

ORGANIZADORES  
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**Apresentação**  
***DECIPHERING EAST-SIDE SOUTH  
AMERICANS INDIGENOUS POPULATIONS  
DYNAMICS***

**DECIFRANDO A DINÂMICA DAS  
POPULAÇÕES INDÍGENAS DOS SUL-  
AMERICANOS DA ZONA LESTE**

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## INTRODUCTION

The impressive results of the editorial project featured in this dossier on the prehistory of the Amazon viewed from the Atlantic flank of South America outline a scientific and ethical success story. The works presented can be seen as a vindication of Max Planck (1950) sinical views of change in science. "A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die and a new generation grows up that is familiar with it" He re-emphasized the some view in another part of the same book, asserting that "an important scientific innovation rarely makes its way by gradually winning over and converting its opponents: it rarely happens that Saul becomes Paul. What does happen is that its opponents gradually die out, and that the growing generation is familiarized with the ideas from the beginning: another instance of the fact that the future lies with the youth". Thomas Kuhn (1962) "*Structure of scientific Revolutions*" provided a rational explanation and helped understand what happens in the mind of working researchers, scientists and scholars. The development of science studies implementing a sociological frame of analysis to scientific and scholarly institutions (Bourdieu 1988, Latour 1988) further clarifies how researchers and scientists communities effectively operate. It is now well-known that normal science operates along accepted assumptions and operational modes -paradigms - that are shared by researchers' demes – networks -. This demic structure tends to enforce adhesion to the dominant paradigm at the exclusion of any alternative. Fortunately, contradictory debates or confrontations of research agendas are also integral part of researchers, scientists, and scholars' daily practices, allowing more effective explanation – sometime significantly delayed – to finally succeed. There is however, no final word in scientific research. A new emerging synthesis always generate new questions, launching a new cycle of conjecture and refutation (Popper 2002).

Read from Max Planck perspective, the contributions presented in this dossier are indeed crafted by a post 1980 generation of researchers and scientists. For most, they were graduate or at best doctoral candidates in the early 1980s, and as such, validate its cynical position. Death is however not the ultimate reason for the success of the new views on the prehistory of the Amazon presented in this dossier. Research protocols, long-term research projects, and better-grounded results ultimately falsified the previous views (Popper 2002). It was not easy to bring new findings to the fore but it ended up being successful because of the skill and professionalism of the new post 1980s generation of scientists.

The papers assembled in this dossier can be arranged into 4 sub-themes, with varying number of contributions. Sub-theme 1 made of 3 papers consists of contributions addressing global issues pertaining to research history on the Atlantic and the early population history of the Amazon. Sub-theme 2 Materialities, localities, and Regional systems, predominantly archaeological is comprised of 9 contributions. Sub-theme 3, Coloniality and cultural encounters, is made of 3 contributions. And finally, sub-theme 4, capacity building consists of a single contribution.

## GLOBAL PERSPECTIVES

Anna C. Roosevelt opening chapter on the Amazon Prehistory sequence analyzes the demic and power structure of science as it applies to the archaeology of Amazon. Starting from her training and PhD field research in the Orinoco in the Venezuela portion of the Amazon, She describes her long struggle to build and convey a factually accurate rendering of the Amazon human past. She singles out an important contrast between the approaches adopted by naturalist scientists of the 19<sup>th</sup> century and the mid-20<sup>th</sup> century Amazon archaeologists. The former acknowledged a relatively long human presence in the Amazon, a presence that started with hunter-gatherers and diversified through time with pottery-making agriculturalists and mixed fishing communities. In contrast, the latter, mid-20<sup>th</sup> century Amazon archaeologists, view the Amazon as a hostile low productivity environment, unsuitable for successful human settlement for a long time, colonized relatively recently from the Andes mountains range. When data are at variance with the dominant narrative, they were either suppressed – not published and/or non-cited – or their impact was skillfully attenuated to fit in the current privileged narrative. Professional networks were sometime mobilized to preclude access to fieldwork to researchers with different views. The chapter outlines the strategy A. C. Roosevelt and co-workers put in place to establish the Amazon prehistory sequence. They documented a Paleo Indian Culture at Monte Alegre in West-Central Para state in northern Brazil, and experienced difficulties making the results of their work known at Monte Alegre. This opening contribution reads like a thriller, with plots and counter-plots, all real. Despite these difficulties, cumulative supporting data and innovative researchers succeeded in building the general frame of what is now the Amazon prehistoric sequence.

Alexandre Guida Navarro revisits the content and interpretation of abstract visual representations crafted by past Amerindians. These abstract “compositions” have initially been viewed as visual communication and language, a materialization of human symbolic capabilities. The author crafts a more complex and comprehensive interpretation of that special category of material culture from his sustained investigation of abstract visual representations from the stilt villages in the Baixada Maranhense. Aquatic landscapes appear to have contributed significantly to the shaping of ancient Amerindians worldviews in which animals, as is the case for anacondas, have social agency. Shifting to broader areal consideration and based on more intensive field archaeological research, the author points to a significant presence of abstract visual representations all over the South American lowlands where black color is featured in the recorded decorative patterns. Relying on ethnographic analogy, he finally suggests these patterns to represent anaconda skin, an ancestral mythical animal, thus showcasing aspects of ancient Amerindians cosmologies.

In third and last contribution from the global sub-theme, Gustavo Peretti Wagner looks at the development of human settlements along the Brazilian At-

lantic coast from a geoarchaeological perspective. He presents a well-grounded chronological framework from 7000 to 1000 AP, anchored on Holocene climate change trends. The chapter summarizes an extensive review of published research on the cultural and environmental evolution of the Atlantic flank of the South American sub-continent. Regional diversification of past indigenous South American cultures is mapped as accurately as possible from the Atlantic coastal strip to the hinterland. The work is extensive and provides an updated synthesis of global settlement dynamics of the eastern half of South America.

## MATERIALITIES, LOCALITIES, AND REGIONAL SYSTEMS

Sub-theme 2 is sub-divided into 3 rubrics, materialities, with 3 contributions, features material culture and ecofacts. 1 paper focuses on specific sites and the remaining 6 deal with regional settlement systems.

Z. L. Epossi Ntah, A. Ossima Ossima, J. R. Mache present a pilot study at the intersection of ethnoarchaeology and material science. It aims to develop protocols tracking mineralogical changes in clay that can be relied upon to reconstruct steps in the chaîne opératoire of pottery production. To achieve that goal, the authors collected pottery sherds at different drying and firing stages from Bankim, a Tikar village from southwest Adamawa in Cameroon, on the East shore of the Atlantic Ocean in this case. Proceeding with 3 complementary analytical methods, 1- the Fourier Transform Infrared Spectroscopy, 2- X-ray diffraction, and 3- thermal analysis, they show pre-firing temperature to be below 450° Celsius and the firing one ranging from 650° to 800° C in bonfires. It would have been interesting to look at the relationship between temperatures and sherds sections colors as has been suggested by Anna Sheppard (1956) in her classic *"Ceramics for the Archaeologist"* as instances of either reductive or oxidation firing atmospheres.

A. S. N. Fernandes da Silva, L. C. Medeiros da Rocha, and A. Guida Navarro carried out a bibliographic review of publications on lithic assemblages found in Brazil Shell-mounds. Their work allows for a chronological assessment of the variations in the production and use of stone artifacts. Based on the important research potential of their review, they advocate more systematic revisit of ancient lithic collections from Brazilian shell-mounds stored in different museum collections nation-wide.

D. Suarez Vespa, L. del Puerto, and H. Inda representing the research field of paleoethnobotanical studies presents the interesting results of a plant macro-remains recovery strategy initiated at the mound site CH2D01 in South-East Uruguay. It allowed to collect an important sample featuring a series of new species identified in the archeological record, furthering the understanding of relationship between past humans and their contemporary vegetation. The chapter highlights the key contribution of paleoethnobotany to the understanding of long-term cultural change.

A. Gambim Júnior and J. J. Souza de Lima contribution unveils aspects of daily life and ritual in 2 ancient villages located south of Amapá in northeast Brazil, dated from the 7<sup>th</sup> to the 17<sup>th</sup> century. Relying on artifacts and human remains recorded in archaeological structures, the authors reveal that the identified practices were derived from relationships between visible and invisible entities, sociability, and dead remembrance.

D. R. Carnajal Contreras shifts the analysis to regional settlement systems and examines the evolution of social complexity and early agricultural lifeways in the Sierra Nevada de Santa María and the Caribbean plains in Colombia during the Formative period, 5000-1000 BP. Despite the unevenness of the data collected so far on environmental, human populations interaction, and cultural evolution, she shows that the reliance on animal resources and new technologies such as pottery allowed flexible and diversified adaptation of hunter-gatherers communities to the tropical lowlands under consideration in the chapter, leading to the development of agriculture and the emergence of complex societies.

E. Villamarzo: provides an updated census of archaeological sites and their chronology in the Atlantic region of Rocha in Uruguay with focus on new research carried out between 1970 and 2000. She has particularly investigated the visited sites state of preservation, to assess the risk faced by this cultural heritage. The work raises questions of methodologies and management of archaeological heritage and outlines mitigation procedures that could enhance balanced conservation policies.

In her contribution, V. Pouey-Vidal presents the results of fieldwork carried out in Brazil/Argentina border area, in the western part of the state of Rio Grande do Sul (Brazil) and the municipality of Uruguai border city of Paso de Los Libres (Argentina). The research project is anchored on a geoarchaeological approach and designed to investigate human settlement process during the Late Pleistocene-Early Holocene period. Data collected from occupation units preserved in the Touro Passo Formation contribute significantly to the analysis of settlement modes of the South American sub-continent.

R. B. Deminici, T. S. Alves Muniz, C. Alves D'Almeida revisit the ritual interpretations of Brazilian shell-mounds (sambaquis). Starting from the history of shell-mounds research, they integrate input from ethnobiology, ethnohistory, and ethnoarchaeology and suggest different ways of deciphering the "Sambaqui phenomenon". The Crab-human thread provides entry to a relational multi-agents' perspective that opens renewed reading of the constructed cultural landscapes embodying human lifeways, ritual performances, and behavioral spaces.

L. Antonio da Silva and MaDu Gaspar look at the Sambaquis or shell-mounds phenomenon. The phenomenon as such has axiomatic and undisputable relationships with water bodies, small and large. The authors explore the multiple facets of this aquatic and marine adaptation and conceptualize water as a "cultural agent" that has shaped fishermen and sambaqueros lifeways.

Finally, Anna C. Roosevelt offers a monograph-like presentation of the

culture of stilt villages through an in-depth analysis of the Warao of the Orinoco delta. "People of the Canoe" or "Lowlands people", distributed in Guyana, Surinam, Trinidad and Venezuela, they feature challenging cases of tropical forest adaptation to floodplains environments. The contribution examines anthropological, cultural, linguistic, historical and biological data collected on these groups over the last 400 years. Viewed by some anthropologists as hunter-gatherers, they in fact rely for an important part of their subsistence on cultivated crops, such as the south American taro, acai and pupunha palms. They are matrilineal with women wielding political power and community leadership roles. They literally live on water, expert paddlers, they have developed intricate exchange networks connecting all communities of the Orinoco drainage with their canoes.

## COLONIALITY, ALTERITY, AND CULTURAL ENCOUNTERS

As far as South America is concerned, coloniality involved encounters, some brutal other more subtle, with indigenous communities, rivalry between European powers, as well as alliances between, and competitions among indigenous groups

J. C. Gouveia Neto and A. Guida Navarro address the topic of music and its practices. Starting from the likely true but unverifiable assumption of the very existence of Music since the beginnings of Human history, partly backed by references to the presence of musical instruments – ocarinas, bone pan flutes – in the archaeological record, the authors focus on musical practices during the colonial period as reported by European missionaries. Their analysis focuses on the Tupinamba from the island of Maranhao in Brazil, with the main source of investigation is accordingly a book written by Claude d'Abbeville, a French Capuchin priest in the early 17<sup>th</sup> century.

K. C. Costa da Conceição and A. Guida Navarro provide a new reading of the relationships between European and indigenous populations in the context of geo-political rivalry between European colonial powers. From 1594 to 1615, the French, through the "Equinocial project" tried to create a colony sitting on the equator in Northern Brazil, but were unsuccessful and defeated by the Portuguese in 1615. In the process they did what they could to harness the support of the native populations. The mainstream history of European colonization tends to focus almost exclusively on Europeans actors. The authors show that, the brief success of the French – the foundation and construction of Saint Louis city - was due to their reliance on the native Tupinamba who were equally very well aware of French-Portuguese rivalries. The native organizational structures, and matrimonial connections allowed for the mobilization and access to labor force, especially that of women. The contribution shows plainly that the natives played their own part in those complex socio-political interconnections and were not simple Europeans pawns.

Finally, E. Lima da Silva contribution analyzes the conflicts between colonizing Europeans and indigenous communities in the 18<sup>th</sup> century captaincies of Maranhao and Piaui triggered by the introduction and expansion of cattle farms. Portuguese properties like mills and corrals, built on appropriated native lands were frequently destroyed, leading to an endless cycle of raids and counter-raids. Relying on colonial archives, the authors scrutinize the indigenous groups forms of actions of resistance, enabled through alliance networks, negotiations, divergent or converging interests. Archival sources are essential in such a research endeavor. It would have been very interesting to complement, cross and check official archival sources with oral traditions and ethnohistorical records related to those crucial events that are certainly stored in local natives' social memory.

## CAPACITY BUILDING

Capacity building is an essential foundation for sustainable development of archaeological and historical research and cultural heritage conservation. A. Guida Navarro presents a case of institutional and capacity building geared to achieve these goals. The paper outlines the success story of the Archaeology Laboratory of the Federal University of Maranhao launched in 2011. The presented unit carries research and human resources training with special focus on Stilt villages. Its "graduates" are today pursuing studies in master and doctoral programs of Brazil renowned universities.

## CONCLUSION

Thanks to the contributions assembled in this dossier, a new better empirically grounded synthesis on the role of the Atlantic in the peopling of the eastern half of South America is now available. The Amazon was neither a hostile repulsive environment, nor an uninhabited area waiting to be colonized by "advanced" Andean civilizations. The East side of South America indigenous cultures emerged and evolved at their pace through niche-construction, scalar adaptation to diverse environmental component of the Amazon, landscape transformation and constant adjustments to climate change. The next step in the construction of a future broader synthesis of the Amazon prehistory will certainly involve the integration of the now increasing challenging results of Ancient DNA (aDNA) and genomic research, as well as historical linguistics.

As paradoxical as it may seem at first glance, it is the clash of ideas and research practices that drive better understanding of the world we live in. Great controversies are the engines for the advancement of science. Examples are many. At the beginning of the 20<sup>th</sup> century for example, R. Dart (1925) published the study of the Taung's child, he named "*Australopithecus africanus*" with the forceful

claim of having identified a remote “human ancestor” in South Africa when European based paleontologists were fully confident to have the cradle of humanity in Europe. It was after 22 years of acrimonious debates, precisely in 1947 at the First Pan-African Congress of Prehistory at Nairobi that Broom (1947) and Le Gros Clark (1947) presentations officially supported Dart conclusions. The latter asserting that “the general conclusion was reached that the *Australopithecinae* must at least be regarded as having a fairly close relationship to the ancestral stock which gave rise to the *Hominidae*” (1947: 111), brought the controversy to its end. The same template applies to the debates on the Indo-Europeans origins and expansion in Western Asia and Europe (Mallory 1991, Renfrew 1990), the expansion of speakers of Bantu Languages, the expansion of farming in Europe, among many others. The debate featured in this dossier on the explanatory framework of the predominant role played by the Atlantic in the peopling of the Amazon is a mirror-image of that on the origin of iron metallurgy in Africa launched in the early 1950s by Henry Lhote and Raymond Mauny. Despite increasing and overwhelming solid field data (Holl 2009, Holl 2020, Zangato and Holl 2010), a dwindling number of Africanist archaeologists are still clinging to the *Ex-Oriente Lux* explanation for the emergence of iron metallurgy in Africa, in some cases ignoring their own research when the results do not support their assumptions (Killick 2004, Killick et al 1988). Vigorous debates are what make science so fascinating.



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