro Chijcha are presented. I suggest that incorporation of this region was selective and focused on establishing relationships with key sites along the river. Access to river may have been important as a route of movement and interaction between the Titicaca basin to the north and the central *Altiplano*.

MATTHEW C. VELASCO, *Vanderbilt University*; DAVID RODRÍGUEZ SOTOMAYOR, *Pontificia Universidad Católica del Perú*

Tombs of Yuraq Qaqa: Architecture and development of a Collagua cemetery in the Colca Valley, Peru

Studies of above-ground funerary structures (chullpas) in the Andes have predominantly focused on inter-regional and inter-site architectural variation as a proxy for ethnic and social divisions.

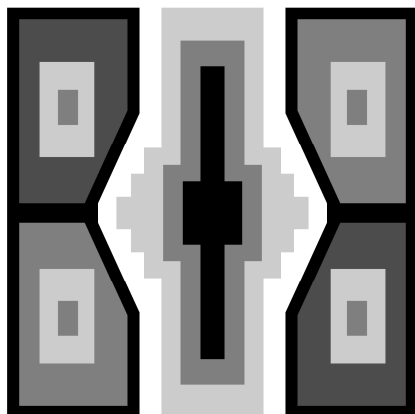
Complimenting these perspectives, we analyze the complex intra-site organization of chullpa architecture within a single cemetery in the central Colca valley. Composed of multiple horizontally and vertically agglutinated funerary chambers, Yuraq Qaqa is the result of several episodes of architectural expansion and landscape modification. By mapping architectural variables such as masonry style against a proposed construction sequence, we explore how the site transformed over the long-term and with the arrival of the Inkas.

KENNETH WRIGHT, RUTH WRIGHT, *Wright Paleohydrological Institute*; ARMINDA MARGUERITE GIBAJA OVIEDO, *Ministerio de Cultura, Peru*

Inkamisana cliff carvings

On the cliffs above the Ollantaytambo, Peru, water temple of Inkamisana, the Inka carved elaborate patterns. The carvings stretch over a cliff length of about 125 meters, running north to south, and have a direct relationship to the water temple. A poster will illustrate the various types of carvings and describe what we learned about them in our 2010-2012 research at Ollantaytambo. Special features include flat vertical areas that were gold plated, niches, nubs, channels and a paqchu (right). In 2012, we assigned two of our long-time local archaeologist colleagues with documentation of the cliff carvings. Ives Bejar Mendoza and Hugo Hanco Halire provided meticulous documentation of the carvings with detailed measurements and scaled sketches.

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53rd
Annual Meeting

JANUARY 11-12, 2013
BERKELEY, CALIFORNIA

*The Institute of Andean Studies was the vision of John H. Rowe
(1918–2004), who founded it in 1960.*

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Restaurant guides: Tom Weller and Karen Bruhns

Wurster Hall and audio-visual support: Joe Gouig

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Friday, January 11th

FRIDAY MORNING 8:30-9:15

Registration

FRIDAY MORNING 9:15-11:30

Session chair: ANDREW RODDICK, *McMaster University*

ABIGAIL LEVINE, *Cotsen Institute of Archaeology, University of California, Los Angeles*

The Use and Re-use of Ceremonial Space at Taraco, Peru

SCOTT C. SMITH, *Franklin & Marshall College*, MARIBEL PÉREZ ARIAS, *University of Pittsburgh*

Early Ceremonialism at Khonkho Wankane, Bolivia

MIRIAM A. KOLAR, *Stanford University Center for Computer Research in Music and Acoustics*

Experimental Archaeology at Chavín de Huántar, Perú: In-Situ
Psychoacoustics

CARLOS FARFÁN LOBATON, *Universidad Nacional Federico Villarreal*

Las Huancas y su Significado Simbólico en los Andes Centrales

FRIDAY AFTERNOON 1:00-1:30

Poster session, Wurster Hall foyer.

FRIDAY AFTERNOON 1:30-5:00

Session chair: JUSTIN JENNINGS, *Royal Ontario Museum*

JENNIFER RINGBERG, *University of North Carolina at Chapel Hill and Moche Inc.*

Highland Identity and Daily Life in a Gallinazo-Early Moche Phase
Community

EVAN SURRIDGE, *University of North Carolina at Chapel Hill*, BRIAN BILLMAN,
University of North Carolina at Chapel Hill, JESUS BRICEÑO ROSARIO, *Ministerio de
Cultura-Trujillo*

Quebrada del Leon: Preliminary Results from a Late Moche Hinterland
Settlement in the Moche Valley

SARAH I. BAITZEL, *University of California, San Diego*

Tiwanaku Mortuary Practices and Social Identities at Omo M10,
Moquegua, Peru

PAUL S. GOLDSTEIN, *University of California, San Diego*

Many Rooms: A Reinterpretation of the Tiwanaku Temple at Omo,
Moquegua, Peru

DONNA NASH, *University of North Carolina Greensboro*, MATTHEW BIWER, *University of California at Santa Barbara*

Crafting Chicha: A Material Comparison Between Archaeological and
Ethnographic Production

KATHARINA SCHREIBER, *University of California at Santa Barbara*

Why Did Wari Collapse?

FRIDAY EVENING 5:15

Annual Business Meeting (IAS members only)

Saturday, January 12th

SATURDAY MORNING 8:30-9:15

Registration

SATURDAY MORNING 9:15-11:30

Session chair: LYNN A. MEISCH, *Saint Mary's College of California*

ELENA PHIPPS, *Metropolitan Museum of Art (ret.)*

Materiality of Color in an Early Nasca Textile

ANN POLLARD ROWE, *The Textile Museum, Washington DC*

Textile Reflections of Highland-Coastal Relationships: Late Chillon and
Chancay

ANN H. PETERS, *University of Pennsylvania Museum of Archaeology and Anthropology*, ELSA
TOMASTO, *Pontificia Universidad Católica del Perú*

Redefining Paracas Necropolis

ROBYN E. CUTRIGHT, *Centre College*

Lambayeque Politics in the Chaupiyunga: A View from Ventanillas

SATURDAY AFTERNOON 1:00-1:30

Poster session, Wurster Hall foyer.

SATURDAY AFTERNOON 1:30-5:00

Session chair: DANIEL CONTRERAS, *Institute for Ecosystem Research, Kiel University*

JEAN-PIERRE PROTZEN, *University of California, Berkeley*

On the Trail of Dwight T. Wallace: the Pisco Valley Revisited

JASON TOOHEY, *University of Wyoming*, BRYN GEDDES, *Independent Scholar*, MELISSA S. MURPHY, *University of Wyoming*

There's No Place Like Home. A Comparative Review and Interpretation of Human Burials in Dwellings and Domestic Contexts

ANNA GUENGERICH, *University of Chicago*

Domestic Monumentality: Spatial Organization and Residential Architecture in Chachapoya Settlements

DI HU, *University of California, Berkeley*

A Perspective of Chincha Economics Through Their Ritual Lithics and Balance Beams

KENNETH R. WRIGHT, *Wright Water Engineers*, RUTH M. WRIGHT, *Wright Water Engineers*, ARMINDA GIBAJA O., *Instituto Regional de Cultura, Cuzco*, RICHARD W. MIKSAD, *The University of Virginia*, GORDON M. MCEWAN, *Wagner College*

Incamisana at Ollantaytambo, Peru: An Inca Water Temple

DAVID BROWN, *The University of Texas at Austin*

End of Empire: The Final Years of the Inka Occupation in Northern Ecuador

SATURDAY EVENING 8:00 (Open to the public)

GARY URTON, *Harvard University*

Knotted Cord Records and Documents in Colonial Peru: Is this the 'Rosetta' Khipu?

SATURDAY EVENING 9:00

President's reception, Archaeological Research Facility

POSTERS

Posters will be on display throughout the conference in the Wurster foyer. Poster authors will be available between 1:00 pm and 1:30 pm daily.

BENJAMIN CARTER, *Mublenberg College*

Can Oxygen and Carbon Isotopes be Used to Source Spondylus?

LUIS JAIME CASTILLO BUTTERS, *Pontificia Universidad Católica del Perú*, SOLSIRE

CUSICANQUI MARSANO, *Pontificia Universidad Católica del Perú*

Behind Walls: Cerro Chepén and San Ildefonso, Two Fortified Settlements in the Jequetepeque Valley

CHRISTIANE CLADOS, *Ludwig-Maximilian University Institute of Ethnology*

Jaguar In A Frame - On the Iconic Nature of Tocapus and Pre-Incaic Square and Rectangular Motif Units

ESTER ECHENIQUE, *University of Arizona*

Technology and Production Patterns of Fine Wares During the Late Formative and Middle Periods in San Pedro de Atacama (Chile): A Petrographic and Experimental Approach

FRANCESCA FERNANDINI, *Stanford University*, GRACE ALEXANDRINO, *Pontificia Universidad Católica del Perú*, JUAN FRANCISCO CARDENAS, *Pontificia Universidad Católica del Perú*

Architecture and Space at Cerro de Oro, Cañete

KEVIN FLOERKE, *University of California, Los Angeles*, *Cotsen Institute of Archaeology*

Cusco Valley Inca Road Survey

ALICIA GORMAN, *University of California, Santa Barbara*, JELMER W. EERKENS, *University of California, Davis*, KEVIN J. VAUGHN, *Purdue University*

Electron Microprobe Analysis of Nasca Polychrome Ceramic Pigments

W. RANDALL HAAS, JR., *The University of Arizona*

Neutral Theory, Residential Mobility, and Site Size Across the Archaic-Formative Transition in the Ilave Basin, Peru

JOHN W. JANUSEK, *Vanderbilt University*

The Tiwanaku Suñawa Monolith and Early 'Classic Style' Carved Stone Stelae: Steps toward a Stylistic Chronology

ILANA JOHNSON, *California State University, Sacramento*

Figurines and Gender Roles in Moche Households

PATRICIA J. KNOBLOCH, *Institute of Andean Studies*

Crowns of Knots: Four-Cornered, 'Pile' Hats of the Middle Horizon

LUIS ARMANDO MURO YNOÑÁN, *San José de Moro Archeological Program*, LUIS JAIME

CASTILLO BUTTERS, *Pontificia Universidad Católica del Perú*

The Tomb of the Priest of San José de Moro and the Power Relations in the Late Moche Society in the Jequetepeque Valle, Perú

JEANETTE NICEWINTER, *Virginia Commonwealth University*

What Does That Say? Visual Communication on Cajamarca Ceramics

DIANNE SCULLIN, *Columbia University*

Moche Soundscapes: The Acoustic Properties of Performance Space at Huaca de la Luna and Huaca Sol

SEBASTIAN K.T.S. WÄRMLÄNDER, *The University of California, Los Angeles/Getty*

Conservation Programme, Stockholm University, VANESSA MUROS, *The University of*

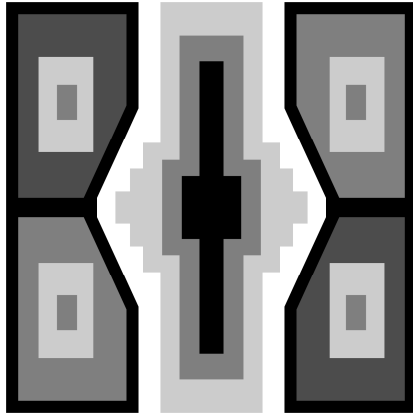
California, Los Angeles/Getty Conservation Programme, DAVID A. SCOTT, *The University of*

California, Los Angeles/Getty Conservation Programme

PreHispanic Gold and Tumbaga Fragments from the Rio de La Miel, Colombia

Notes

INSTITUTE
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52nd
Annual Meeting

JANUARY 6-7, 2012
BERKELEY, CALIFORNIA

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Legal Advice: Chris Schaller
Doyenne: Pat Lyon

Friday, January 6th

FRIDAY MORNING 8:30-9:15

Registration

FRIDAY MORNING 9:15-11:30

Session chair: MATTHEW SAYRE, *University of South Dakota*

ABIGAIL LEVINE, *University of California, Los Angeles*, CHARLES STANISH, *University of California, Los Angeles*

Conflict and Competition in the Formative Northern Lake Titicaca Basin

HUGO R. LUDENÑA, *Fondo Documentario de la Cultura Peruana*

El Prececerámico en el Valle del Chillón y la Historia Mítica del Wa-Kon y los Wilka

PETER R. FUCHS, *Freie Universität Berlin, Lateinamerika-Institut (LAI)*, RENATE PATZSCHKE, *Freie Universität Berlin, Lateinamerika-Institut (LAI)*, JESÚS BRICEÑO, *Ministerio de Cultura, Trujillo*

Sechin Bajo, Casma, Peru: Earliest Monumental Architecture in the Central Andes

EMILY STOVEL, *Instituto de Investigación Arqueológica y Museo Gustavo Le Paige San Pedro de Atacama, Chile, Ripon College*

So Who Happened What? Prehistoric Atacameño Ceramic Styles and Chronology Reassessed

FRIDAY AFTERNOON 1:00-1:30

Poster session, Wurster Hall foyer.

FRIDAY AFTERNOON 1:30-5:00

Session chair: ERIN RODRIGUEZ, *University of California, Berkeley*

MIEŁOSZ GIERSZ, *Institute of Archaeology, Center for Pre-Columbian Studies, University of Warsaw*

Castillo de Huarney: Huari Elite Residential and Mortuary Complex on the North Coast of Peru

SILVANA A. ROSENFELD, *University of South Dakota*

Local Elites and Animal Meat in the Wari Empire

WILLIAM WHITEHEAD, *University of Wisconsin Colleges and Ripon College*, MATTHEW BIWER, *University of California, Santa Barbara*

Paleoethnobotany of the Moquegua, Peru Region: A Review of Middle Horizon Plant Use

JOHN W. JANUSEK, *Vanderbilt University*, PATRICK RYAN WILLIAMS, *Field Museum of Natural History*, MARK GOLITKO, *Field Museum of Natural History*, CARLOS LEMUZ AGUIRRE, *Sociedad de Arqueología de La Paz*

Building Taypikala: Telluric Transformations in the Stone Production of Tiwanaku

NICOLA SHARRATT, *Field Museum of Natural History*

Living and Dying through Collapse: Excavations in a Terminal Tiwanaku Village in the Moquegua Valley, Peru

MELISSA VOGEL, *Clemson University*

Exit Strategies: The Conquest and Abandonment of El Purgatorio

FRIDAY EVENING 5:15

Annual Business Meeting (IAS members only)

Saturday, January 7th

SATURDAY MORNING 8:30-9:15

Registration

SATURDAY MORNING 9:15-11:30

Session chair: DI HU, *University of California, Berkeley*

HEIDI KING, *The Metropolitan Museum of Art*

The Wari Feathered Panels from Corral Redondo, Churunga Valley: A Re-Examination of Context

ANN POLLARD ROWE, *The Textile Museum, Washington*

Huari-style Tie-dyed Tunics

ELIZABETH M. PLUNGER, *University of California, San Diego*, PAUL S. GOLDSTEIN, *University of California, San Diego*

Women of the Cloth: A Case of a Possible Female Specialist Group or Social Category from the M43, M70, and M16 Tiwanaku Cemeteries in Moquegua, Southern Peru

KIRSTEN HALLIDAY, *University College London Institute of Archaeology, British Museum*

Calculating Control: Chimu Textile Production Lines

SATURDAY AFTERNOON 1:00-1:30

Poster session, Wurster Hall foyer.

SATURDAY AFTERNOON 1:30-5:00

Session chair: DANIEL CONTRERAS, *Kiel University, Germany*

ANN KENDALL, *Cusichaca Trust*

The Development of Andean Civilizations with Implications for Today

JASON TOOHEY, *University of Wyoming*

Late Intermediate Period Highland-Coast Interaction: A View from
Cajamarca

COLLEEN M. ZORI, *Cotsen Institute of Archaeology, University of California, Los Angeles*

Copper and Silver Production in the Tarapacá Valley, Northern Chile
during the Late Intermediate Period and Late Horizon

STEVE WIRTZ, *University of California, Santa Barbara*

The Inca Occupation of a Huanca shrine

DENNIS OGBURN, *University of North Carolina at Charlotte*, BILL SILLAR, *University
College London*

Incidents of Travel and Exploration with Portable XRF in the Land of
the Incas

ADRIANA VON HAGEN, *Institute of Andean Studies*, KEITH MUSCUTT, *University of
California, Santa Cruz*

Off with their Heads: Chachapoya Trophy Head Imagery

SATURDAY EVENING 8:00 (Open to the public)

Session chair: JOHN RICK, *Stanford University*

TAMARA L. BRAY, *Wayne State University*

Water, Ritual and Power in the Inca Empire

SATURDAY EVENING 9:00

President's reception, Archaeological Research Facility

POSTERS

Posters will be on display throughout the conference in the Wurster foyer. Poster authors will be available between 1:00 pm and 1:30 pm daily.

AMANDA S. ALAND, *Southern Methodist University*

Reassessing the Inka Occupation of the North Coast of Peru: A Case Study at Santa Rita B, Chao Valley

BERNARD BELL, *Optical Wizards LLC*

Greeting the Sun at Puncuyoc

VIVIANA BELLIFEMINE, *University of Cambridge*

Mortuary Practices in the Cuzco Region: An Arena of Inka Imperial and Local Interactions

MIRON BOGACKI, *Institute of Archaeology, University of Warsaw*, MIŁOSZ GIERSZ, *Institute of Archaeology, Center for Pre-Columbian Studies, University of Warsaw*, PATRYCJA PRZĄDKA-GIERSZ, *Center for Pre-Columbian Studies, University of Warsaw*, WIEŚLAW MAŁKOWSKI, *Institute of Archaeology, University of Warsaw*, KRZYSZTOF MISIEWICZ, *Institute of Archaeology, University of Warsaw*, *Institute of Archeology and Ethnology of the Polish Academy of Sciences, Warsaw*

GPS RTK Mapping, Kite Aerial Photogrammetry, Geophysical Survey and GIS Based Analysis of Surface Artifact Distribution at the pre-Hispanic site of the Castillo de Huarmey, North Coast of Peru

BOB BRADLEY, *University of Texas, Pan-American*

Surveying the Shrine of the Matron of Cajamarquilla

JESSICA JOYCE CHRISTIE, *East Carolina University*

Spatial Divisions and Social Structure in the Ausangate Region, Departamento Cusco

CHRISTIANE CLADOS, *University of Wisconsin–Madison*

Between the Scenes – Square and Rectangular Motif Units in Nasca Imagery

DANIEL A. CONTRERAS, *Institute for Ecosystem Research, Kiel University*, NICHOLAS TRIPCEVICH, *University of California, Berkeley*

Long-term Human Occupation of the Upper Río Caracha, Ayacucho, Peru

KIMBERLY L. JONES, *University of Texas at Austin*
Gallinazo Ceramics in the Zaña Valley, Peru

PATRICIA KNOBLOCH, *Institute of Andean Studies*
New Kids on the Block: Recent Investigation of Andean Identity in the
Middle Horizon

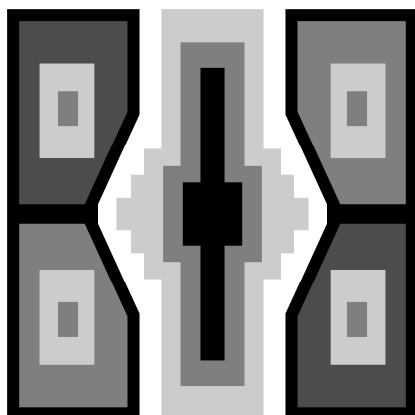
SARAH SCHER, *Upper Iowa University*
Making Masculinity: Phallic Representation and Male Gender in Moche
Art

KENNETH R. WRIGHT, *Wright Water Engineers*
Moray: Inca Engineering Mystery

RUTH M. WRIGHT, *Wright Water Engineers*
Moray: A Ceremonial Center

Notes

INSTITUTE
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51st
Annual Meeting

JANUARY 7-8, 2011
BERKELEY, CALIFORNIA

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Left Coast Press (*Ñawpa Pacha*): Mitch Allen, Bridget Moar, Detta Penna
Ñawpa Pacha 29 mailing: Craig Smith
Key collection: Katie Chiou
Doyenne: Pat Lyon

Friday, January 7th

FRIDAY MORNING 8:30-9:15

Registration

FRIDAY MORNING 9:15-11:30

Session chair: MATTHEW SAYRE *Stanford University*

GABRIEL PRIETO, *Yale University*

Characterizing Ritual Activities in an Early Fishing Village of the Peruvian North Coast

CHRISTOPHER MILAN, *Yale University*

Life on the Margin: Preliminary Data from the Initial Period Hamlets of Anchucaya, Chillaco and Sisicaya

CHARLES ORTLOFF, *University of Chicago, CFD Consultants International*,
MICHAEL E. MOSELEY, *University of Florida*, RUTH SHADY SOLIS, *Director, North Central Coast Peruvian Archaeology Instituto Nacional de Cultura*, DANIEL SANDWEISS, *University of Maine*, DAVID KEEFER, *United States Geological Survey*, ANA LONDONO G., *Saint Louis University*

2600-1800 BCE Caral: Environmental Change and Agricultural/ Maritime Resource Collapse at the End of the Late Archaic Period

MARCO CURATOLA-PETROCCHI, *Pontificia Universidad Católica del Perú*

The Sound and Shape of God's Voice

FRIDAY AFTERNOON 1:00-1:30

Poster session, Wurster Hall foyer.

FRIDAY AFTERNOON 1:30-5:00

Session Chair: MARIA BRUNO, *Lake Tahoe Community College*

JEFFREY SPLITSTOSER, *Institute for Andean Studies*

Early Paracas Textiles from the Paracas-Nasca Region of Peru

MERCEDES DELGADO, *QALLTA*

Villa El Salvador: Un Sitio con Cerámica de la Costa Sur en el Valle Bajo de Lurin

JOSÉ CAPRILES, *Washington University*, JUAN ALBARRACIN-JORDAN, *Fundación Bartolomé de las Casas*

Ritual and Social Interaction in the Southern Altiplano: Recent Research from the Sora River Caves, Bolivia

CAROL SCHULTZE, *Historical Research Associates, Inc.*

A Tiwanaku Enclave in the Metallurgical Landscape of Puno Bay, Lake Titicaca, Peru

VICTOR M. PONTE, *University of Wisconsin Milwaukee*

Prehispanic Andean Herders from the Callejon de Huaylas, Peru, A Case Study of Household Archaeology

ANDREW RODDICK, *University of Victoria*, John Janusek, *Vanderbilt University*

From Profanity to Profundity: (Grudgingly) Learning to Appreciate Tiwanaku 'Ash Pits' as Tiwanaku Cultural Practice

FRIDAY EVENING 5:15

Annual Business Meeting (IAS members only)

Saturday, January 8th

SATURDAY MORNING 8:30-9:15

Registration

SATURDAY MORNING 9:15-11:30

Session chair: STEFANIE BAUTISTA, *Stanford University*

CHRISTOPHER ARNETT, *University of British Columbia*

Moche Elite Burials and Iconographic Interpretation

BRIAN BILLMAN, *University of North Carolina*, JESUS BRICEÑO ROSARIO, *Instituto Nacional de Cultura MOCHE, Inc.*

Saving the Past by Investing in the Future: Community-based Site Preservation from the North Coast of Peru

LISA TREVER, *Harvard University*, JORGE GAMBOA VELÁSQUEZ, *Proyecto Arqueológico Pañamarca – Área Monumental*, RICARDO TORIBIO RODRÍGUEZ, *Proyecto Arqueológico Pañamarca – Área Monumental*, RICARDO MORALES GAMARRA, *Universidad Nacional de Trujillo*

Return to Pañamarca: Results of the 2010 Excavations in the Moche Monumental Area

JOANNE PILLSBURY, *Dumbarton Oaks*, CAROL MACKEY, *California State University Northridge*

Cosmology and Ritual on a Lambayeque Kero

SATURDAY AFTERNOON 1:00-1:30

Poster session, Wurster Hall foyer.

SATURDAY AFTERNOON 1:30-5:00

Session chair: ANNA HARKEY *University of California at Berkeley*

BOB BRADLEY, *University of Texas-Pan American*

Mapping the Pre-Columbian Trail in the Chachapoya Cloud Forest

ALICIA BOSWELL, *UC San Diego*, EVAN SURRIDGE, *UNC Chapel Hill*, BRIAN BILLMAN, *UNC Chapel Hill*

Rethinking the Role of *Chaupiyunga* People in the Prehistory of the North Coast of Peru: A Case Study from the Moche Valley

MATT SCHAUER, *University of Illinois at Chicago*

Life on the Frontier: the Distribution and Density of Occupation of Inca Fortifications in the Northern Highlands of Ecuador

PATRICE LECOQ, *Université Paris Sorbonne*

The Terraces with Mosaic from the Inca site of Choqek'iraw, in Peru.

STEVE KOSIBA, *Monmouth University*

Emplacing Inka Authority: The Conversion of Local Places and the Construction of Political Subjects Throughout Inka State Formation (Cusco, Perú)

LARRY COBEN, *Sustainable Preservation Initiative, University of Pennsylvania*

Is Every Platform an Usnu? And Vice-versa?

SATURDAY EVENING 8:00 (Open to the public)

CAROLYN DEAN, *University of California at Santa Cruz*

The Many Meanings of Inka Masonry

SATURDAY EVENING 9:00

President's reception, Archaeological Research Facility

POSTERS

Posters will be on display throughout the conference in the Wurster foyer. Poster authors will be available between 1:00 pm and 1:30 pm daily.

JACOB BONGERS, *University of Southern California*, ELIZABETH ARKUSH
University of Pittsburgh, MICHAEL HARROWER, *Johns Hopkins University*
Landscapes of Death: GIS-based Analyses of Chullpas in the Western
Lake Titicaca basin

PABLO CAHIZA, *CONICET/UNCuyo Argentina - CSDC ASU United States*,
MARÍA JOSÉ OTS, *CONICET/UNCuyo Argentina*, JUAN PABLO AGUILAR,
CONICET, Argentina, JORGE GARCÍA, *CONICET/UNCuyo Argentina*
Transitional Spaces in the Argentinean Middle-west: Late Societies of
Valle Fértil, San Juan (A.D. 300-1500)

DANTE CASARETO MOGNASCHI
Route of a Divine Wari

DANIEL A. CONTRERAS, *Stanford University*
How Far to Conchucos? Assessing the Implications of Exotic Goods at
Chavín de Huántar

RANDY HAAS, *University of Arizona*
Archaic Networks and Residential Sedentism in the Ilave Drainage,
Titicaca Basin, Peru

VINCE LEE, *Institute of Andean Studies*
The Building of Sacsawaman Revisited

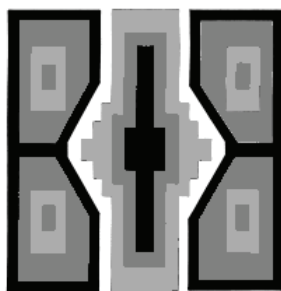
LIZETTE MUÑOZ, *University of Pittsburgh*, DAVID GOLDSTEIN, *Institute of
Andean Studies*, STEVEN WERNKE, *Vanderbilt University*
Foodways at Malata, an Early Doctrina in the Southern Peruvian
Highlands

PAUL SZPAK, *The University of Western Ontario*, JEAN-FRANÇOIS MILLAIRE, *The
University of Western Ontario*, FRED J. LONGSTAFFE, *The University of Western
Ontario*, CHRISTINE D. WHITE, *The University of Western Ontario*
Guano Fertilization on the Coast of Peru: An Isotopic Perspective

Notes

Notes

INSTITUTE *of*
ANDEAN STUDIES



50th
Annual Meeting

JANUARY 7 - 9, 2010

BERKELEY, CALIFORNIA

Thursday, January 7

THURSDAY MORNING 8:30-9:15

Registration

THURSDAY MORNING 9:15-11:30

Session chair: JOHN RICK *Stanford University*

CHRISTINE HASTORF *University of California, Berkeley*

Becoming Traditions—the Formative Times in the Titicaca Basin

JOHN RICK *Stanford University*

The Stamped Ceramics of Chavín: Content and Connections

PETER KAULICKE *Pontificia Universidad Católica del Perú*

Finding the Harpy Eagle's Nest:

Recent Research at an Early Paracas Burial Ground in the
Río Grande de Nazca Valley, South Coast of Peru

YUJI SEKI *National University of Ethnology, Japan*

Diversidad del Poder en la Sociedad del Período Formativo:
Desde el Punto de Vista de la Sierra Norte del Perú

THURSDAY AFTERNOON 1:15-1:30

Poster session, Wurster Hall foyer.

THURSDAY AFTERNOON 1:30-5:00

Session Chair: LUÍS JAIME CASTILLO *Pontificia Universidad Católica del Perú*

YOSHIO ONUKI *University of Tokyo*

Formative Period in the Northern Part of Peru

JEAN-FRANÇOIS MILLAIRE *University of Western Ontario*

Primary State Formation on the Peruvian North Coast

STEVE BOURGET *University of Texas, Austin*

Moche Rulership and Society Between the 5th and the 7th
Century: A View from the Middle Moche Period

LUÍS JAIME CASTILLO *Pontificia Universidad Católica del Perú*
SANTIAGO UCEDA CASTILLO *Universidad Nacional de Trujillo*

110 Years of Moche Archaeology:
Changing Paradigms and New Perspectives

IZUMI SHIMADA *University of Southern Illinois, Carbondale*

A Holistic Understanding of the Sicán Culture:
Results from Three Decades of Research

CAROL MACKEY *California State University, Northridge*

Empires of the North Coast: An Overview of the Chimú and Inka

JEFFREY QUILTER *Harvard University*

Archaeology and the Colonial Period on the North Coast of Peru

THURSDAY EVENING 8:00

Paper (open to the public):

RICHARD BURGER *Yale University*

First Glimpses of the Religion and Ritual of the Manchay Culture
(1800–700 BC)

Friday, January 8

FRIDAY MORNING 8:30-9:15

Registration

FRIDAY MORNING 9:15-11:30

Session chair: KATHARINA SCHREIBER *University of California, Santa Barbara*

HENDRIK VAN GIJSEGHEN *McGill University*

ANN PETERS *Cornell University*

The “End” of the Paracas Sequence:
Geographic Views on a Transformative Period

KEVIN VAUGHN *Purdue University*

Nasca Then and Now: A Retrospective on a
Century of Understanding an Enigmatic Andean Culture

KATHARINA SCHREIBER *University of California, Santa Barbara*
ANITA COOK *The Catholic University of America*
CORINA KELLNER *Northern Arizona University*

The South Coast in the Middle Horizon:
Reconsidering the Nasca-Huari Connection

CHRISTINA CONLEE *Texas State University*

Reassessing Nasca in the Late Intermediate Period
and Late Horizon

FRIDAY AFTERNOON 1:15-1:30

Poster session, Wurster Hall foyer.

FRIDAY AFTERNOON 1:30-5:00

Session Chair: CHARLES STANISH *University of California, Los Angeles*

MAURICIO URIBE *University of Chile*

El Período Medio y Tiwanaku en el Norte Grande de Chile:
Revisión de la Evidencia Cerámica y Textil de Arica
y San Pedro de Atacama (ca. 500–1000 D.C.)

JOHN JANUSEK *Vanderbilt University*

Urbanism in the South-Central Andes during the Middle Horizon

CHARLES STANISH *University of California, Los Angeles*

Tiwanaku in the Middle Horizon

KATHARINA SCHREIBER *University of California, Santa Barbara*

Huari in the Middle Horizon

LUIS G. LUMBRERAS *Universidad Nacional Mayor de San Marcos, Lima*
La Sierra Central

SUSAN E. BERGH *Cleveland Museum of Art*

Tapestry in the Middle Horizon

FRIDAY EVENING 6:00

Annual Business Meeting (IAS members only)

Saturday, January 9

SATURDAY MORNING 8:30-9:15

Registration

SATURDAY MORNING 9:15-11:30

Session chair: ANN POLLARD ROWE *Textile Museum*

WILLIAM J. CONKLIN *Institute of Andean Studies, Textile Museum, Field Museum*

Technology and Culture in the Andes

Ann Pollard Rowe *Textile Museum*

The Linear Mode Revisited

MARY FRAME *Independent Researcher, Vancouver, Canada*

FRANCISCO VALLEJO

MARIO RUALES *Director of the Huaycán de Cieneguilla Social Applications Project, Program Qbapaq Ñan. INC, Lima, Peru*

WALTER TOSSO *Director of the Pisquillo Archaeological Project, Amano Museum Foundation*

Ychsma Textiles from a Late Horizon Burial at Armatambo

LYNN A. MEISCH *Saint Mary's College of California*

Murúa Was Right:

Ethnographic Confirmation of a Pre-Hispanic Weaving Code

SATURDAY AFTERNOON 1:15-1:30

Poster session, Wurster Hall foyer.

SATURDAY AFTERNOON 1:30-5:00

Session chair: CATHERINE JULIEN *Western Michigan University*

STELLA NAIR *University of California, Riverside*

In Search of the Kallanka:

Modern Myths, Colonial Tales and Other Architectural Fables

JEAN-PIERRE PROTZEN *University of California, Berkeley*

Inca Architecture: A Perspective

SUSAN NILES *Lafayette College*

Up Against the Wall: The Use and Misuse of Inca Buildings

ROBERTO SAMANÉZ ARGUMEDO *Instituto Nacional de Cultura, Cuzco*

El Cuzco Inca en una Vision Actual

CATHERINE JULIEN *Western Michigan University*

The Chinchaysuyu Road as Imperial Landscape

ELIZABETH MERCEDES KUON ARCE *Cuzco*

“Lo Inca” en el Arte del Cuzco del Siglo XX

SATURDAY EVENING 8:00

Paper (open to the public):

JORGE FLORES OCHOA *Universidad Nacional de San Antonio Abad del Cuzco*

John H. Rowe y el Cuzco

SATURDAY EVENING 9:00

President's Reception, Archaeological Research Facility



POSTER SESSION

Posters will be on display throughout the duration of the conference. Poster authors will be available to meet with conference attendees between 1:15 pm and 1:30 pm daily. Light refreshments will be served in the Wurster foyer.

PATRICK CARMICHAEL *Mount Royal University*

Nasca 1 and 2 Phase Markers:
Adjustments to the Original Seriation

YESSICA JOYCE CHRISTIE *East Carolina University*

Roads and Spatial Divisions in the Inka Empire
Explored through the Lens of Appearance and Essence

KEVIN DARCY JR. *Metropolitan State College of Denver*

CATHERINE GAITHER *Metropolitan State College of Denver*

KLAUS KOSCHMIEDER *Comunidad Alemana de Investigaciones*

Trauma Patterns Among the Chachapoyas:
New Evidence and Insights

MATT EDWARDS *University of California, Santa Barbara*

Wari Outposts from Southern Ayacucho to Nasca:
Pataraya and its Regional Context

JOSEPH FABISH *Huamachuco Textile Project*

ALAN COLVILLE *California State University, Los Angeles*

Inca Motifs in Huamachuco Textiles

MELISSA GOODMAN-ELGAR *Washington State University*

NICHOLE BETTENCOURT *Washington State University*

LOUIS FORTIN *Washington State University*

Politics of Building: Geoarchaeological Analyses of
Formative Buildings from the Taraco Peninsula

PATRICIA KNOBLOCH *Institute of Andean Studies*

Divine Myths of Ancient Heroes in the Middle Horizon

KEVIN LANE *Sainsbury Centre for Visual Arts, University of East Anglia*

Incoming into the Highlands:
Inca Presence in the North-central Andes

LUIS FERNANDO BEJAR LUKSIC *Pontificia Universidad Católica del Perú*
KAREN DURAND CÁCERES *Universidad Nacional de San Antonio Abad del Cuzco*
ALEXEI VRANICH *Cotsen Institute of Archaeology, UCLA*

Investigating the Huacas of the Empire:
The Archaeological Project “Balcón del Diablo,” Cusco, Peru

DONNA J. NASH *The Field Museum, Chicago*

What is a Tenon Head Doing on Cerro Baúl?

DENNIS OGBURN *University of North Carolina, Charlotte*

Elite Inter-marriage in the Andean Middle Horizon

JEFFREY C. SPLITSTOSER *The Catholic University of America*

ANNE E. TIBALLI *Binghamton University*

Parenthetical Notation:
A New Method for Recording Yarn Structure

NICHOLAS STEPHENS *Metropolitan State College of Denver*

CATHERINE GAITHER *Metropolitan State College of Denver*

KLAUS KOSCHMIEDER *Comunidad Alemana de Investigaciones*

General Population Health of the Chachapoyas

NICHOLAS TRIPCEVICH *Archaeological Research Facility, UC Berkeley*

Llama Caravan Travel Speeds

MELISSA VOGEL *Clemson University*

Ceramic Innovation and Experimentation
at the Casma Capital City, El Purgatorio

ALEXEI VRANICH *Cotsen Institute of Archaeology, UCLA*

KEVIN FISHER *Cornell University*

Rendering Cuzco in Three Dimensions

P. R. WILLIAMS *The Field Museum, Chicago*

A. LEVINE *Cotsen Institute of Archaeology, UCLA*

C. STANISH *Cotsen Institute of Archaeology, UCLA*

L. DUSSUBIEUX *The Field Museum, Chicago*

M. BRUM *Ripon College*

Ch'iyar Qala: Basalt Sourcing in the Andean Altiplano