DUMBARTON OAKS

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PRE-COLUMBIAN STUDIES SYMPOSIUM

OUT OF THE SHADOWS: THE BEGINNINGS OF SOUTH AMERICAN CIVILIZATION

October 6-7, 2023

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<u>Friday, October 6, 2023</u>		
8:30 - 9:00 a.m.	Coffee & Registration	
9:00 – 9:30 a.m.	Welcome and Introduction Thomas B. F. Cummins, Director of Dumbarton Oaks Frauke Sachse, Director of Pre-Columbian Studies Tom D. Dillehay and Eduardo Neves, Organizers	
Session 1		
Moderator: Stephen Houston, Brown University		
9:30 - 10:15 a.m.	Dolores Piperno, Smithsonian National Museum of Natural History Smithsonian Tropical Research Institute, Republic of Panama The Economic, Environmental, and Social Conditions Surrounding the Origins, Development, and Dispersals of Agriculture in South America	
10:15 - 10:45 a.m.	Break	
10:45 - 11:30 a.m.	María Fernanda Ugalde, Museum Rietberg Pontificia Universidad Católica del Ecuador Beyond Real Alto and Cotocollao: A Reconsideration of Early Ecuadorian Settlements	
11:30 a.m 12:15 p.m.	Rafael Vega-Centeno, Pontificia Universidad Católica del Perú Ritual Architecture and the Emergence of Social Complexity in the Central Andes	
12:15 - 2:00 p.m.	Lunch (Orangery)	
Session 2 Moderator: María Teresa Uriarte Castañeda, Universidad Nacional Autónoma de México		
2:00 - 2:45 p.m.	Tom D. Dillehay, Vanderbilt University Universidad Austral de Chile Connecting and Coalescing Socio-economic Sectors in Community Formation on the North Coast of Peru, 8,000-5,000 cal BP	
2:45 - 3:30 p.m.	David Beresford Jones, McDonald Institute of Archaeological Research, Cambridge University Preceramic Trajectories on The Pacific Coast of South America Between 12°S and 20°S: New Perspectives on the Mesolithic-Neolithic Transition	
3:30 - 4:00 p.m.	Break	
4:00 - 4:45 p.m.	Christine A. Hastorf, University of California, Berkeley All Together Now: The Andean Formative in the Time of Territoriality	
4:45 - 5:30 p.m.	José M. Capriles, Pennsylvania State University Early Socioecological Complexity in the South-Central Andes	
5:30 p.m.	Conclusion of Symposium Day #1	
5:30 - 7:00 p.m.	Reception (Orangery)	

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Saturday, October 7, 2023

Session 3 Moderator: Stella Nair, University of California, Los Angeles		
9:00 - 9:30 a.m.	Coffee	
9:30 - 10:15 a.m.	María Cristina Scattolin, Instituto de las Culturas (Universidad de Buenos Aires y CONICET) Rooting to Land: Material and Symbolic Differentiation in Northwestern Argentina	
10:15 - 11:00 a.m.	Jennifer Watling, University of São Paulo The Emergence of Anthropogenic Landscapes During the Early and Middle Holocene in Amazonia	
11:00 - 11:30 a.m.	Break	
11:30 a.m 12:15 p.m.	Eduardo Neves, University of São Paulo Early Monumentalism in the Amazon and the Tropical Atlantic Coast of South America	
12:15 - 2:00 p.m.	Lunch (Orangery)	

Session 4 Moderator: Oswaldo Chinchilla Mazariegos, Yale University

2:00 - 2:45 p.m.	Helena Pinto Lima, Museu Paraense Emílio Goeldi The Wind of Change: Early Dispersion of Ceramic Styles in Amazonia
2:45 - 3:30 p.m.	Annick Daneels, Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México North to South or the Way Around
3:30 - 4:00 p.m.	Break
4:00 - 4:45 p.m.	Miriam Stark, University of Hawai'i at Manoa Discussant
4.45 p.m.	Conclusion of Symposium Day #2

OUT OF THE SHADOWS: THE BEGINNINGS OF SOUTH AMERICAN CIVILIZATION

A Pre-Columbian Studies Symposium Organized by Tom D. Dillehay (Vanderbilt University | Universidad Austral de Chile) and Eduardo Neves (University of São Paulo)

ABSTRACTS

After ~8500 BP, human groups in parts of South America, especially in the Central Andes and the tropical lowlands began to settle down, domesticate, adopt agriculture, and take many of the steps that we associate with "civilization." Recent developments in archaeology bring a complex perspective of the early history of permanent agro-maritime villages, farming communities, camelid husbandry, public architecture, art and iconography, and craft production. Between ~7500-5000 BP, these developments resulted in the establishment of new social organizations, elaborate iconographies, public rituals, large-scale monumental structures, proto-urban population centers, and intensive landscape transformations.

The appearance of permanent villages and towns in productive resource zones (e.g., oases coastal valleys of Peru and fertile basins of wider-Amazonia) created new socio-political forms and ideologies that involved conceptual shifts in the way people interacted with their environments, ancestors, and the spiritual world. Early plant domestication/cultivation, independent centers of craft production with art styles disseminating across the Andes to the Pacific coast, monumental and public architecture, as well as large earthen-shell mounds and stone structures attest to multiple dynamic histories of cultural and social innovation that occurred in the northern half of South America.

This symposium questions whether it is still valid to import and replicate the developmental categories "Archaic" or "Formative" to refer to the deep past of South America, or whether new categories based on local contexts and interregional interactions are needed. Participants will discuss key archaeological data and interpretative models to critically explore regional and subcontinental processes of socio-cultural formation.

Dolores Piperno, Smithsonian National Museum of Natural History | Smithsonian Tropical Research Institute, Republic of Panama

The Economic, Environmental, and Social Conditions Surrounding the Origins, Development, and Dispersals of Agriculture in South America

The shift from a mode of subsistence based on terrestrial or maritime foraging to one based on agricultural foodstuffs was one of the most profound transitions in human and ecological history. It occurred independently in at least seven regions of the world; namely, the eastern United States, the Near East, China, New Guinea, probably mainland Southeast Asia, Mesoamerica, and South America. This paper reviews agricultural origins and dispersals in South America where, as in most other independent centers, systems of plant cultivation leading to domestication emerged shortly after the Pleistocene ended. Within South America, food production systems appear to have developed independently in a number of regions spread from north to south. Their native crop plants spread quickly both within the continent and across the Panamanian land bridge into southern Central America. Conventional definitions of Neolithic don't apply to the Neotropics, as productive, sophisticated systems of food production emerged independently in both the South American and Mesoamerican tropical forest in the absence of ceramics, sedentary village life, and in South America, cereals. They would subsequently support dense sedentary and complex cultural systems with landscape-level environmental manipulations.

Dolores Piperno (PhD 1983, Temple University) is Senior Scientist and Curator of Archaeobotany and South America Archaeology Emerita at the National Museum of Natural History, Washington DC, and Smithsonian Tropical Research Institute, Panama. Her current projects include the roles of developmental plasticity and environmental change in early crop plant evolution, and prehistoric influences and legacies on the Neotropical forest especially Amazonia. She is an author of three books and more than 90 peer-reviewed articles and was elected to the National Academy of Sciences and American Academy of Arts and Sciences in 2005.

María Fernanda Ugalde, Museum Rietberg | Pontificia Universidad Católica del Ecuador

Beyond Real Alto and Cotocollao: A Reconsideration of Early Ecuadorian Settlements

Decades ago, discoveries on the Ecuadorian coast and in the adjacent inter-Andean valleys produced the first approximations of early pre-Columbian agricultural societies. Excavations at Real Alto and Cotocollao documented societies that, despite their distinct temporalities, share characteristics of the "Neolithic package": sedentary settlements, plant cultivation, and ceramics. Each project represented the first effort in its region (coast and highlands, respectively) to conduct many multidisciplinary studies, with paleobotanical evidence being of particular importance. While Las Vegas was identified as the antecedent for Valdivia society, Cotocollao seemed to suddenly appear as a completely developed society around 1500 BCE.

Since the seminal volume on Formative Ecuador published by Dumbarton Oaks, new evidence has identified pre-Cotocollao occupations in the sierra, analyzed evidence of occupations between Las Vegas and Valdivia, and further studied variability in Valdivia. Early occupations in the Ecuadorian Amazon also have been investigated. The new data suggest that the beginnings of civilization in pre-Columbian Ecuador are less straightforward than the initial ideas produced from the earliest investigations. In this paper, we review the current state of knowledge for different topics relevant to discussions of early social complexity for the Ecuadorian coast and sierra. Ultimately, we argue that new conceptual models must be developed to stop the application of generalized concepts such as Archaic and Formative in Ecuadorian archaeology. This will aid in efforts to analyze and appreciate the particularities of each region and what they have to offer to our understanding of early social complexity in the Andes as a whole.

María Fernanda Ugalde is an Ecuadorian archaeologist who currently is the Curator for the Art of the Americas at the Museum Rietberg in Zürich and Associate Researcher at the Pontificia Universidad Católica del Ecuador (PUCE). After receiving her MA and PhD from the Freie Universität in Berlin, she returned to Ecuador and was a professor and chair of the Anthropology Department at PUCE for many years. She has directed archaeological projects in multiple regions of Ecuador, with an emphasis on early settlements, funerary practices, iconography, and gender studies. At the moment, she collaborates on research with colleagues in the United States, Germany, Colombia, and Ecuador. One of her principal goals is the development of public archaeology. Much of her recent work has focused on the role of museums, and she has curated many exhibitions in Ecuador and currently is organizing a large exhibition about Amazonian Archaeology in Europe.

Rafael Vega-Centeno, Pontificia Universidad Católica del Perú

Ritual Architecture and the Emergence of Social Complexity in the Central Andes

This paper proposes an explanation for the social processes that took place in the Central Andes during the third millennium BC, a time span usually known as the Late Preceramic or Late Archaic Period, and most recently known as the Initial Formative Period (Onuki 1999, Shady et al. 2014, 2016). This time span witnessed the appearance of emergent forms of social complexity, within the context of agricultural communities. These forms are characterized by the development of inequalities in resources or status among peer kin-groups that constituted the mentioned communities. These inequalities are mainly manifested in the nature and scale of ritual architecture, which materialized both the existence of peer groups as well as the rising differences among them.

Rafael Vega-Centeno graduated as an archaeologist at the Catholic University in 1995 and received his PhD at the University of Arizona in 2005. He was professor at San Marcos University and is currently full professor at the Catholic University. He has conducted research on early complex societies of the Fortaleza Valley and late societies of the Yanamayo Basin. Currently, he conducts research at the Maranga archaeological complex.

Tom D. Dillehay, Vanderbilt University | Universidad Austral de Chile

Connecting and Coalescing Socio-economic Sectors in Community Formation on the North Coast of Peru, 8,000-5,000 cal BP

This presentation explores the processes of initial connectivity and coalescence of different community sectors (e.g., households, social groups, technology, monumental architecture, symbolism, economy) during the middle Holocene period on the north coast of Peru. This is the period when social, ecological, and economic factors produced the first maritime, farming and subsequent monument-building communities in the area. It was not until most sectors were coordinated, coalesced and co-dependent that higher levels of social and economic complexity were reached around 4500-4000 BP when moderate- to large-scale, isolated, and clustered monuments first appeared in selected valleys. Prior to this time, the coalescence of autonomous households and later supra-household communities resulted from a combination of multiple, forming episodes at specific places, for example the Huaca Prieta site complex in the lower Chicama valley. This coalescence created co-depending maritime and farming communities that became economically specialized in terms of their 'habitat', whether it was littoral, wetland or farther inland. Symbolic representation was needed as specializations and community identities formed in these habitats. These and other transformations facilitated the formation of new social constructs such as supra-household settlements and eventually advanced farming communities with isolated or multiple monuments and elaborate symbolic systems. An important consequence of living in larger, symbolically mediated, monumentbuilding agricultural communities was that the community became the effective environment for rapid cultural (and genetic) transformations.

Tom D. Dillehay has carried out numerous archaeological and anthropological projects in Peru, Chile, Argentina, and other South American countries and in the United States. His main interests are migration, the long-term transformative processes leading to political and economic change, and the interdisciplinary and historical methodologies designed to study those processes. He has been a Visiting Professor at several universities around the world, including the Universidad de Chile, Universidad Nacional Mayor de San Marcos, Lima, Universidade de Sao Paulo, Universidad Nacional Autonoma de Mexico, Cambridge University, University of Tokyo, University of Chicago, among others. Professor Dillehay has published twenty-eight books and more than four hundred refereed journal articles and book chapters. He currently directs several interdisciplinary projects focused on long-term human and environmental interaction on the north coast of Peru and on the political and cultural identity of the Mapuche people in Chile. Professor Dillehay has received numerous international and national awards for his research, books and teaching. He is a member of the American Academy of Arts and Sciences.

David Beresford Jones, McDonald Institute of Archaeological Research, University of Cambridge

Preceramic Trajectories on The Pacific Coast of South America Between 12°S and 20°S: New Perspectives on the Mesolithic-Neolithic Transition

Of all the transitions which define us as modern humans none was so profound as that which took place after hundreds of millennia of subsistence through mobile hunting and gathering as people began to broaden their use of resources, thereby setting in train the emergence of agriculture. This so-called Neolithic Revolution was a significant evolutionary event that transformed human society and the planet we live on. Yet it took place in relatively few places worldwide. One such location was the Pacific coast of South America, where a long Mesolithic (here termed Archaic or Preceramic) culminated in the florescence of monumental civilization and proto-urban populations beginning around 5000 BP.

This contribution reviews the evidence for early settlement along the Pacific coast of South America between around 12°S and 20°S – from the Lomas de Ancón, Río Chillón, just north of Lima, Peru, to the Quebrada de Tama, northern Chile – defined herein as the 'southern Pacific coast'. Although this embraces more than 1,000 km of the Pacific littoral, it nonetheless exhibits certain archaeological and geographical commonalities, often defined in contrast with that further north.

Findings from 105 Preceramic Period sites from first settlement to the end of the Late Preceramic Period, defined by 459 radiocarbon dates recalibrated using ShCal2O, are synthesized for their evidence for the changing settlement dynamics, subsistence and emergent social complexity that foreshadowed the flowering of Andean civilization. These findings are then used to offer some inferences towards the wider goals of the symposium.

David G. Beresford-Jones (PhD, University of Cambridge) is an Affiliated Scholar of the McDonald Institute for Archaeological Research. For the past two decades he has directed fieldwork on the south coast of Peru using various archives to investigate the transition to agriculture and its role in determining past human impacts on ecosystems and landscapes. He has particular interests in archaeobotany (especially wood, charcoal and plant fibres), hunter-gatherer archaeology, the European Upper Palaeolithic, ancient fabric and textile technologies, dryland geoarchaeology and the synthesis between archaeology and other disciplines, especially with historical linguistics. His publications include The Lost Woodlands of Ancient Nasca (OUP, 2011), Archaeology and Language in the Andes (OUP, 2012), Lenguas y Sociedades en el Antiguo Perú (PUCP, 2011), and Rethinking the Andes-Amazonia Divide (UCL Press, 2020), alongside some 60 journal articles and book chapters.

Christine A. Hastorf, University of California, Berkeley

All Together Now: The Andean Formative in the Time of Territoriality

This presentation will focus on the ritual economy of early settled communities in the Andean highlands to view how people created their community as they engaged with their landscape through their worldview. This will be done by describing a range of Formative archaeological sites across the Andes, looking at their architectural and artifactual evidence to illustrate their subsistence patterns but also their ceremonial activities and materialization of their beliefs. By looking at both the architecture of community gatherings, as well as mobile artifacts, we will explore how the communities created and supported the larger ritual practices that are suggested and the extent of these extra-settlement gatherings. Any symbolic and mobile artifacts that materialized the residents' worldviews will be folded into the presentation, to better see how the local ontologies participated with the architecture in the local region's lived longevity. We will look at the similarities and differences of these early ceremonial settings, to better understand the diversity, flexibility, and resilience of these places across the highlands and compare them to the other regions this workshop will be discussing.

Christine A. Hastorf is a Distinguished Professor in the Department of Anthropology at the University of California, Berkeley. She is the Director of the Archaeological Research Facility, the Director of the McCown Archaeobotany Laboratory in the Anthropology Department, as well as the Curator of South American Archaeology at the Phoebe A. Hearst Museum of Anthropology at the University of California. She is a Co-Director of the Taraco Archaeological Project on the shores of Lake Titicaca investigating early plant use and community. She primarily works in highland South America, with a focus on food and agriculture, but has also completed food research in Turkey, Italy, and Mexico.

José M. Capriles, Pennsylvania State University

Early Socioecological Complexity in the South-Central Andes

Currently spread over four countries and spanning the broadest latitudinal expanse of highland terrain above 2,500 m above sea level, the south-central Andes comprises a diverse set of socioecological systems. Here, human settlement, population growth, and institutional evolution resulted from a rich history expanding over ten millennia. In this paper, I provide an overview of archaeological research emphasizing some recent findings and analysis that are helping to gain an empirically grounded understanding of the processes that characterized the emergence of social complexity in this region. Recognizing diverse research traditions and biases, I aim to integrate empirical evidence with concrete hypotheses about the different changes and continuities that specific socioecological systems experienced over time. Initial foraging gave way to progressive highland adaptation and the eventual adoption of various food producing strategies including quinoa and potato cultivation and camelid pastoralism. Agropastoral communities developed into regional organizations of variable size and hierarchal intricacy. Macro-regional integration was fostered by the emergence of the Tiwanaku state but also by the expansion and aggrandizement of smaller regional polities. Llama caravans became critical for facilitating interregional articulation and consolidating a complex interdigitated sociopolitical landscape that would catalyze the Inca expansion.

José M. Capriles is Associate Professor of Anthropology at The Pennsylvania State University. He is a Bolivian anthropological archaeologist specializing in environmental archaeology, human ecology, and zooarchaeology. Before joining Penn State University, he was a Visiting Scholar at the University of Pittsburgh (2012-2013), a Chilean FONDECYT Postdoctoral Researcher (2013-2015) and an Assistant Professor at Universidad de Tarapacá (2015-2016). He conducts research in Bolivia and Chile and collaborated broadly with international interdisciplinary research teams.

María Cristina Scattolin, Instituto de las Culturas (Universidad de Buenos Aires y CONICET)

Rooting to Land: Material and Symbolic Differentiation in Northwestern Argentina

Intensification and social change in pre-state societies are issues that have been treated in the archaeology of Northwestern Argentina. How did these changes occur in this sector of the southern Andean Area? I will seek to interpret the use of material culture to understand the transition from the first village societies to the later formations, which are visualized in the shadows of urban developments in the Central Andean Area.

Certain Formative Period villages offer an opportunity to consider the modes of material and symbolic differentiation that operated among them. Then, I will focus on the emergence of differences in access to material and symbolic goods among village communities of the Formative Period (1500 BC to 1000 AD) in the central valleys of Northwestern Argentina. Various forms of spatial differentiation and resource investment can be distinguished. The emphasis on some of these modes of investment produced distinctive ways of hierarchizing the social landscape and community architecture.

María Cristina Scattolin received her degree (1977, Licenciada en Antropología) from Universidad Nacional de La Plata, Argentina. She has held the position of Researcher at the National Council of Research (CONICET UBA) since 1991, and of Associate Professor of Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata since 1995. Her areas of interest include the archaeology of early village societies of Northwestern Argentina (Southern Andes). She has also been interested in the study of collections of objects and the formation of archaeological heritage. In 1985 she joined the Ethnographic Museum, UBA, and Instituto de las Culturas, in 2015. She has been hired by the Världskulturmuseet of Gothenburg (Sweden) to advise on pre-Hispanic collections from northwestern Argentina. Her publications have appeared in World Archaeology, Estudios Atacameños, Relaciones, Antiquity, and PNAS, among others. Her research has been funded by CONICET, UNLP, and Wenner-Gren Foundation for Anthropological Research.

Jennifer Watling, University of São Paulo

The Emergence of Anthropogenic Landscapes During the Early and Middle Holocene in Amazonia

This contribution evaluates the evidence for early landscape transformations in paleoecological, archaeological and archaeobotanical data in the Amazon basin. Faced with a highly fragmentary record for most of the region, as well as the unknown effects of climate change upon human settlement and fire feedbacks in lake core records, the talk focuses on Southwestern Amazonia where recent research has been dedicated to investigating a rich and diverse archaeological landscape. Genetic data have long suggested that manioc, peanut, and several other crops were domesticated in this region during the Early to Middle Holocene, and archaeobotanical evidence of plant cultivation dating back to 10,000 years ago now backs this up. During the Middle Holocene, extensive earth and shell mound-building activities in savannas and wetlands culminated in a densely-settled and managed regional landscape by 5,000 years ago. In the forested interior, these developments are contemporary with the earliest formations of Anthropogenic Dark Earths (terra preta) in the Amazon, fertile soils associated with longer-term occupations and a greater investment in landscape management. These landscape histories, alongside the rapid movement of certain plants between Southwestern Amazonia and the rest of South America, defy traditional categories of cultural development and attest to the presence of diverse, highly-connected, cultural landscapes in the Amazon lowlands before the Chavin culture emerged in the Andean highlands.

Jennifer Watling (PhD, University of Exeter) is lecturer in Archaeology and coordinator of Archaeobotany at the Microarchaeology Laboratory of the Museum of Archaeology and Ethnology, University of São Paulo. Her research interests lie in the study of microbotanical remains to understand people-plant-landscape interactions in Amazonia, and in how to mobilize this knowledge to inform modern-day conservation policies and strengthen indigenous peoples' territorial sovereignty.

Eduardo Neves, University of São Paulo

Early Monumentalism in the Amazon and the Tropical Atlantic Coast of South America

The Amazon basin is a cradle for plant cultivation in the Americas, with evidence going back to the Early Holocene. Both the Amazon and the tropical Atlantic coast of South America show the construction of monumental shell and earthen mounds in the Middle Holocene and in the case of the Amazon such mounds are associated to some of the earliest ceramics found in the Americas. Other early ceramic complexes in South America are also found in tropical settings such as the coast of Ecuador, Colombia, and the Guianas. The earliest evidence for stirrup spout ceramics - a typical vessel shape found for millennia in different cultural contexts in the Andes – comes from a site with public architecture found in the Upper Amazon in Ecuador. Such data falsify claims that place tropical settings in a marginal context in the deep ancient history of South America. However, contrary to the Central Andes, the state never developed in the Amazon, or on the tropical Atlantic coast of the continent. Traditionally, the absence of the state in tropical settings has been framed with arguments of scarcity, such as lack of animal protein, poor soils etc. This paper uses the evidence of early cultural innovation in the Early and Middle Holocene to argue against ideas of scarcity and propose that it was the abundance of resources - resulting both from natural conditions but also from the deliberate production of abundance - that prevent the establishment of the state or other forms of coercive power in the South American tropical lowlands.

Eduardo Neves is Professor of Archaeology and Director of the Museum of Archaeology and Ethnology at the University of São Paulo. He received his BA in History from the University of São Paulo and a PhD in Anthropology from Indiana University. He has been conducting archaeological fieldwork in the Amazon basin since 1986. He supervised or is currently supervising 59 master's or PhD projects on the archaeology of the Amazon. He has around 130 publications, including articles, book chapters and the books "Arqueologia da Amazonia", "Sob os Tempos do Equinocio", and "Unknown Amazon" (co-editor with Colin McEwan and Cristiana Barreto). He was president of the Brazilian Archaeological Society and has served on the Board of the Directors of the Society for American Archaeology and the Advisory Council of the Wenner-Gren Foundation. He has held visiting professorships at Harvard University (CAPES-Harvard Distinguished Visiting Professor), the Natural History Museum of France, the Catholic University of Peru and has taught courses in the graduate programs of the Polytechnic School of Guayaquil (Ecuador) and the University of Buenos Aires Province in Olavarria, Argentina. He was awarded the Shanghai Archaeological Prize for research in 2019.

Helena Pinto Lima, Museu Paraense Emílio Goeldi

The Wind of Change: Early Dispersion of Ceramic Styles in Amazonia

There is agreement today that Amazonia's ecosystem is not pristine and has actively changed as a result of cumulative human activity over time. Growing interdisciplinary dialogue between archaeology, historically-oriented ecology, and ethnography has helped to illuminate sophisticated environmental knowledge that sustained countless generations of indigenous societies in the past and was intrinsically linked to their historical trajectories. This megadiversity region, now recognized as a center for biocultural diversity, has profound histories in which the early development of pottery technology, high language diversification, plant domestication, and anthropogenic landscapes, shed light on the dynamics of Amazonian societies through time. This paper focuses on a presumed "ground zero" for the rapid spread of interconnected ceramic art styles across major rivers around 3000 b.c.e. and, we argue, were part of major social transformations that included intensive plant processing (including much older domesticates) and the creation of landscapes in the form of terras pretas and earthworks. Modeled-incised pottery shares distinctive standardized morphologies and decorative patterns that were recognizable beyond the immediate regional level in extended interaction spheres. They have been known for a while and linked to Arawak (agri)cultural expansion. To support our claim that the disputed Amazonian Formative is unique (and not some late "New World" relative of the "Neolithic Revolution"), we examine both classic literature and novel Modeled-Incised ceramic contextual evidence from across the basin to shed light on this specific Amazonian trajectory.

Helena Pinto Lima has a PhD in Archaeology and is a senior researcher at the Goeldi Museum in Belém (Pará-Brazil), where she also serves as a lecturer for the graduate program in sociocultural diversity and curator of the archaeological collection. Employing historical ecology, material culture studies, and a collaborative approach, she runs academic research archaeology and outreach projects related to the management of cultural heritage with indigenous peoples, riverine and quilombola communities in Amazônia.

Annick Daneels, Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México

North to South or the Way Around

For a very long time, the accepted version of the development of civilization in the American continent has been one from North to South: peopling, agriculture.... New evidence seems to indicate alternative scenarios. The earliest interest in plant domestication, ceramics and monumental construction arises in the tropical lowlands of the Amazonian Basin. As a specialist in Mesoamerican archaeology, focusing on earthen architecture technology, I think that a series of ideas coming from the south (from and through Central America), in the same lowland tropical environment, actually caused Mesoamerican civilization to jumpstart between the Pacific coast of Guatemala and the Mexican Isthmus, around 1900 BC, amongst populations exploiting the tropical forest and waterways, settled in the characteristic dispersed pattern. Afterwards, in certain moments of their histories, Andean and Mesoamerican civilizations appear to have been in contact with each other, probably through Pacific maritime contact, and adopted ideas and technologies of one another, at a rather high-up level of society. While other researchers have focused on shared iconography and beliefs, on crafts like ceramics or metallurgy, and more recently plant and animal genetics and domestication processes, I will illustrate these possible contacts by technological transfer in earthen construction. I will show that while the earliest evidence of different earthen construction techniques appears in South America, and are probably adopted (late) by Mesoamerica, particular construction techniques are developed in the Mesoamerican Preclassic Period and show up quite suddenly on the Northern Coast of Peru.

Annick Daneels is an Archaeologist (Ghent University PhD 1987; UNAM PhD 2002), senior researcher at the Institute of Anthropological Research of the National Autonomous University of Mexico. She has been active on the Gulf coast of Mexico since 1981, covering sociopolitical organization, ritual practices (including ballgame) and urbanism, specializing in Mesoamerican earthen architecture since 2004. This research interest led her to focus on building technology (with Dumbarton Oaks funding, among others), and on the possible technological transfers both regionally and across the American continent. She has published academic work on the topic in English, French and Spanish.

Miriam Stark, University of Hawai'i at Manoa

Discussant

Miriam Stark (MA, PhD, Arizona) is a Professor of Anthropology and Director of the Center for Southeast Asian Studies at the University of Hawai'i at Mānoa, USA. Her field-based research programs examine political economy, urbanization, and complex societies in premodern Southeast Asia. Since 1996, she has co-directed archaeological projects across the Kingdom of Cambodia. Her Lower Mekong Archaeological Project (1996- present) focuses on early state formation in southern Cambodia. Her Greater Angkor Project (2010-present) explores Angkorian urbanism, and the Pteah Cambodia (2018-present) examines provincial dynamics. She most recently co-edited The Angkorian World volume in the Routledge Worlds series (2023).