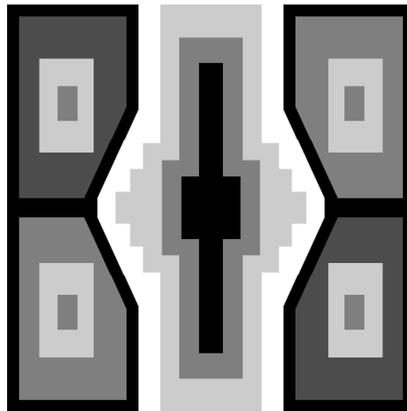


INSTITUTE  
*of*  
ANDEAN STUDIES

~ *Abstracts* ~



60<sup>th</sup>

*Annual Meeting*

JANUARY 10-11, 2020  
BERKELEY, CALIFORNIA

Friday, January 10<sup>th</sup>

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ERIK MARSH, *Universidad Nacional de Cuyo, Argentina*; ANDREW RODDICK, *McMaster University*; ELIZABETH KLARICH, *Smith College*; CHRISTINE HASTORF, *University of California, Berkeley*

### **The incised and the slipped: Tracking the tempo of northern and southern Titicaca basin Formative ceramic styles**

This paper proposes refinements to the chronology of Formative decorated ceramics in the Lake Titicaca basin. We summarize the results, currently in press, of Bayesian models from eight Late Formative centers in the southern Lake Titicaca basin. We extend this chronology with two new Bayesian models of Middle Formative ceramics from Chiripa in the south and four sites with Pukara ceramics in the north. The similar incised styles and closely aligned chronologies lead us to explore the possibility that decorating practices or even potting communities may have alternated between the north and south during the Formative.

LUIS A. FLORES, *University of California, Davis*

### **Goods to everyone: Obsidian during the Formative Period of the Titicaca basin**

Previous research in the Lake Titicaca basin proposed that emergent social prestige and status in the Formative Period is indicated by differential access to obsidian by elite and non-elite members of the population. The model anticipates high proportions of obsidian in large ceremonial centers relative to residential centers. This study examines the distribution of obsidian among Middle and Late Formative period (1300 BC - 500 AD) settlements in the Ramis valley in the northern Lake Titicaca basin. The analysis reveals not only an abundance of obsidian projectile points in both site types, but also fails to find any relationship between site type and obsidian prevalence. Implications for social organization are considered and seem to point to a hierarchical order that is based more in economics than politics.

SARAH A. MASSEY, *Independent*

### **Tajahuana: New perspectives on a Paracas site in the Ica valley**

Research was initiated in 2019 at the site of Tajahuana in the middle Ica valley for the purpose of gaining insight into regional interaction during the late Paracas period. Tajahuana was described by Menzel, Rowe, and Dawson as a single phase urban center. The presence of earthen walls and stone-lined terraces caused speculation on its defensive character during a time of possible inter-group conflict. However, all theories have been based on surface observations. The 2019 survey of the lower slopes and excavations conducted along the walls and at low mounds on the summit offer new evidence of Tajahuana's construction, organization and regional presence.

LISA DELEONARDIS, *Johns Hopkins University*

### **Narratives of place and space: Architectural form and motif at Casa Blanca**

Innovation in artistic media is widely recognized for the Paracas (ca. 800-200 BCE) of south coastal Peru. Especially intriguing are new architectonic forms and their visual referents understood for the later phases. In this paper, I discuss a stepped pyramidal sculpture recently identified in the lower Ica valley as a starting point for examining the interplay between architectural form and motif on portable objects. I consider the sculpture's placement in relation to landscape features and its import to ritual practice. This research draws from broader questions about architecture and place-making, and informs the repertoire of architectonic elements that constitute Paracas ceremonial complexes.

OSCAR ARIAS ESPINOZA, *Programa de Investigación Arqueológica y Conservación en Chavín de Huántar de Stanford University*

### **Prácticas de renovación arquitectónica en el centro ceremonial Chavín de Huántar durante el Periodo Formativo (3300–2550 AP)**

En esta exposición trataré sobre las prácticas de renovación arquitectónica que conllevaron a la monumentalidad del centro ceremonial Chavín de Huántar durante el Periodo Formativo (3300–2550 AP) a partir de los datos obtenidos en las excavaciones en la Explanada Norte del Edificio “C”. Realizaré la caracterización de las edificaciones halladas y definidas como arquitectura ceremonial; en un intento de comprender los cambios y continuidades dados durante ese periodo. Además, presentaré resultados de los análisis interdisciplinarios realizados a diversos materiales que fueron depositados intencionalmente durante eventos específicos de construcción, siendo catalogados como ofrendas, determinando aspectos como el tipo de elemento, procedencia y uso social.

MIRIAM A. KOLAR, *Amberst College*

### **The Chavín pututus: Instruments of wind, water, and world-building in the Andean Formative**

Sonic communication facilitated ideological transmission and cosmological projections at monumental Chavin. Materials, objects, and places transform sound that can be reconstructed, measured, and quantified archaeoacoustically. Graphically portrayed and site-excavated, the Chavin *pututus*—marine conch shell horns whose performance potential exceeds normative definitions—convey anthropic-ecological relationships with wind and water, beyond their elemental associations. Interdynamical use-function explorations of these ritual instruments in well-preserved site settings reveal anthropological evidence corroborated yet subsumed in non-sonic analyses. My study leverages iconographical and situational evidence in an exploration of the role of *pututus* in the positioning of humans and the ordering of human-environmental relations at Chavin.

RAFAEL VEGA CENTENO, *Pontificia Universidad Católica del Perú*

### **La ocupación Lima en Maranga y el valle bajo del Rímac**

Presento los resultados de las primeras cinco temporadas de trabajos en Maranga entre 2015 y 2019. Éstas se han orientado al esclarecimiento de la cronología y a la reconstrucción del contexto ambiental de las ocupaciones. Así, se aprovecharon perfiles estratigráficos expuestos por huaqueos, obras civiles y excavaciones antiguas para obtener contextos estratificados y material cultural diagnóstico, material orgánico para fechado y muestras de suelos para reconstrucción de perfiles palinológicos. El resultado ha sido una sólida secuencia ocupacional con tres fases vinculadas a material cerámico y patrones arquitectónicos característicos respaldadas con 36 fechas radiocarbónicas, además de una primera caracterización de las condiciones paleoambientales de la ocupación Lima en el valle bajo del Rímac.

GEOFFREY L. TAYLOR, *University of California, Berkeley*; MATTHEW P. SAYRE, *High Point University*

### **Wari foodways: A view from the urban core of Huari**

In recent years, archaeologists have seen major advancements in our understanding of Wari culture and political interaction during the Middle Horizon (AD 500–1000). Studies of Middle Horizon foodways have shed light on a Wari cuisine rooted in intensified maize agriculture, domesticated camelids and guinea pigs, along with fermented beverages brewed from molle fruit (*Schinus molle*). This paper will examine paleoethnobotanical evidence from the Patipampa sector in the urban core of Huari, providing previously unavailable evidence on Wari food and daily life at the capital. This analysis will also permit us to make comparative statements on the variation in food production practices across the Wari sphere of influence.

D. RAMÓN TORREZ CRUZ, *Saberes Bolivianos Investigaciones Sociales y Culturales*

### **Complementariedad y conflicto en los sitios arqueológicos de altura en la montaña Sajama durante el Periodo Intermedio Tardío (1000–1450 d.C.)**

La fijación del ser humano por las montañas, viene desde tiempos inmemoriales, a veces vistas como seres vivientes o deidades. En Bolivia la montaña Sajama, posee este elemento simbólico, una forma de comprobar esta mitificación fue registrando los sitios arqueológicos en su geografía, analizando su función, visibilidad, materialidad arqueológica y arquitectónica. Identificando 40 sitios, 28 en baja montaña, 11 en media montaña y 1 en alta montaña, de los 40 sitios el 90% son rituales, lo que comprueba su importancia y mitificación, una forma de interpretar esta ritualidad, está relacionada a conceptos de *tinku* y *taypi* que significan encuentro.

LORENA GRANA (IAS 2020 TRAVEL GRANTEE), *Instituto de Datación y Arqueometría, Centro de Desarrollo Tecnológico “Gral. Manuel Savio,” Universidad Nacional de Jujuy*; MARCOS QUESADA, *Centro de Investigaciones y Transferencia de Catamarca, Universidad Nacional de Catamarca*; VICTORIA ARÉVALOS, *Centro de Investigaciones y Transferencia de Catamarca*

### **Agricultural oasis at the southern puna: Ancient water management in Antofagasta de la Sierra (Argentina)**

The objective of the presentation is to show how a number of simple hydrological technics enabled the irrigation of a vast area of Antofagasta de la Sierra (Puna-Argentina) during the Prehispanic period. Through a combination of multiscale methods (including satellite imagery analysis, ground-proofing survey, excavation, and diatom analysis of the features), we revealed five different irrigation networks with distinct designs and different scales of use. This allows us to figure out the complexity of knowledge about ancient water management, to better understand the capacities of societies to adapt to desert conditions, and to learn about the creation of agricultural oases.

*Saturday, January 11<sup>th</sup>*

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ALINA APARICIO DE LA RIVA, *California Institute for Peruvian Studies (CIPS), Universidad Católica de Santa María (UCSM), and Museo Santuario Andino, Arequipa*

### **El tratamiento de los textiles en el campo**

Textiles collected in the field through excavation or surface collection often wait for considerable time before being treated in the laboratory. These important repositories of valuable information deserve to be treated properly in a more timely manner. This presentation tells how to process the textiles beginning in the field by following a few simple steps that facilitate their laboratory treatment, analysis, and documentation as well as their preservation.

AMY OAKLAND, *California State University East Bay, Institute of Andean Studies*

### **Middle Horizon textiles from Site A on the Pyramid of the Sun, Moche valley**

This paper discusses Max Uhle’s textile collection excavated in 1899 at Site A on the Pyramid of the Sun in the Moche valley that he sent to the University of California, Berkeley and his patron Phoebe Apperson Hearst. The textiles form a cohesive group and include double cloth, tapestry, basketry, spindles, and dyed yarn. Uhle (1913) discussed Tiahuanaco attributes and Dorothy Menzel (1977) determined early Middle Horizon dates. Peter Kaulicke (2019) published new data for Moche, including Site A textiles. The site is dramatic, but the textile characteristics compare directly with other Middle Horizon cemeteries along the Peruvian Pacific coast.

ANN P. ROWE, *The Textile Museum, The George Washington University Museum*

### **Fugitive dyes in Chancay textiles**

During my research for a book on Chancay textiles, it became apparent that the yarns that now look khaki were originally some much brighter and more interesting color. A few examples that have different amounts of fading in different areas alerted me to this problem. Although I originally focused on a rarely preserved fugitive green, I found that several other colors were sometimes also fugitive, and many Chancay textiles looked startlingly different when new than what we are accustomed to. Although the dyes have not yet been identified, I can suggest the original context for their use.

GRACE KATTERMAN, *California Institute for Peruvian Studies (CIPS), Universidad Católica de Santa María (UCSA) and Museo Santuario Andino, Arequipa*

### **Sacred textile offerings from the high Andes**

When archaeologist Johan Reinhard excavated the high peaks of the Andes, he returned with some amazing textiles that, because of their fragility were not displayed but stored in the Museo Santuario Andino. The museum has recently decided to stabilize some of them for public display. So far, they include an amazing black tunic and a number of figurines fully dressed in Inca style clothing.

RANDALL HAAS, TAMMY BUONASERA, *University of California, Davis*; JENNIFER CHEN, *Pennsylvania State University*; JELMER EERKENS, *University of California, Davis*; SARAH NOE, *University of California, Santa Barbara*; GLENDON PARKER, *University of California, Davis*; JOHN SOUTHON, *University of California, Irvine*; CARLOS VIVIANO LLAVE, *Independent*; JAMES WATSON, *University of Arizona and Arizona State Museum*

### **Excavations at Wilamaya Patjxa, Lake Titicaca basin, 9–7ka**

After more than a century of archaeological research in the Lake Titicaca basin, the Early Archaic Period remains the only unexcavated archaeological period, limiting our understanding of the first inhabitants of the interior highlands. Excavations in 2018 and 2019 at the newly discovered site of Wilamaya Patjxa in the Ilave basin, Peru, revealed a series of human burials and roasting pit features spanning the Early and Middle Archaic periods. Analyses of the materials show that human populations were living year-round in the interior highlands by at least 9ka, subsistence practices were gendered in surprising ways, and children were treated differently than adults in death.

DAGMARA SOCHA, *University of Warsaw*; RUDDY PEREA CHAVEZ, *Museo Santuarios Andinos, Universidad Católica de Santa María, Arequipa*

### **Capacocha from Pichu Pichu and Ampato (Peru): Anthropological analysis of human remains**

The *capacocha* ritual was one of the most important sacrifices made in the Inca Empire. It has involved sacrificing children and young women who were furnished with prestigious goods. The *capacochas* from Pichu Pichu and Ampato were discovered by a team lead by Johan Reinhard and Jose Antonio Chavez, in the 1990s. The six bodies of children from Pichu Pichu and Ampato were the focus of anthropological research for the first time in April and May of 2019. The results revealed new data about the distribution of age and sex patterns and pathological lesions.

VINCENT R. LEE, *Institute of Andean Studies*

### **Planning the construction of Saqsaywaman's northern terraces**

Previous analyses of the possible methods used to build Saqsaywaman, including my own, have dealt only with a limited aspect of the problem: manipulating and fitting the megaliths in the three northern terrace walls. This paper will propose a solution to the previously unexamined and far larger challenge of organizing the entire project. Applying any of the three most likely fitting strategies to the severe space limitations imposed by the roughly typical cross-sectional arrangement of the three walls, it is clear that workspace virtually determined the entire scheme of construction.

DOMINIKA SIECZKOWSKA, *University of Warsaw*; JOSE BASTANTE, *National Archaeological Park of Machupicchu*

### **Desde los apus hasta la extirpación de la idolatría: El curioso caso del sitio arqueológico de Qantupata en el Parque Arqueológico Nacional de Machupicchu—Peru**

Pumas talladas descabezadas, pinturas rupestres con cruces, *huacas*, *apus*, *paqchas*, plazas hundidas, entre otros... todos estos elementos se entreconectan en Qantupata. El sitio se encuentra un poco alejado del Camino Inca tradicional que atraviesa el Parque Arqueológico Nacional de Machupicchu. Por este motivo ha sido cubierto por una vegetación densa, lo que ha permitido conservarlo casi intacto desde el abandono. El objetivo de la ponencia es presentar el sitio con todas sus funciones y curiosidades desde el punto de vista tanto etnohistórico como arqueológico.

ROSABELLA ALVAREZ-CALDERON SILVA-SANTISTEBAN, *Pontificia Universidad Católica del Perú*

### **Negotiating the future of the prehispanic past in the modern city of Lima, Peru**

The expansion and modernization of Lima in the 20<sup>th</sup> century involved the partial destruction of its past and negotiations between different actors over what to preserve and value. When the city's prehispanic sites, locally known as *huacas*, became threatened by urban growth, advocates sought to protect them by declaring them the responsibility of the State. Unfortunately, most *huacas* still remain vulnerable and are regarded by many as negative spaces, rather than as much-needed, albeit fragile, public places of value. This presentation argues for the need to foster greater citizen stewardship of these sites and their use as places that imbue communities with meaning and identity. It presents two projects (*Activa la Huaca* and *Huaca Fest*) that address these challenges through research, urban placemaking, and social engagement.

ALEXANDER AURIS GONZALES, CAROLINE NEWTON, *Katholieke Universiteit Leuven*

### **Cajamarquilla: An urban analysis for new approaches of appropriation and interaction in archaeological sites**

As the speed of urbanization increases so does the number of (archaeological) heritage sites that are being incorporated within the urban fabric. Attempts to protect the sites ban the people living near it from its use as the preservation of these spaces often happens by a full closure of its borders. The wider consequences for urban space and people and the effect on the urban dynamics are often neglected. These tensions between urban development (and planning), preservation of archaeological heritage, and the everyday life of urbanites deserve our attention. In this contribution we look into this paradoxical relationship, using Cajamarquilla, a 167-ha open-border archaeological site in Lima, as a study case. We analyze the site as an example for a new approach to public archaeology, tactics to appropriate and participate in these spaces.

**SATURDAY EVENING 7:30 (Open to the public)**

CARLA HERNÁNDEZ GARAVITO, *University of California, Riverside*

**W'akas, plazas, and conquest: The children of Pariaqaqa and the Inka empire (Huarochirí, Peru)**

In Huarochirí, pairing colonial texts and archaeological research provides a unique lens on how one community experienced and portrayed its incorporation into the Inka Empire. Results from excavations at the site of Canchaje, a pre-Inka *w'aka* transformed into an Inka-style plaza, show extensive evidence of cultural resilience. Material analyses and reading of historical sources suggest the incorporation of local rituals into plazas, enabling the people of Huarochirí to subvert the terms of their subjugation and maintain a sense of continuity even in state-sanction spaces. My results highlight the importance of reinvention among Andean communities in the face of political imposition.

*Posters*


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*Posters will be on display throughout the conference in the 120 Kroeber. Poster authors will be available between 1:00 and 1:45 on Friday and Saturday.*

GIOVANY PAOLO ARTEAGA MONTES, *Universidad del Cauca*

**Between Europe, the Andes, and the Amazon: The road used by the Catalan Capuchins to take Christian civilization to Colombian Putumayo**

This poster exposes the history of the construction and the architectural plans of the pre-Hispanic road that the Catalan Capuchins used to take the Christian civilization to Putumayo between 1905 and 1930. Putumayo is an indigenous territory that is located in the western Amazon, bordering the Andes in the south of Colombia. The analysis is based on the *Mission Reports* published in the period 1911-1926, the road built in the jungle at the beginning of the 20<sup>th</sup> century, and photographs about this epoch.

GEORGE CALDWELL, *Llamas of Circle Home*

**Llamas, past, present, and future**

I have had the responsibility and honor to be a *Llama Michiq* for over 35 years. I have taught a class to the public under the auspices of the East Bay Regional Park District for 26 years. These classes have accounted for thousands of human llama encounters over the years. After many trips to the Andes I know what a *Llama Camayoq* and a *Michiq Camayoq* are. I am working with my associate, Fred Clarke Alvarez, to further the interests of llamas to their highest purpose, that of encouraging mental wellness in people. I will present my findings and conclusions from my observations. I will put into perspective their personal and religious relationship with people past present and future. I will reveal their intelligence, their connection to people and how this connection formed.

CHRISTIANE CLADOS, *Philipps University, Marburg*

**Sacred landscapes represented: Cave symbolism in southern central Andean iconographies**

In Inca mythology caves play an important role in accounts of creation. In the Colonial Period, their representations can be identified in manuscripts of indigenous chroniclers, but the question remains how caves were represented before the contact. In 1933 Heinrich Ubbelohde-Doering defined a Nasca motif as *Grabböhle* (funeral cave) indicating the possibility of cave motifs in the Intermediate Period and Middle Horizon. The poster aims to show that the colonial variety of a cave representation goes far back to pre-Inca times and can be found on Tiwanaku sculptures and on Nasca (AD 60–AD 650) and Early Tiwanaku-Qeya ceramics (AD 300–500).

DANIEL FERNANDEZ-DAVILA, *Independent*; RACHEL LORENC, *Johns Hopkins University*; JASON KLEINHENZ, *Exact Metrology*

**New technology, new discoveries in the Chachapoya region: Portable Structured Light 3D scanning for the reconstruction of petroglyphs and lithic sculptures**

The ancient Chachapoya are known for their sophisticated mortuary embalming of bodies and their cliff mausoleums. Little is known about their petroglyphs and lithic sculptures. However, during our 2019 expedition to the Huabayacu River, we rediscovered a large monolith with Chachapoya petroglyphs and an unknown tenon head. With a handheld 3D scanner, we accurately digitized most of the petroglyphs and a replica of the tenon head. Our intention with the poster presentation is to show the viability of this technology when recovering faded carvings on rock surfaces and the precision when constructing 3D models of lithic sculptures.

KAYLA GOLAY LAUSANNE, JEAN-FRANÇOIS MILLAIRE, *Western University-London, Canada*

**Understanding the urban devolvement of Las Colmenas through an integrated remote sensing approach: Geophysical survey of Las Colmenas (V-157), Virú valley, Peru**

Archaeological studies in the Virú valley have often focused on the study of large civic-ceremonial centers, but this project focuses on a neighbourhood site to better understand the urban development of this region. This project studies the urban morphology of Las Colmenas (V-157), a site amongst the Gallinazo Group, in Virú valley Peru, using a non-destructive, integrated remote sensing approach to archaeological fieldwork. The goal of this study is to better understand the internal organization of an early urban settlement as part of a broader effort to study early urbanization in the Virú valley and the Andes in general.

AMEDEO SGHINOLFI, JEAN-FRANÇOIS MILLAIRE, *Western University-London, Canada*

**Reconstructing the prehispanic occupation of an intermediate zone: Pedestrian survey of the Carabamba valley, northern Peru**

Archaeological research in the Andean region has traditionally focused on the coast and the highlands, neglecting the intermediate zone that connected the Pacific Ocean shoreline to the Andes. One such area is the Carabamba valley, northern Peru (ca. 300 to 3,500 m.a.s.l.), which includes the resource-rich *chaupiyunga*, links the coastal Virú valley to the Carabamba Plateau, and put into contact human groups featuring different sociopolitical organizations, beliefs, identities, and material culture. This research aims to map archaeological sites located in this valley, reconstruct the settlement patterns over time, and document how people (coastal, highland and local) interacted in this area.

GENESIS TORRES-MORALES, *University of California, Riverside*; CELESTE M. GAGNON, *Wagner College*

**The Chimú at Huaca de la Luna: A bioarchaeological understanding of dietary and nutritional stress**

Emerging from the Moche valley of Peru, the Chimú were the second largest Andean empire (AD 900-1470). Near modern day Trujillo, the empire built their capital city of Chan Chan, and expanded their territory from the northern border of Ecuador, south to the Chillón valley of Peru. While in the Moche valley, the Chimú interacted with the abandoned capital of the Southern Moche State: Huaca de la Luna. This research presents preliminary findings of 32 burials excavated from Huaca de la Luna or the urban center. We analyzed stress indicators of nutrition and diet.

KENNETH R. WRIGHT, *Wright Water Engineers, Inc.*; RUTH M. WRIGHT, *Wright Paleohydrological Institute*

**Native technology**

Native technology, as represented by Inca civil engineering achievements, is well documented by the field evidence left behind at archaeological sites. The Inca road system that has been described by the National Museum of the American Indian in Washington, D.C., tells a story of technical achievements represented by the Inca road system in six South American countries and in 24,000 lineal miles of trail. Machu Picchu is another example of abundant evidence of Inca engineering. Its fountains, canals, drainage, retaining walls, and building structures provide field evidence. Similarly, the ruins at Típon, Moray, and Ollantaytambo provide many examples of native technology that give modern engineering researchers abundant opportunities to study ancient civil engineering achievements.