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Indigenous Societies in Brazil before the European Arrival

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Summary and Keywords

Before the Portuguese arrived in Brazil at the beginning of the 16th century, the vast area that today constitutes the national territory was occupied by different indigenous groups, the native peoples of the land. The origins of human settlement in Brazil have been the subject of heated debates. Brazilian archaeology has long been dedicated to the issue, in conjunction with researchers from several countries, because the question holds implications for charting early human life across the Americas. Their findings have made it possible to better understand the long history of indigenous societies in what is today Brazil based on their material remains, because it is rarely possible to establish a correlation between one group or another based solely on ethno-historical sources. The archaeological research has also made meaningful progress on cultural history, addressing questions related to the way of life of hunter gathers and ceramist groups. The latter were numerous and diversified in the past, but the importance and wide distribution of the Tupi, the first indigenous group with whom Europeans came into contact, should be highlighted. Another issue of interest is the sociopolitical complexity and the material sophistication of late precolonial Amazon societies.

Keywords: Ancient indigenous societies, Brazilian archaeology, Paleo-Indian, lithic technology, shell mounds, Tupi-Guarani tradition, anthropophagy, complex societies in Amazonia, geoglyphs, megaliths

According to Pedro Paulo Funari, Brazilian archaeology was one of the pioneers on the world scene.¹ It was established in the 19th century, some years after the arrival of the Portuguese royal family, at the behest of Dom Pedro I, who brought with him some exotic objects from Eastern and European cultures. For a few decades, archaeology was at the center of imperial ideology in Brazil, a period during which the National Museum in Rio de Janeiro and the Emílio Goeldi Museum in Belém were founded. During the period of the first republic (1889–1930), archaeology faded in importance.

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During the first half of the 20th century, marked by the fascistic Estado Novo dictatorship of Getúlio Vargas (1937–1945), archaeology resurfaced at the center of a humanist movement that arose in reaction to authoritarianism. Years later, between 1945 and 1964, based on initiatives led by Paulo Duarte in defense of indigenous rights and the preservation of cultural patrimony, research institutions like the Institute of Prehistory in São Paulo were established. At that time, professional archaeologists like Joseph and Annette Laming-Emperaire, associated with young French intellectuals such as Claude Lévi-Strauss, became attracted to Brazil. They were interested in investigating the capacity for symbolic language by ancient inhabitants, thus they concentrated their studies on cave paintings.

After the military coup in 1964, the government established the National Archaeological Research Program (Programa Nacional de Pesquisas Arqueológicas, or PRONAPA), with support from the Smithsonian Institution, coordinated by Clifford Evans and Betty Meggers. The program's goal was to map human settlement and its various forms of expression in Brazilian territory. PRONAPA produced a standardized sample field methodology and proposed categories for classifying artifacts, organized according to a historical-cultural approach that identified several ceramic and lithic phases and traditions without establishing a linguistic or ethnic correlation. Brazilian archaeologists still use the classificatory units developed by PRONAPA.

Beginning in the 1980s, with the end of PRONAPA and PRONAPABA—the project's branch in the Amazon basin—new research questions emerged that built off of the empirical, exploratory, and largely historical-cultural approach developed by Brazilian archaeologists. Among these, important research topics include ancient human presence in Brazil; the way of life of ancient hunter-gatherers; of *sambaqui* (shell mounds) builders; and ceramist groups, like the Tupi. More recently, research has been influenced by new archaeological theories originating in other parts of the world. In Amazonian archaeology, some theoretical questions have become particularly significant, such as the emergence of forms of social complexity, their association with issues related to historical ecology, and studies of cosmologies based on ceramic iconography. These are some of the topics discussed in this article.

The Ancient Settlement of Hunters-Gatherers in Brazil

While some date the presence of humans in Brazil especially far in the distant past—between 50,000 BP and 23,000 BP—as of 13,000 BP there are clear identifiable signs of Paleo-Indian settlement, with archaeological sites contemporaneous to the oldest locations in the Americas with widely accepted dates.² In addition, large collections

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consisting of skeletal remains from sites in Lagoa Santa, Minas Gerais, in central Brazil, date from the end of the Pleistocene to the beginning of the Holocene eras.

Studies of skeletal remains in Lagoa Santa carried out by Walter Neves and his collaborators have played an important role in the discussion of the biological characteristics of the first Americans, suggesting great differences in cranial morphology compared to indigenous groups who arrived later. While recent Amerindian populations are distinguished by a Mongoloid pattern, similar to Asian populations, the remnants of Lagoa Santa exhibit a cranial morphology more akin to Australian and Melanesian groups.

Understanding these distinctions requires explaining the processes that led to the dispersal of humans across the American continent, which occurred both through the Beringia route and through waves of migration through navigation. According to researchers, distinctive patterns statistically observable in analyses of skeletons from coastal, central-west, northeast, and southern Brazil, associated with different chronological periods of the Holocene, suggest at least two discrete migratory waves from Asia toward South America.³

Another set of evidence that allows for the study of human settlement across the Americas is the different lithic artifacts found in various regions of Brazil. One such site is Caverna da Pedra Pintada, in Monte Alegre, Baixo Amazonas, with initial dates of 11,000 BP.⁴ This collection consists mainly of chalcedony and quartz crystal chips, with the presence of formal artifacts—bifacial triangular tips measuring between 20 and 40 mm and unifacial artifacts (blades and limaces)—associated with a varied tropical forest economy, based on the cultivation of palm trees and nuts, as well as small and medium-sized hunting and fishing. Although not much has been preserved, fish remains are the most numerous at this site, followed by fossils of rodents, turtles, amphibians, and birds. The fact that this tropical forest settlement existed contemporaneously with the Clovis culture in North America, along with contrasting data regarding subsistence and lithic technology, suggests that the latter was only one among various regional traditions.

Relying on artifact classification categories that do not necessarily correspond to ethnic groupings, it is possible to identify three distinct contemporaneous lithic traditions in Brazilian territory—Umbu, Itaparica, and Lagoa Santa (Figure 1)—which produced different patterns of production.⁵ However, neither the technological variation nor the chronology they exhibit seem to make sense when confronted with the traditional settlement model in the Americas, referred to as “Clovis First.” According to this explanatory model, the Clovis culture was responsible for the specialized production of bifacial projectile tips used in the hunting of large mammals, and that all of the cultures of South America originated from a single dispersion point in American territory. The existing data point to a different picture, as previously indicated by studies carried out in the Amazon.

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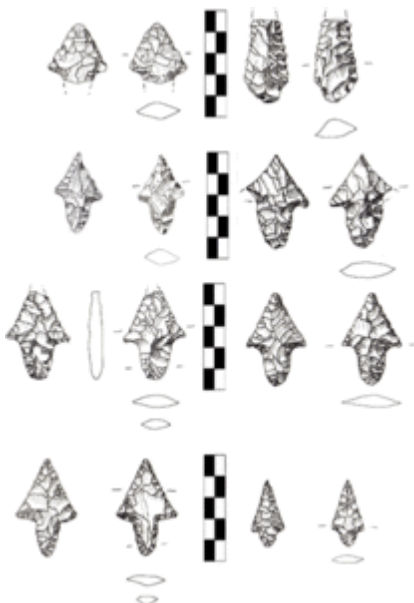


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Figure 1. Area of occurrence of Umu, Lagoa Santa, and Itaparica traditions. Adapted from Araujo et al., "Extreme Cultural Persistence in Eastern-Central Brazil: The Case of Lagoa Santa Paleoindians," *Anais da Academia Brasileira de Ciências* (2017): 2.

The first of these cultural traditions is the Umu, whose oldest dating is $11,555 \pm 100$, in south and southeast Brazil, with what is considered to be a formal industry involving small scrapers and tips of manufactured projectiles (See figure 2). The second is the Itaparica, another culture that had formal artifacts, with initial dates around $10,750 + 300$ BP, spread across a wide region between central and northeastern Brazil, characterized by

manufactured unifacial scrapers (limaces) (Figure 3). And the third of these is the settlement of Lagoa Santa, Minas Gerais, dated around $10,490 \pm 50$ BP (Lapa do Santo site) and $7500 + 110$ BP (Boleiras site), with most sites located in shelters. The latter consists of a generalized industry that produced small (20 mm) and slightly larger (30 mm) chisels, which sometimes demonstrate marginal retouches (Figure 4). One of the striking features of this tradition is its extreme cultural persistence, maintaining its presence for a long period of time (about 8,240 years).⁶

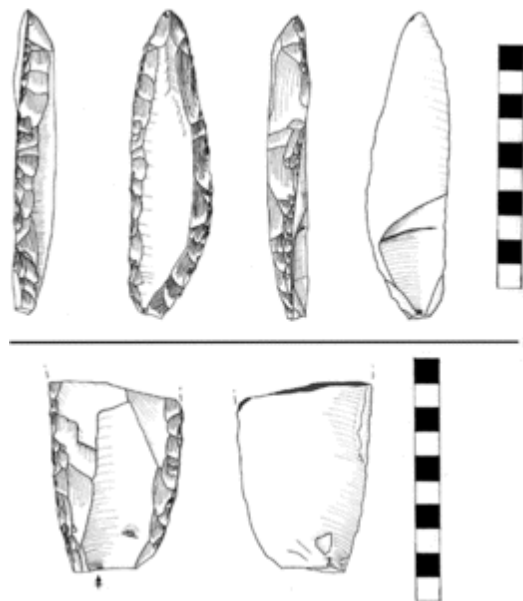


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Figure 2. Bifacial points of Umu tradition. Alice Boer site, São Paulo.

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Drawings by João Carlos Moreno de Sousa.



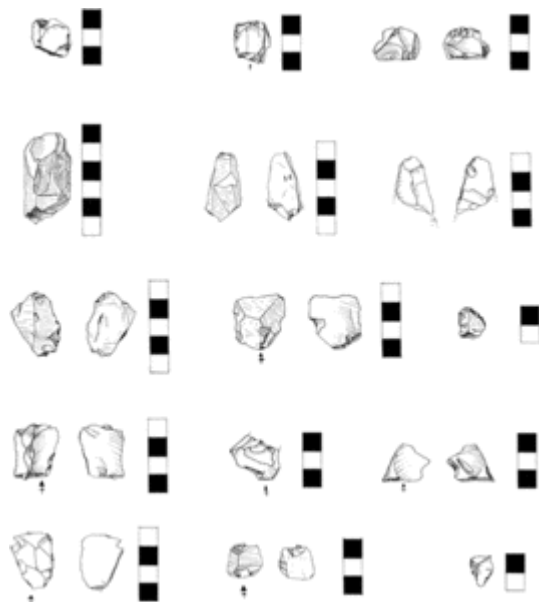
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Figure 3. Limaces of Itaparica tradition. Gruta das Araras site, Serranópolis, Goiás.

Drawings by João Carlos Moreno de Sousa.

Analyses of the operative chain of lithic collections from these sites have drawn attention to the specificity of Lagoa Santa, which stands apart for its complex, highly efficient microlithic industry based on small flint blocks and quartz crystals.⁷ Existing data on the diet of hunter-gatherers from the Lagoa Santa region expand our understanding of the use of these lithic instruments. Zooarchaeological examinations of samples from the Lapa do Santo site indicate a varied diet, including small and medium-sized mammals

like deer and armadillos, followed by lizards and preás (Brazilian guinea pigs), along with several other small animals.⁸



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Figure 4. Flakes of crystal quartz of Lagoa Santa tradition. Lapa do Santo site, Lagoa Santa, Minas Gerais.

Drawings by João Carlos Moreno de Sousa.

These findings regarding the diversity and historical depth of Paleo-Indian hunter-gatherers in Brazilian territory does not fit the “Clovis First” model of human settlement. As scholars point out, the best explanation is one that takes into account multiple migrations to the South American continent, which would allow for the development of different cultural lines and the establishment of settlements in varied environments. These groups did not necessarily produce large bifacial

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arrowheads, because the use of these artifacts suggests a rather specific hunting mode related to large animals existing in North America. Analyses of the aforementioned lithic technologies and the available zooarchaeological data reinforce this perception.

The Builders of Coastal Brazilian Mounds

Between 8000 BP and 1000 BP, monticular archaeological structures composed of faunal remains, mainly shells and fish bones, along with lithic artifacts, ashes, and numerous human remains associated with the settlements of ancient fishermen-gatherers, began to appear along the Brazilian coastline. These sites are called *sambaquis* (a term derived from the Tupi language to refer to these mounds of shells) and were usually built near bays and ponds in areas with a reliable food supply. The largest such sites were located in the south and reached a monumental scale (over 50 meters high), visibly standing out in the landscape (See figure 5).



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Figure 5. Sambaqui de Figueirinhas, Jaguaruna, Santa Catarina, Brazil.

Photo by Madu Gaspar.

Until the late 1980s, scholars of sambaquis approached the accumulations of mollusk shells and fish bones as garbage dumps, studying them for evidence of diet and subsistence activities of coastal fishing and gathering societies. Another trend in this period was the excavation of wide surfaces using the French method, which

prioritized horizontal space. This made it appear as if holes from stakes, graves, and funerary accompaniments were on the same plane.

Beginning in the 1990s, there was a paradigm shift in the study of sambaquis when scholars realized that funerary rites were the symbolic center of these groups' lives and that their material expression was the three-dimensional archaeological features made up of the accumulation of sediments and shells over a grave along with the remains of food associated with funerary ceremonies. Zooliths, sculptures of polished stone in the form of animal effigies (fish, birds, and mammals), have also been identified in these ancient funerary settings. But only through extensive profiling and a stratigraphic approach attentive to the complex sequence of vertical layering did it become possible to perceive that the recurrence of these rituals produced high visibility monticular sites, intentionally constructed over time, which would have served as landmarks.⁹

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Excavations carried out at the Jabuticabeiras II site (dated 2880 ± 75 BP and $1400 + 40$ BP), located on the coast of Santa Catarina state, were key to understanding the importance of funerary rites and formative processes that led to the constitution of this great sambaqui cemetery. The site measures 400 m X 250 m high, with profiles indicating a complex layered deposit of shells, dark coats of sediment with considerable organic matter, numerous stake holes, and signs of individual and group burials. Archaeological analyses of the sites suggest that the stake holes did not conform to a pattern consistent with what would have been the floor of a dwelling. They were thus assumed to be structures related to funerary events (Figure 6). Successive episodes of collective burials seem to have resulted in the construction of this sambaqui, which displays a combination of layers of clear shells used to close tombs and funeral areas, interspersed with thick dark layers containing food debris, especially fish, but also birds and mammal bones. These were consumed in funeral feasts and also presented as offerings in honor of the dead members of neighboring communities around the lagoon of Garopaba.¹⁰



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Figure 6. Burials and numerous post holes at Jabuticabeiras II site, Santa Catarina, Brazil.

Photo by Madu Gaspar.

Although coastal sambaquis are considered part of the same sociocultural system with funerary rites at their center, it is necessary to recognize the difficulty in identifying housing sites that do not contain the same remnants and diagnostic structures.¹¹ There are also regional particularities. In the southeast and in the north of Brazil there are sites

that combine housing and funerary spaces.¹² The recent resumption of research at the Porto da Mina site, a sambaqui on the Amazonian coast with the presence of pottery dating to around 5000 BP, also revealed behavioral aspects as yet unknown to scholars. This one, which appears to be a grave and not a habitation site, demonstrated the use of small ceramic fragments, which along with animal remains were used in monticular constructions.¹³

By 2000 BP, there is a change in the techniques of building sambaquis, with a decrease in the use of the shells. A few centuries later, the construction of monumental mounds disappears from the archaeological record, giving rise to cemetery sites in low mounds, with pottery present in small quantities. This cultural shift, also marked by the appearance of pottery, is related to the expansion of groups of potter farmers in regions of central Brazil, the south and southeast, and along the coast, which were certainly involved in the disappearance of the sambaqui tradition. There are also indications of contact and assimilation taking place among the different populations, such as in the

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interior of Rio de Janeiro, generating some transition sites. But along the coast, which came to be occupied by the Tupi-Guarani ceramist groups who quickly reached demographic and technological superiority, is where this process of sambaqui disappearance is most clearly detected.

The Tupi-Guarani and Their Pottery

Origin and Chronology

When the Portuguese arrived on the Atlantic coast of Brazil in 1500, they found numerous indigenous groups inhabiting large villages on the coast, which stood out for their social organization, rituals involving the consumption of fermented beverages, and anthropophagic practices. These Indians spoke languages belonging to the Tupi-Guarani family, whose distribution encompasses not only Brazil but neighboring countries such as Peru, Bolivia, Paraguay, Argentina, and Uruguay. According to the ethnohistorical observations of European chroniclers, it was possible to distinguish basically two generic groups: the Tupinambá, who occupied the coast from Cananéia in the present state of São Paulo to Maranhão in the northeast; and the Guarani in the southern region of Brazil (Figure 7). These communities had ceramic artifacts whose shapes and decoration involving polychromatic painting were quite similar to those later found by archaeologists in the same regions as well as in the Amazon, in the interior of the Northeast, and Central Brazil.¹⁴



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Figure 7. Map of distribution of Tupinambá and Guarani groups according to historical sources.

Based on this overlap, members of PRONAPA established an archaeological unit called Tupi-Guarani, which recognizes an affinity between the different groups that created this pottery, distributed across a vast territory, but does not assume an ethnological or linguistic correlation. According to this perspective, accepted by most experts, ceramics with formal and decorative

features associated with this archaeological group were not necessarily produced by people who had the same language or ethnicity.¹⁵ Furthermore, the great variability of

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Tupi-Guarani ceramics from different regions, where other ceramic traditions were also recorded, suggests that this resulted from processes of cultural exchange that led to the adoption of technological and decorative characteristics. In any case, this matter indicates a cultural phenomenon that stresses affinities and which consists of the only pan-Brazilian archaeological manifestation, with borders far beyond the country, as pointed out by archaeologist André Prous.

Debates over the origin and development of the Tupi-Guarani tradition raise questions that remain open. José Proença Brochado developed a very influential hypothetical model, proposing that Tupi-Guarani ceramics originated in the Amazon and that from there a line would have migrated toward the east, reaching the Brazilian coast (Tupinambá ceramists), and another one would have traveled to the southwest toward Argentina (Guarani ceramists).¹⁶ Recent studies in the southwest Amazon region of Rondônia have investigated the possibility that the Tupi-Guarani tradition began in that region, because, according to historical linguistics, that is where the Tupi language family originated around 5,000 years ago before branching off between 2,500 and 2,000 years ago. But archaeological results are still inconclusive. Nevertheless, independent bioanthropological studies, based on statistical comparisons of the cranial morphology of populations associated with Tupi-Guarani ceramics and several other prehistoric and ethnographic populations, reinforce the hypothesis of an Amazonian origin for Tupi-Guarani ceramics.¹⁷

As for the chronology of other regions, most of the existing C14 tests place the Tupi-Guarani settlement between 1200 and 1500 AD. Another significant chronological range can be identified between 700 and 1000 AD. There are also dates associated with typically Tupi-Guarani contexts from the coast of Araruama, Rio de Janeiro, dating from 2900 to 2600 BP.¹⁸ Initially seen as anomalous, these dates, when confronted with others around 2500 BP from contexts in São Paulo and Rio Grande do Sul that had previously been discarded, could be reconsidered, reinforcing the hypothesis that the dispersion of Tupi-Guarani populations took place before 2000 BP.¹⁹ In the southern Amazon, the dates are more recent: between 280 and 390 AD and between 400 and 690 AD for the Itacaiúnas phase, in the Xingu river basin. What is noticeable is a great dispersion of this style of pottery in several directions, probably explained by migratory processes, but also by the diffusion of ideas and techniques.

Tupi-Guarani Archaeological Evidence

Archaeological research has uncovered the existence of large Tupi-Guarani villages, both on the coast and in the interior, near forested areas, as well as smaller sites that probably functioned as collection sites or fishing camps. Although some villages had circular or elliptical shapes, arranged around a central square, there is no single pattern, as most of the sites exhibit a disorderly layout of houses. There are indications that settlements were long-lasting, because the bottoms of the huts stand out from the soil in their surroundings

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due to the dark coloration of the sediment (black or dark gray) containing organic matter, probably resulting from the large amount of bonfires, constantly lit to warm the interior of the huts.

Sites in the Paranapanema River valley region, in the state of São Paulo, were dug up in the 1970s by extensive surface excavation techniques. These techniques allowed researchers to develop village diagrams of about 120 to 150 m in diameter, with dark spots corresponding to the huts measuring about 15 x 8 m in diameter. Inside these spots were unstructured fires, marks of support posts and mats that would have served as dividers to separate the inner space of the huts, as well as lithic and ceramic fragments in varying densities.²⁰

Another important aspect of Tupi-Guarani populations, which reveals the existence of ritualized practices and of great symbolic content, refers to burials. These were commonly simple burials straight underground or in funerary urns, the latter being buried some distance from the houses or below the dwellings. These urns contained disjointed bones, which suggests secondary burials, probably of people of greater prestige, along with lithic artifacts such as *tembetás* (lip adornments) and stone ax blades, indicating the presence of personal objects in burials. Open containers are sometimes associated with funeral urns, indicating the existence of ritual offerings.

Excavations conducted on the Araruama coast, in the state of Rio de Janeiro, by archaeologist Angela Buarque exposed funerary structures associated with the Tupinambá, constituted by a set of organized remains. At the Morro Grande site, structure 2 (dated 2600 ± 160 BP) is formed by an ovoid-shaped urn, with corrugated decoration and three externally associated bowls of various shapes, one of them decorated by a painting with circular and concentric geometric motifs. Another bowl covered an individual's skull (Figure 8). At another site, Bananeiras (dated 430 + 40 BP), the funerary structure was composed of a closed urn, with a complex outline and corrugated decoration. This contained a female individual, whose bowl covering the skull had marks of change of use related to the consumption of drinks. The urn was also associated with two painted bowls.²¹



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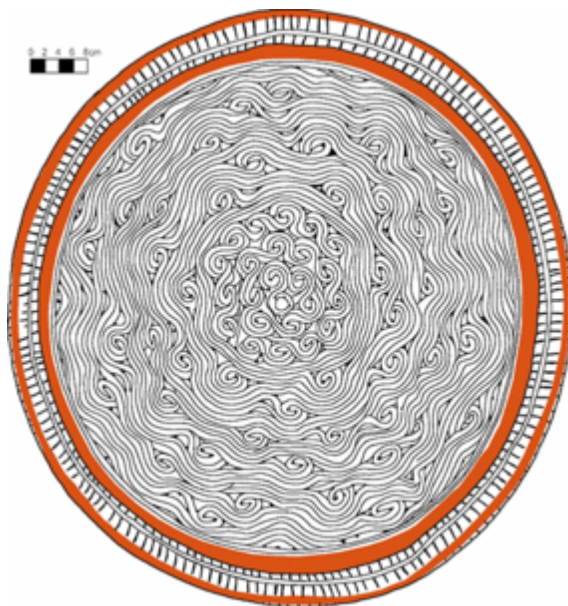
Figure 8. Funerary structure composed of an urn and vessels, Morro Grande site, Araruama, Rio de Janeiro, Brazil.

Photo by Beto Barcellos.

Ceramics, used in daily activities as well as rituals, are thus the most important element in identifying Tupi-Guarani

populations. In the south of Brazil (Guarani) there are few simple forms (conical, half-shell, or spherical shell), most of which are closed and have composite or complex profiles, with angular inflections, and corrugated decorations. Painted decoration are relatively uncommon, being restricted to the upper part of the large containers used to hold drinks, repurposed as urns in a funerary context. Several simple ceramic forms are found throughout the area of Tupi-Guarani presence in Brazil.

From the central coast (Tupinambá), larger vessels are ovoid shaped, predominantly in open shapes for collective service in elliptical circular or quadrangular shapes with great attention to decorations composed of polychrome painting (See figure 9) in abstract patterns (for instance, sinuous motifs forming labyrinthine drawings, fine and delicate dot compositions, oblique segments, etc.). There are some more complex designs with corrugated decoration similar to the typical vessels of the southernmost regions, such as the funerary urn from the Bananeiras site previously described, which indicates cultural contact between settlements in different Tupi-Guarani regions. Figurative elements like human faces were identified in pottery paintings in the states of Pernambuco and Rio Grande do Norte (northeast) and also feline heads in the south of the Amazon.²²



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Figure 9. Tupi-Guarani vessel with polychrome painting with sinuous design. Bananeira site, Araruama, Rio de Janeiro.

Drawing by William Borba.

Beverage Consumption and Anthropophagic Rituals

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Aspects related to the uses of Tupi-Guarani ceramic vessels have been inferred from correlations established with ethnohistorical accounts and engravings by European chroniclers of the 16th and 17th centuries (Hans Staden, Thévet, Jean de Léry, Gandavo, D'Abbeville, etc.). These sources indicate that the archaeological ceramics of the east and northeast coasts of Brazil were produced by the Tupinambá. Their illustrations provide direct evidence that the indigenous group's diet was based on cassava, because the chroniclers describe various activities and tools used to prepare that crop and its derivatives. But most striking is the resemblance between the large biconical vessels of Hans Staden's illustrations used to contain beverages and those archaeologically excavated in the area occupied by the group. Most of the illustrations depict festivities and beverages being consumed, sometimes as part of anthropophagic rituals.²³

The aforementioned chroniclers wrote about the preparation of fermented beverages, making it possible to identify different phases in the process and the vessels used. According to Hans Staden, a German traveler held captive by the Tupinambá on the coast of São Paulo between 1548 and 1555, narrowly escaping being sacrificed in a cannibalistic ritual, the preparation of the cassava drink involved initially cooking the cassava in large biconical bowls that went into the fire. After the tubers were cooked, women chewed them and then kneaded and spat the bagasse in the pots to accelerate the fermentation. During the process of fermentation and storage of the drink the large vessels (about 16 liters) were partially buried. Open hemispherical bowls (about 4 liters) were used to serve the beverage in smaller bowls used by Indians as drinking cups.

Jean de Léry, who lived among the Tupinambá of Guanabara Bay between 1557 and 1558, observed that the fermented drink was made from a mixture of sweet and bitter manioc, as well as another one made from corn. These were ready in a period of three or four days. In Maranhão, according to D'Abbeville, the drink was made from cashew, and the fermentation and storage vessels were ovoid and not biconical as in other regions further south. Thévet, who was in Rio Grande do Norte, also confirmed the use of cashew in the preparation of the beverage and the use of large ovoid containers with corrugated decorations.



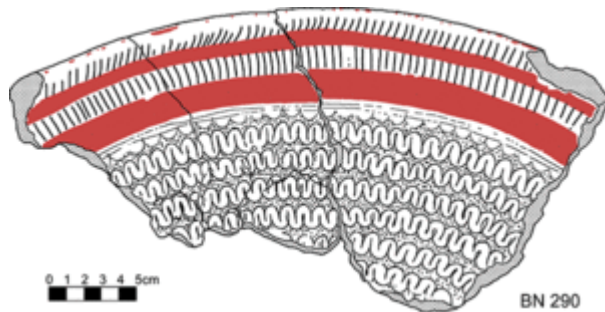
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Figure 10. Scene of cannibalism among the Tupinambá, according to Hans Staden (colored engraving). Theodor De Bry. *America Tertia Pars*, 1592. Service Historique de La Marine, Vincennes, France.

In addition to the collective festivities of the Tupinambá, involving the consumption of fermented beverages, European chroniclers were also

especially interested in anthropophagic practices, employed not for nutritional but ritualistic purposes in the context of war. Months or years after conflicts, enemies were sacrificed in the name of vengeance for lost family members and the complete destruction of their enemies.²⁴ According to Brochado, Thevet points out that the captive's flesh was baked in the *moqué*m (a kind of suspended wooden grill). Large plates or open bowls with reinforced edges and polychromatic painting on the inside and around the edge were used to serve different types of food, including human flesh to be ritually consumed by the group (Figure 10).



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Figure 11. Fragment of Tupi-Guarani vessel with a design possibly associated with cannibal feasting. Bananeira site, Araruama, Rio de Janeiro.

Drawing by William Borba.

Some of these open vessels were decorated more explicitly with figurative elements that can be correlated to the anthropophagic ritual (anatomical elements). A vessel from Minas Gerais shows a head, spine, and serpentine ribbons evoking the intestines. In addition to this artifact, others exhibit motifs that

resemble brains or bowels, which recall the drawings of 16th-century chroniclers depicting intestines displayed on plates during the cannibalistic feast.²⁵ This pattern, which consists of a stylization of the aforementioned figurations, was found in a ceramic fragment on the outskirts of the Bananeiras site, in Araruama, Rio de Janeiro, excavated by Buarque, who associates it with a piece possibly used in anthropophagic rites (Figure 11).

Settlement in the Amazon

The Development of Complex Societies

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Archaeological research presents a long history of human settlement in the Brazilian Amazon region, dating back to at least 11,000 BP. Although there were diverse small- and medium-scale precolonial social formations, academic production since the 1980s has recognized the existence of complex societies that emerged between 1000 and 1500 AD (Figure 12). This expresses a shift from the previous view, which described the precolonial Amazonian societies as dispersed, simple, and egalitarian and whose development was limited by environmental conditions. According to scholars, complex societies in the Amazon, referred to as *cacicados*, were regional networks defined by large sites, elaborate artistic complexes, social stratification, settlement hierarchies, and sometimes the existence of centralized political power.²⁶

One of these societies, and perhaps the most emblematic, emerged at the mouth of the Amazon River on Marajó Island. Between 1948 and 1949 the American archaeologists Betty Meggers and Clifford Evans conducted the first scientific research in the region, based on previously formulated hypotheses, whose objective was to investigate the existence of a Circum-Caribbean culture that might have developed in an area of tropical forest.²⁷ According to Meggers, Marajoara pottery presented a variety of highly elaborated decorative styles, which together with burial patterns, size, and number of mounds implied complex social and religious organization with well-developed leadership, social stratification, division of labor, and a religion that probably involved priests.²⁸ The research, based on a relative chronology established through seriations, found that the origin of this society could be explained by a migration of highly organized sub-Andean groups that colonized this lowland region but were unable to maintain their original traits due to the limitations of the environment, which led to a disintegration of the social system until it ultimately declined completely.²⁹



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Figure 12. Map of archaeological areas in Amazonia mentioned in the text.

In the 1980s, Anna Roosevelt conducted her own research in Marajó. Excavating Teso do Bichos, an artificial mound 7 meters high with an area of 3 hectares, located near Lake Arari, and another mound in the region of the river Anajás, Roosevelt demonstrated through the use of geophysical prospecting that these were not only burial sites, but also housing sites occupied over centuries,

with several clay structures consisting of domestic stoves. They also displayed signs of dozens of communal houses, suggesting a population of about 1,000 people in each settlement, allowing for human settlement at an urban scale. Roosevelt concluded that

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the Marajoara culture represented a *cacicado* that developed locally, not from an Andean migration, between the years 400 and 1300.³⁰ As to their subsistence, the author did not find conclusive evidence that maize would have been the main crop, capable of sustaining large populations as initially thought, but found that the local diet would have been based on intensive fishing, fruit and seed collection, and occasional hunting. Finally, with regard to political organization, she concluded that this society had an independent and non-centralized and therefore heterarchical system of administration.³¹

Later, Denise Schaan devised an interpretive model of the complex societies of Marajó Island based on a study of the Camutins site—a network made up of a set of mounds that extend for 6.2 miles along the Igarapé do Camutins, a tributary of Alto rio Anajás—which described the social formation in question as non-agricultural *cacicados*.³² The study aimed to investigate the spatial distribution of mounds (occupied as of 500 AD), cultural features, land structures, and domestic and ceremonial artifacts in order to understand the function of the mounds, the relationships among them, in addition to aspects of resource allocation and social hierarchies. Surveys were conducted at different times of the year, making it possible to identify seasonal changes in the landscape caused by fluctuations in water levels that affected resources, mobility, and transportation. After mapping the mounds and their main features, excavations were conducted at two large sites.

Results from recent archaeological studies carried out in Marajó, along with observations of current fishing practices, made it possible to detect a system of hydraulic management and control of aquatic resources located near the mounds, with features indicating the existence of canals, wells, and dams. The settlements included small mounds deployed along Igarapé Camutins, around large sites (up to 12 m high) consisting of political and ceremonial housing centers (sites M-1 and M-17), where festivities were held to establish relationships of cooperation, in addition to funerary rites of ancestor worship with burials in elaborate urns. For Schaan, the intensification of a fishing economy made possible population growth and the development of complex sociopolitical institutions controlled by heads of local family groups, inserted in a network of regional interaction among the *cacicados*, but without supra-regional organization.

In central Amazonia, in the area of confluence between the Negro and Solimões Rivers, Eduardo Neves and his collaborators conducted a long-term project that made it possible to chronologically characterize four ceramic assemblages: Açutuba (300 BP to 400 AD); Manacapuru (400 to 900 AD); Paredão (700 to 1200 AD) and Guarita (900 to 1500 AD).³³ During the period corresponding with the expansion of the regional population, Paredão phase faded in 1200 AD. This assemblage was associated with defensive structures present in the Açutuba and Lago Grande sites, suggesting conflicts with the groups responsible for Guarita ceramics. Also in this later period, settlement patterns were identified with small detached sites and large residential sites that also served as ceremonial centers, such as the Açutuba site, where a central plaza with ramps and other built features were detected. This configuration was interpreted as hierarchical and with indications of mobilized collective labor, which suggests the existence of regional polities.

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However, one of the distinctive features of the social formations in the region, recognized by scholars, was its fluctuating character, alternating between periods of greater and lesser political centralization.³⁴

In the indigenous area now occupied by the Kuikuro in Alto Xingu, numerous archaeological sites dating from the late prehistorical period (1250 AD) have been detected. According to archaeologist Michael Heckenberger, the sites were organized into two sets of hierarchical settlements and were part of a broader regional system.³⁵ Some of the large villages (25 to 50 ha), which were also ceremonial centers with central squares, had defensive structures (palisades and ditches) and may have been inhabited by about 1,000 people. Smaller villages, for their part, were arranged around larger ones in a satellite relation, connected by a system of roads. These patterns were seen as ancient forms of urbanism in the Amazon Basin.³⁶

The region of Santarém, in the lower Amazon, constitutes another archaeological example of a complex society in the tropical forest with differing scholarly interpretations. This social formation was described by Roosevelt as a “complex *cacicado* of moderate centralization” with an elaborate ceramic style presenting depictions of predatory animals that symbolized the warring and conquering character of the people. Furthermore, the regional landscape was recognized as being dominated by satellite villages that stretched along the Tapajós and Amazonas Rivers, revolving around a large central village situated in the present city of Santarém.³⁷

Recently, an alternative interpretation of the socio-political forms of Santarém, which developed between 1200 and 1600 AD, was put forth by Denise Gomes based on analysis of settlement patterns and the iconography of ritual artifacts.³⁸ Gomes’s argument rests on the worldview of Amerindian peoples and their relational interactions with animals, as well as the imagined capacity for beings to transform. This interpretation recognizes the social complexity of Santarém but denies the existence of political centralization and marked social hierarchies, because no material vestiges have been identified suggesting political subordination between sites or qualitative differences between individuals. On the other hand, it highlights intentional strategies of maintaining political autonomy through reconfigurations of territory, as well as efforts to deal with inherent instabilities through shamanic ritual activity.



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Figure 13. Map of delimitation of Aldeia and Porto sites, in the urban area of Santarém, Lower Amazon.

Although the presence of large central villages was recognized in the urban

area of Santarém—the Aldeia (120 ha) and Porto (89 ha) sites—these being indicative of population increases (See figure 13), the smaller villages around them were seen as independent units and sources of tension, whose separation took place in order to alleviate demographic and political pressures. As for the iconography of ritual ceramic artifacts, it includes animals and impressively realistic images of chiefs/shamans (Figure 14). Corporeal transformation is also a recurring theme, which represents the possibility of establishing a connection with pan-Amazonian indigenous cosmologies, according to which humans, animals, spirits, and other beings interact, assume their own perspectives, and can metamorphasize.³⁹



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Figure 14. Figurine of a chief/shaman of Santarém culture. Museu Nacional-UFRJ.

Photo by Denise Gomes.

In this inconstant world, the shamanic institution presents the possibility of regulating cosmopolitical relations involving human and nonhuman beings. Material and other intangible aspects were considered in association with Pierre Clastres's theories regarding the existence of intentional actions developed by Amerindian societies that avoid the concentration of individual power, deal with sociopolitical instability, and make these "societies against the State,"

pointing to the preservation of an egalitarian order.⁴⁰

Changes in the Amazon Forest and Their Material Manifestations

The idea that the Amazonian forest is pristine and untouched is no longer accepted. Although the extent of modifications made in the landscape by precolonial populations is the subject of heated debate, there is a consensus among most researchers about the idea that the composition and structure of the jungle as it exists today have been influenced by domestication activities, cultivation, and the dispersal of species carried out by precolonial populations over millennia.⁴¹ The identification of anthropogenic landscapes next to ancient archaeological sites reinforces this proposition. Beginning in 2500 BP, anthropogenic black soils—found in ancient villages with large amounts of coals and organic matter—arise, illustrating the archaeological correlation between sedentary lifestyle and population increase. However, the most striking landscape modifications, which are strongly associated with the idea of developing complex societies, involve the movement of land, or the construction of monuments.

In the western Amazon, earth structures with a precise geometric shape (circular, rectangular, quadrangular, oval, and hexagonal), called geoglyphs, formed by excavated dikes 11 m wide and 4 m deep, with adjacent earth walls, about 90 and 300 m in diameter have been found (Figure 15). Studies in the state of Acre, conducted by Schaan, have documented about 450 sites, occupying an area of 13,000 km² covering both land and floodplain areas.⁴² These were dated between 2000 and 700 BP and their possible symbolic function, related to the existence of religious centers and ceremonies, was inferred from its perfect geometry and the absence of material vestiges in its interior, although a few sites, like the Fazenda Colorada, have small monticular structures with vestiges that indicate use as housing.⁴³ The geoglyphs are thought to have been constructed by complex societies, capable of handling the environment.



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Figure 15. Geoglyph of Tequinho, Senador Guiomard municipality, Acre.

Photo by Edison Caetano.

Recent paleoenvironmental studies, based on analyses of phytoliths (siliceous plant cells used as plant markers), presented a reconstruction of the environmental context of the Acre geoglyphs, allowing for an evaluation of the impact of human intervention on the vegetation of the past. These demonstrated that the original flora of the

region was dominated by an anthropogenic bamboo forest with concentrations of palm trees and that only temporary clearings were carried out to enable the construction of the

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geoglyphs.⁴⁴ In this sense, there was no significant deforestation of the original forest, this being, therefore, a modern phenomenon. These studies also concluded that, due to localized interventions, there was no intervisibility of the geoglyphs, which remained hidden in the jungle.

On the northern coast of the state of Amapá, megalithic sites emerged, another type of monumental structure composed of granite blocks arranged in circular groups of up to 4m in height, horizontally, vertically, or inclined, that when implanted on the top of hills, intervene dramatically in the landscape.⁴⁵ These structures have been dated to 1000 BP and associated with ceremonial contexts, with graves containing undecorated ceramic vessels, smooth urns, and anthropomorphic urns with polychromatic paint from the Aristé phase, as well as votive deposits of vessels by the monoliths. Excavations by João Saldanha and Mariana Petry Cabral at the AP-CA-18: Rego Grande site, in the municipality of Calçoene, Amapá (Figure 16), demonstrate that the content of these structures does not only consist of artifactual deposits but also indicates reopening and manipulation of their contents, suggesting different ways of building these sites and establishing relationships with the dead over time.



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Figure 16. Megaliths, Rego Grande site, Calçoene, Amapá.

Photo by Mariana Petry Cabral.

In view of the ongoing discussion about the nature and intensity of intentional changes in the environment carried out by precolonial Amazonian populations, in addition to the sociopolitical implications involving discussions about the existence of alleged power

relations and submission of individuals aiming at construction of monumental structures, it is possible to highlight the existence of different ideological systems in place and the great capacity for symbolic materialization of these groups exemplified by monumental structures like geoglyphs and megaliths.

Discussion of the Literature

Between the 1960s and 1970s, Brazilian archaeology was focused on developing extensive explorations at sites and based on the Ford method and an approach developed by the aforementioned PRONAPA. With the exception of researchers linked to the French Mission, scientific production of that time was restricted to field and laboratory manuals, reports, and descriptions of phases and lithic and ceramic traditions. In the 1980s, a

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reaction against this methodology and the essentially empirical character of archaeology practiced in Brazil began, seeking new approaches from foreign influences.

Since the 1990s, there has been an expansion in postgraduate courses in archaeology in Brazil and also an increase in research related to environmental licensing, which has made it possible to increase knowledge about the precolonial occupation of large areas of the country and to allow for a more interpretative archaeology to take shape. Several theses, articles, and books were produced, most of them in Portuguese. In general terms, the most influential book is that of André Prous, *Arqueologia Brasileira* (1991), recently reissued. There are regional syntheses, such as *Pré-História do Nordeste do Brasil* (1997), by Gabriela Martin, and *Arqueologia Amazônica* (2010), edited by Edithe Pereira and Vera Guapindaia.

Although scholarly production in English remains much smaller, articles on recent research in Brazilian archaeology can be found in the *Handbook of South American Archaeology* (2008). A valuable review of Amazonian research can be found in "Amazonian Archaeology" by Michael Heckenberger and Eduardo Neves, published in the *Annual Review of Anthropology* (2009). Another important contribution is Denise Schaan's book *Sacred Geographies of Ancient Amazonia: Historical Ecology of Social Complexity* (2012), which analyzes environmental transformations demonstrated in the study of complex societies in the Amazon, with emphasis on monumental structures. Finally, the recent approximation between archaeology and anthropology proposed by Denise Gomes resulted in the proposition of a model regarding the existence of a "American perspectivist aesthetic," inaugurating a thread focused on the study of ceramic iconography in connection with indigenous animist perspectives.⁴⁶

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