THE DIVERSITY OF SOCIAL FORMS IN PRE-COLONIAL AMAZONIA

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Abstract

Existing interpretations of Amazonia’s pre-colonial chiefdoms, frequently reproduced in academic surveys, have helped create a grandiose image of the region’s past. However, the results of new archaeological research conducted in the lower Amazon, combined with a closer engagement with Amazonian ethnology, diverge from the dominant interpretative model and cast doubts on its explanatory value. Based on ethnohistorical projections, social evolutionary theories and still incomplete material evidence, the model proposed by archaeologist Anna Roosevelt has produced essentialist reconstructions of the Amazonian past, which (among other problems) tend to over-emphasize the historical distance from contemporary indigenous Amazonian societies.

This article provides a critical discussion of new archaeological evidence from the Santarém region of the lower Amazon, reopening the debate on the emergence of late pre-colonial chiefdoms from a wider perspective. The analysis combines factors traditionally included by archaeology, such as demographics, ecology, settlement patterns and territorial organization, with ‘intangible’ aspects relating to sociocosmology, inferred from an analysis of pottery iconography. As well as exposing the inadequacy of a conceptual framework employing an ethnocentric definition of Amazonian chiefdoms and political power, the article reveals a more socially diverse historical panorama, structurally and symbolically closer to late pre-colonial social formations and contemporary indigenous societies.

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Resumen

La diversidad de las formas sociales en la Amazonia Pre-colonial

Las actuales interpretaciones de las jefaturas pre-coloniales en la Amazonia, reproducidas con frecuencia en las síntesis académicas, han contribuido a crear una imagen grandiosa del pasado de la región. Sin embargo, los resultados de nuevas investigaciones arqueológicas realizadas en el Bajo Amazonas, en conjunto con una mayor participación de la etnología amazónica, divergen del modelo interpretativo dominante y arrojan dudas sobre su valor explicativo. Sobre la base de proyecciones etnohistóricas, teorías de evolución social y evidencia material aún incompleta, el modelo propuesto por la arqueóloga Anna Roosevelt ha producido reconstrucciones esencialistas del pasado amazónico, que (entre otros problemas) tienden a enfatizar demasiado la distancia histórica de las sociedades indígenas amazónicas contemporáneas.

Este artículo ofrece una discusión crítica de las nuevas evidencias arqueológicas de la región de Santarém del Bajo Amazonas, reabriendo el debate sobre la aparición de las jefaturas pre-coloniales tardías desde una perspectiva más amplia. El análisis combina elementos tradicionalmente incluidos por la arqueología, como la demografía, la ecología, los patrones de asentamiento y organización territorial, con aspectos ‘intangibles’ relativos a la socio-cosmología, inferida a partir del análisis de la iconografía de la cerámica. Además de exponer la insuficiencia de un marco conceptual que emplea una definición etnocéntrica de las jefaturas y el poder político amazónico, el artículo pone de manifiesto un panorama histórico socialmente más diverso, estructural y simbólicamente más cerca de las formaciones sociales pre-coloniales tardías y de las sociedades indígenas contemporáneas.

Résumé

La diversité des formes sociales en Amazonie pré-coloniale

Les interprétations courantes des chefferies pré-coloniales en Amazonie, souvent répétées dans les survols académiques, ont aidé à créer une image grandiose du passé de cette région. Cependant, les résultats de nouvelles recherches archéologiques entreprises le long du cours inférieur de l’Amazonie, de concert avec une utilisation plus poussée de l’ethnologie amazonienne, donne un modèle qui diverge du modèle dominant et remet en question la valeur explicative de cette dernière. Utilisant des projections ethno-historiques, des théories d’évolution sociale et une base de culture matérielle qui demeure incomplète, le modèle proposé par l’archéologue Anna Roosevelt a produit des reconstructions “essentialistes” du passé amazonien qui, entre autres problèmes, tend à donner trop d’émphase à la distance historique des populations autochtones contemporaines de l’Amazonie.
Le présent article offre une discussion critique des nouvelles données archéologiques de la région Santarém de l’Amazone inférieur, réanimant le débat sur l’émergence des chefferies de l’époque pré-coloniale tardive à partir d’une perspective élargie. L’analyse combine des éléments traditionnellement inclus par l’archéologie, tels la démographie, l’écologie, les schèmes d’établissement et l’organisation territoriale, avec des aspects intangibles liés à la socio-cosmologie, inférés à partir de l’analyse de l’iconographie sur les céramiques. En plus de révéler les insuffisances du cadre conceptuel utilisant une définition ethnocentrique des chefferies et du pouvoir politique en Amazonie, nous décrivons une image historique qui témoigne d’une plus grande diversité sociale qui se rapproche structurellement et symboliquement des formations sociales pré-coloniales et des sociétés autochtones contemporaines.

Resumo

A diversidade de formas sociais na Amazônia pré-colonial

As interpretações existentes sobre as chefias pré-coloniais da Amazônia têm contribuído para a construção de uma imagem grandiosa do passado amazônico, reafirmada em sínteses acadêmicas. Resultados de pesquisas desenvolvidas na região do Baixo Amazonas, além de um diálogo mais estreito estabelecido com a etnologia indígena, trazem elementos que se distanciam do principal modelo interpretativo vigente, questionando sua validade explicativa. Baseado em projeções etno-históricas, em teorias sócio-evolutivas e num conjunto de evidências materiais ainda incompleto, o modelo proposto pela arqueóloga Anna Roosevelt levou a reconstruções essencialistas, que terminam (entre outras consequências problemáticas) por sugerir uma excessiva distância histórica com relação às sociedades amazônicas contemporâneas.

Este artigo discute criticamente novas evidências arqueológicas da região de Santarém, no Baixo Amazonas, que permitem retomar o debate sobre a emergência das chefias pré-coloniais tardias, segundo uma perspectiva mais ampla do que aquela adotada pela maior parte dos arqueólogos. A reflexão proposta associa aos fatores tradicionalmente abordados pela arqueologia, tais como demografia, ecologia, padrões de assentamento e de organização territorial, aspectos considerados intangíveis, a exemplo da ideologia, inferida a partir da análise da iconografia cerâmica e de seus conteúdos sócio-cosmológicos. Além de indicar a insuficiência de um arcabouço conceitual que tende a definir a chefia e o poder político amazônico de modo etnocêntrico, o presente trabalho propõe um quadro de maior diversidade social e proximidade entre as formações sociais pré-coloniais tardias e as sociedades indígenas contemporâneas, em termos estruturais e simbólicos.
Introduction

The study of so-called complex societies represents one of the main vectors of the archaeological research currently being pursued in Amazonia. Although most of the researchers qualify various late pre-colonial Amazonian societies in this way, social complexity is a fairly imprecise and hence problematic notion. McGuire (1983) has already highlighted the simplistic nature of this concept, which includes a wide range of independent variables, yet fails to establish causal connections capable of explaining cultural evolution, resulting in an unproductive category. As a solution, the author proposes dividing the concept of complexity into two constitutive variables: inequality and heterogeneity. Inequality refers to differential access to economic resources, while heterogeneity describes the differences existing between social groups (McGuire 1983:93).

Earle (1997:208) argues that centralization is a critically important element in terms of understanding chiefdoms. But although political centralization plays a decisive role in the administration of agricultural resources in the examples analyzed by Earle, taken from the Andes, Polynesia and Northern Europe, archaeobotanical evidence undermines the idea of intensive agriculture in pre-colonial Amazonia (Gomes 2008; Neves 2006; Neves and Petersen 2006; Roosevelt 1991a). The Amerindian tradition suggests that social hierarchy reveals more about the nature of the political relations involved in chiefdoms found in Amazonian societies, such as those of the Upper Xingu and Northwestern Amazonia, although differences in people’s access to economic resources are not observed (Fausto et al. in press; Heckenberger 2005; Hugh-Jones 1979). In this sense, McGuire’s proposal (1983) affords greater conceptual precision, since the existence of a positive correlation between inequality and heterogeneity would imply a measurable phenomenon in terms of the concentration of economic and political power.

Following the establishment of a new paradigm for Amazonian cultural development by Roosevelt in the 1980s (1980, 1987, 1992), subsequent generations of archaeologists took up the challenge of understanding the nature of societies described as hierarchical and centralized: the chiefdoms. As well as serving as inspiration for the development of various research projects, this model has also acted as a framework for investigations designed to test its validity through a series of specific questions.

Roosevelt’s model has proven valuable in terms of revealing the existence of late pre-colonial societies with a high population density – some of them possibly diverging from today’s groups in relation to their forms of sociopolitical organization, as various sources of complementary information suggest. However, the model remains hypothetical and a number of reformulations are required to adapt it to various kinds of new evidence. Eleven years after the publication of a survey of the “images of nature and
society” in Amazonian ethnology and related disciplines (Viveiros de Castro 1996a/2002), this article resumes the debate, focusing specifically on archaeology’s production of an image that places heavy emphasis on Amazonian social complexity. It discusses the results of recent archaeological research conducted in the Santarém region of the lower Amazon with the express purpose of investigating these late pre-colonial chiefdoms, incorporating various considerations relating to the ideology of these societies. As I hope to show, the issues approached in the course of the article have implications in terms of understanding other Amazonian contexts.

Interpretations of cultural development

In the mid 1950s, the archaeologist Betty Meggers formulated a model that defines Amazonia as a recipient of exogenous cultural influences, as well as a region inconducive to cultural development owing to the limits imposed by the natural environment. The author identifies the low fertility of the soils as the key factor responsible for preventing the emergence of high population concentrations and stable settlements in Amazonia (Meggers 1954). An intellectual heir of Steward —editor of the Handbook of South American Indians, in the 1940s and 1950s— Meggers’s work combines neo-evolutionist influences and cultural ecology with the materialist focus of Leslie White. Employing this theoretical framework, the author describes the tropical forest societies as low density populations with subsistence economies based on hunting, fishing and the cultivation of tuber crops, an egalitarian social organization centered on kinship, chiefs with limited authority and a division of labor based on differences in sex and age.

Meggers interprets the material evidence of a social organization on Marajó Island of the same level of complexity as that encountered in the circum-Caribbean —large artificial constructions (mounds), differences in burial patterns and elaborate pottery ware— as the result of a migration from the Andes which, incapable of surviving in the new environment, lapsed into a pattern typical of the tropical forest (Meggers 1954:809). The influence of Steward’s ideas, shared by cultural ecologists and to a certain extent anthropologists, has helped crystallize an image of Amazonian people as simple, egalitarian societies, similar to those familiar to ethnography, an idea dubbed by Viveiros de Castro as the standard model (Viveiros de Castro 1996a/2002).

Later refinements to Meggers’s model highlighted other limiting factors on cultural development, such as the ecological restrictions identified in both the floodplain (várzea) and terra firme environments (Meggers 1987 [1971]). In the floodplain area, the unpredictability of the annual flood patterns was taken to lead to the loss of harvests, while in the terra firme areas, the unsuitability
of the soils for intensive cultivation, as well as the scarcity of wildlife resources, was held to induce a pattern of continually shifting settlements.

Donald Lathrap was the first to contest Meggers's interpretation, in the 1970s. For Lathrap, the tropical forest's development was not limited by environmental factors. On the contrary, he attributes a positive value to the tropical forest since it was there that important cultural processes related to the emergence of agriculture and the appearance of ceramics in the New World first developed. Making use of ethnographic analogies, Lathrap produced a speculative model that attributes a fundamental role to the evolution of house gardens through trial and experiment, which, he argues, led to the intensification of the manioc cultivation system in the floodplain areas between 4000 and 5000 B.C. This process enabled populations to increase in density in the floodplain areas, which in turn allowed the emergence of political centralization (Lathrap 1977).

Lathrap proposes Central Amazonia as the origin of pottery production, with datings estimated around 4000 BC (whose sites were yet to be discovered in the 1970s), and as the source of complexes with Barrancoid traces, associated with the ancestral populations of contemporary speakers of Arawak languages, who spread to other areas of the north of South America (Brochado and Lathrap 2000 [1982]; Lathrap 1970, 1972). Curiously, this prediction in some ways became a reality almost two decades later, not in Central Amazonia, but on the lower Amazon with the discoveries made by Roosevelt in the Taperinha shell mounds whose ceramics, dated to around 7000 years ago, were considered by the author as the oldest in the Americas (Roosevelt 1995; Roosevelt et al. 1991), although both the early datings and the acceptance of this independent center of pottery production are treated with caution or even contested by other specialists (Meggers 1997).

Nonetheless, the debate on the emergence of hierarchical and politically centralized societies only gained prominence in the 1980s with the work undertaken by Anna Roosevelt herself, which would go on to influence an entire generation of archaeologists. In Parmana, in Venezuela, Roosevelt (1980), although admitting that Meggers could be right about the low fertility potential of Amazonian soils, argues that a subsistence strategy based on the introduction of the intensive cultivation of maize meant a diet richer in proteins, enabling a large population growth in the region situated in the floodplains of the Orinoco. These conditions favored the emergence of a complex chieftain-based social organization of the chieftain type.

The intensive cultivation of maize and manioc, combined with hunting and fishing, was identified as the subsistence strategy underlying the local development of other late pre-colonial societies in the more fertile (floodplain) areas of Amazonia such as Marajó and Santarém. According to Roosevelt, these kind of societies involved a hierarchized organization of chiefs and settlement sizes, distributed over large territories, a situation comparable to
the Minoan and Mycenaean civilizations, or to the state formations in the Indus Valley and Africa. Extensive, densely inhabited sites with a multifunctional internal structure were interpreted as true urban centers – that is, cities. Comparing the area of the sites and their populations, she argued that several of these settlements had been occupied by tens of thousands of people (Roosevelt 1992:82).

At the end of the 1980s, Roosevelt initiated a long-term project in the Santarém region aimed at establishing the area’s sequence of cultural development. Evidence of occupation by Paleoindian hunter-gatherers was obtained from the excavations of the Pedra Pintada Cave in Monte Alegre, with dates as early as 12000 years ago (Roosevelt et al. 1996). In Taperinha, a freshwater shell mound and groups that subsisted on fish and shellfish were linked to the fabrication of pottery dated to the Archaic period around 7000 years old (Roosevelt 1995; Roosevelt et al. 1991). The Formative occupation was not documented by Roosevelt, who only reports datings of around 4000 years ago, deriving from occupational levels of the Pedra Pintada Cave (Roosevelt 1995, 1999b). Finally, although some archaeological data has been produced for the late pre-colonial period relating to the emergence of complex chiefdoms, this scenario remains largely hypothetical, derived in large part from ethnohistorical projections that involve the author’s literal and uncritical use of historical documentation.

A combination of information derived from these ethnohistorical accounts, as well as preliminary archaeological surveys from the 1920s and studies of museum collections, were used as the basis for a reconstruction that indicated the existence of a large village in Santarém, considered the capital of the biggest and most powerful Amazonian chiefdom, ruled by expansionist warrior chiefs from the Tapajó nation, which she argues developed from 1000 A.D. onwards (Roosevelt 1999b:336). According to the author, these chiefs dominated other communities, distributed across a vast area of around 20000 km², as well as establishing trade contacts with distant places in order to obtain prestigious goods. Seeking to incorporate new theoretical influences, Roosevelt later introduced the concept of heterarchy into her studies of the region, allowing her to describe Santarém as a complex and war-based chiefdom with moderate centralization and a political elite that received tribute from a common population engaged in the intensive production of foods, but also enjoying access to elaborate pottery and community ceremonies (Roosevelt 1999a:27).

At an ideological level, the historical references to preserved bodies and idols kept in special structures were taken to indicate the worship of divinized ancestors. Roosevelt states that the pottery iconography centered on the representation of war-like animals, given the predominance of jaguars, caimans and birds of prey (Roosevelt 1996:29, 1999b:13). The human figure was taken to be the central representation of an art form devoted to
reaffirming political hierarchies and genealogies. Although rarer than female images, the male representations found in Santarém pottery depict chiefs and shamans with their typical paraphernalia such as stools and rattles. Finally, Roosevelt blames the complete disintegration of these Amazonian societies in the 16th and 17th centuries on the deleterious consequences of European conquest. (Roosevelt 1987, 1992, 1993, 1996, 1999a).

Twenty years after the elaboration of this sophisticated historical model, which raises late pre-colonial Amazonian social formations to the condition of complex societies, we can note the considerable impact of these ideas in the academic world and their repercussion in the media, as well as the different forms in which the categories employed by Roosevelt have been appropriated by archaeologists working in Amazonia. While some researchers have made creative use of the general model and the chiefdom concept, looking to explain empirically observed phenomena, others display an uncritical dependence on Roosevelt’s formulations, thereby perpetuating a lack of understanding concerning the nature of chiefdoms and political power in Amazonia.

Eduardo Neves exemplifies the former case. He takes hierarchy and political centralization to be the constitutive traits of the late pre-colonial chiefdoms of Central Amazonia and other areas of the lower Amazon, whose existence he infers not only from ethnohistorical reports, but also a wealth of material evidence, such as extensive and deep sites with elaborate pottery and funerary mounds, containing deposits of anthropogenic dark earths, identified as indications of permanent occupation by dense indigenous populations. At the same time, though, other evidence gathered by the author challenges the temporal validity of Roosevelt’s interpretive model.

Basing his research on the collection of paleobotanical remains and interdisciplinary studies into the genesis of anthropogenic dark earth, Neves concludes that the lifestyle of late pre-colonial societies is part of a longstanding tradition of landscape management in Amazonia, involving a subsistence strategy that combined hunting, fishing, fruit gathering and manioc cultivation, rather than a fully agricultural economy – a pattern much less intensive than that proposed by Roosevelt. For Neves, this economy centered on the domestic group conferred the peoples in question a crucial degree of autonomy: this in turn was the factor responsible for the long-term political instability of Amazonian chiefdoms, an instability verified in the archaeological record through successive episodes of occupying and abandoning large settlements (Neves 2006:77; Neves and Petersen 2006:302).

This type of explanation, based on independent archaeological evidence, has proven to be of considerable value in terms of constructing interpretative models capable of identifying the cultural specificity of Amazonian societies. In spite of the variability in social morphologies, we can distinguish patterns
that demonstrate a high degree of historical continuity with present-day indigenous and caboclo societies. This trend marks a shift in the debate on Amazonia's cultural development from a clash between two essentially antagonistic positions—namely, the emphasis on environmental limits versus the emphasis on ethnohistorical projections—to a line of research that aims to understand these late pre-colonial societies in accordance with their own material and symbolic parameters, rejecting their arbitrary adaptation to socioevolutionist typologies.

One of the ways of attaining this aim involves establishing a more intense dialogue between archaeology and indigenous ethnology. Since Amazonia today contains the highest number of indigenous groups and traditional populations in Brazil, the archaeological research conducted in the region generally aims to construct an indigenous history (Neves 1999). Consequently, ethnographic analogy is of considerable importance in terms of our comprehension of Amazonian archaeological contexts. Moreover, the use proposed in the present article reflects an hermeneutic tendency in archaeology, which seeks to elucidate the technoeconomic and ideological aspects of objects through the construction of contextual archaeological interpretations capable of being compared with specific ethnographic models (Hodder 2002). This approach—by exploring aspects such as the continuity of the meanings embedded in artifacts and the cosmological vision linked to particular symbols, independent of the existence of direct historical relations, as Dillehay's work among the Mapuche of Chile has shown (1990, 1998)—enables these aspects to be conjoined with the processes of cultural transformation experienced by present-day populations. This in turn allows patterns to be identified that, even where transformed, represent an enduring symbolic capital in contemporary Amazonia. The discussion of the evidence presented below shares this approach.

The definition of a regional system

The archaeological surveys conducted by Curt Nimuendajú in the Santarém region of the lower Amazon between 1923 and 1926 enabled the localization of 65 anthropogenic dark earth sites, most of them containing pottery attributed to the Tapajó. These sites were situated close to Santarém on both shores of the Amazon river, and on the right-hand shore of the Tapajós river as far as Aramanai (50 km to the south of Santarém). There are no records of any sites identified on the left shore of the main river, although the limit of the Tapajó occupation had been projected as far as Boim (120 km to the south of Santarém). The information available allows us to conclude that the area of influence of the Santarém culture extended over an area of approximately 20,000 km², as originally proposed by Roosevelt.
However, alongside the distribution of the sites containing Santarém pottery, the cultural diversity of this region can be inferred from the stylistic traits of other pottery industries, identified at the Lago Grande de Vila Franca, on the Arapiuns river and at Monte Alegre. Analyzing the catalogue recently published by the Gothenburg Museum, containing a series of documents, maps and pottery illustrations collected by Curt Nimuendajú, we can identify archaeological complexes that display strong affinities with the Valloid series of Venezuela, dated between 1000-1500 A.D., and occupations containing pottery with Barrancoid elements in the Lago Grande area, as well as industries associated with the Incised Rim tradition of Amazonia (Nimuendaju 2004).

Other surveys were carried out by Celso Perota on the middle and upper Tapajós in 1979 and 1982 while PRONAPABA (the National Amazon Basin Archaeological Research Program) was running. Just two sites, each containing rare fragments of Santarém pottery, were located on the middle Tapajós. Perota associates these sites with ceramic phases belonging to the Incised and Punctate tradition, while the occurrence of isolated Santarém pottery sherds were explained as the result of trading (Perota 1982). This evidence makes it clear that the Tapajó presence was indeed concentrated on the lower course of the Tapajós river, allowing us to map the regional limits of this culture.

According to most scholars, a fundamental condition for a chiefdom is the existence of a regional system, or a supralocal network constituted by satellite communities governed by a central power (Carneiro 1970; Earle 1997). In archaeological terms, one of the ways of testing this model would be to discover remains of ancient villages in the region of the lower Amazon, around Santarém and along the Tapajós river that demonstrate a political and ideological dependency on the center of this chiefdom. This was the hypothesis that guided my doctoral research project on the left bank of the lower Tapajós, 100 km to the south of Santarém, conducted at a location corresponding to the present-day community of Parauá (Gomes 2005). The objective of this study was to test the limits and the ideological and political influence of the Santarém chiefdom in a peripheral area, using data on settlement patterns and the internal organization of the sites, as well as the comprehension of the daily subsistence practices.

An archaeological survey was conducted across a 36 km² area, combining systematic strategies, including the opening of 30 km transects through dense vegetation. A typology of ten surveyed sites enabled the presence of the local community to be inferred along with the different activities pursued by the population. Habitation sites with sizes varying between 9 and 11 ha were detected on the shores of the Tapajós river. Fishing camps were also found near to the smaller creeks. Cultivated areas were identified on the basis of alterations observed in the brown-colored
anthropogenic soils. In addition, various habitation sites were concentrated in the terra firme area, located on the plateau surrounding the Lago do Jacaré site more than 5 km from the shore of the Tapajós. The largest of these sites has an area of 39 ha, while the sizes of the others range from 3 to 10.5 ha, providing evidence of distinct occupation patterns.

The pottery remains encountered at these sites suggest the relative isolation of the communities of this area from the late pre-colonial Santarém chiefdoms, since few archaeological artifacts belonging to this culture were found. The local pottery, characterized by a basically utilitarian industry with decorative elements composed of vertical and transversal incisions, is related to the Amazonian Incised Rim tradition (Meggers and Evans 1961), while the later ceramics belonging to the Incised Punctated tradition possess stylistic affinities with the Upper Xingu (Ipavu phase) and Central Brazil (Uru tradition) industries (Heckenberger 1996; Wüst 1990). The chronology indicates continuous, long-term occupation with initial dates of around 2000 B.C. These dates register the development in the Santarém region of one of the oldest Amazonian Formative ceramic complexes, as well as more intense occupations from 700 A.D. onwards, which fade out between 1100 and 1200 A.D.

Three sites with distinct characteristics were chosen to conduct spatial analyses aimed at understanding the processes contributing to their morphology. The size, the form of intervention in the landscape and the probable function of the site were determinant factors in the choice of the Lago do Jacaré, Zenóbio and Terra Preta sites. My interpretations of the intrasite organizational patterns were based on the excavation contexts, the study of the processes leading to the formation of both the archaeological record and the dark earths, and partially on ethnographic analogy.

To summarize these results, the form of the Lago do Jacaré site corresponds to a circular village, with more intense refuse deposits found on the outer edge of the settlement, as well as several extensive concentrations in peripheral areas. Set on a hilltop with gullied slopes, the Zenóbio site possibly owes its circular form to this local topology. The site is characterized by the absence of structured refuse deposits, presenting a diffuse lens of pottery sherds. Patches of anthropogenic dark earth dispersed within broad sectors of brown earth were taken to indicate an isolated house or temporary encampments, with use of the same area for cultivation activities. Finally, the Terra Preta site reveals a linear village located along the river shore with clear refuse deposit patterns on the sides of the settlement. The carbon datings obtained for the three sites indicated that the community was formed by autonomous villages, since the sites were not contemporary to each other.

The excavations at the Lago do Jacaré and Zenóbio sites indicate sparse occupations unassociated with dark earth, dated by 2000 B.C., suggesting a
Formative record by semi-sedentary populations. On the other hand, the later occupations dated between 700 and 1100 A.D. are situated on anthropogenic dark earths and show greater intensity. The dates obtained in different areas of the Lago do Jacaré and Terra Preta sites, as well as the overlapping of cultural layers at the Lago do Jacaré site, reveal a succession of episodes that imply reoccupation of the same sites over time.

The processes involved ranged from the reconstruction of oval-shaped houses, measuring 7.0 m × 3.5 m, to the repeated return to the abandoned village. The motives for abandoning the village may have been related to the deterioration of the houses, worsening sanitary conditions, political tensions and/or fall in the local game population. During the late period, the occupations intensified and one of the motives postulated for the return to the ancient villages is the fertility of the anthropogenic dark earths, formed by the depositing of organic waste left by the ancient inhabitants, which over time become an additional ecological resource for new residents.

The patterns of pottery use constitute a third community marker, capable of furnishing information on the daily subsistence practices and collective rituals. The latter were identified from small vessels with mammiform appendages (in the shape of female breasts) and large vessels used to ferment manioc drinks (50 to 80 liters). The hypothetical reconstruction of pottery forms and the use of formal and technological criteria based on ethnographic examples (Rice 1987; Sinopoli 1999) allowed the use of the vessels to be conjectured, indicating subsistence daily practices related to serving, storing, cooking and transporting activities.

Analyses of phytoliths and food residues confirmed the multifunctional use of particular vessels associated with late contexts, dated by 900 and 1100 A.D. At the Lago do Jacaré site, a griddle was found to have been used to process cultivated species such as manioc (Manihot esculenta) and maize (Zea mays), but also palm fruits gathered in the wild, such as peach-palm (Bactris sp.) and moriche palm (Mauritia flexuosa), also recovered during excavation work in the form of carbonized seeds. At the Terra Preta site, a concretion was found at the bottom of a large vessel reused as a funerary urn, indicating the presence of manioc starch, a substance associated with the preparation of fermented drinks.

Overall, the faunal and archaeobotanical remains indicate that the subsistence patterns of these peripheral groups, situated in an area of riverine terra firme, were based on hunting small animals, fishing, horticulture and gathering, since the palm fruits attest to the importance of wild foods for late pre-colonial populations as a complement to the cultivation of species such as manioc and maize. This reveals a lifestyle centered on a mixed, productive but non-intensive economy, as also observed in Central Amazonia (Gomes 2008).
While the levels correlated with the oldest dates of around 2000 B.C. reveal small spherical vessels (1 to 4 liters), probably used in cooking activities or to carry liquids, made by semi-sedentary groups, the later levels show a greater variability of ceramic artifacts. Additionally, we can observe an emphasis on artifacts for individual use (small bowls with a 0.8 liter capacity), along with others with greater attention paid to the surface finish and iconographic design (vessels with mammiform appendages). The latter may have been used as artifacts for consuming drinks during collective female initiation ceremonies, which themselves form part of more general processes of constructing the body and the person (Seeger et al. 1979; Vilaça 2005) commonly found among Amazonian societies, as corroborated by some archaeological evidence and ethnohistorical accounts (Marcoy 2001; Morales Chocano 2002; Roe 1982; Spix and Martius 1976).

This set of data indicates that various forms of social organization and interaction with different indigenous groups developed in the lower Amazon region. The argument is based on the local patterns of community organization and the ceramic indicators of regional interactions with other floodplain communities; it also includes the analysis of Parauá pottery, whose later datings, contemporaneous with the initial phase of the Santarém chiefdoms, suggest not only the long-term temporal continuity of the Incised Rim complex, which evolved in a style related to the Incised Punctate Tradition, but also a large degree of autonomy in relation to any hypothetical hegemonic center. Pottery was not produced solely for subsistence-related tasks; it was also capable of forging a community identity through stylistic markers.

Prominent elements during the late pre-colonial period include the mammiform vessels used in public female initiation ceremonies, whose symbolism was designed to communicate social roles and group affiliations. I interpret these markers as the expression of a community identity, which at regional level was as a symbol of resistance to the emergent political center. After 1000 A.D., when the chiefdoms began to strengthen their position in Santarém (Roosevelt 1999b:336), political pressures may have forced peripheral and independent communities to relocate along the Tapajós river, as indicated by the local chronological sequence which is interrupted between 1010 A.D. and 1200 A.D.

This panorama differs from previous reconstructions that posit the existence of politically centralized and hegemonic societies during Amazonia's late pre-colonial period. Instead, the accumulated evidence indicates the regional coexistence of sociopolitical formations of different scales, which did not necessarily lead to the domination of peripheral groups by the emerging chiefdoms. Furthermore, this analysis takes into account not only the ecological characteristics of an area of riverine terra firme on the lower Tapajós, but also the interactions between these sites and other
communities from the floodplain area, demonstrating the possibility for a certain degree of self-determination among the groups situated at the edges of the late pre-colonial chiefdoms. Consequently, this body of evidence converges towards the construction of a historical scenario that diverges from the idea of a supralocal political system based on some degree of coercion, as well as suggesting a more dynamic and less essentialist regional interaction between floodplain and terra firme societies during late pre-colonial periods. Finally, these same results delimit the Tapajó influence to a much smaller area than the one proposed earlier, based on information collated by Nimuendajú.

The perspectivist ideology of the tropical forest

Studies on how hierarchical and centralized societies developed have tended to ignore the informative potential of cosmologies in terms of comprehending the kinds of relations existing between the elites and the community. According to Helms (1998), hierarchy is generally confused with power and submission. The latter author suggests that one of the keys to understanding how the chiefdoms operated lies in the origins of aristocratic groups. In kinship-based societies (centralized or otherwise), inequality is institutionalized through the recognition of the alterity of the aristocrats, who are structurally positioned as affines vis-à-vis the rest of society. The political and ideological legitimacy of this elite group is guaranteed by its association with the society's cosmological origins, meaning that the aristocrats are conceived as another category of superior beings, living ancestors, who are naturally suited to occupying a leadership position and coordinating social tasks.

Helms argues that the qualitative hierarchy stratifying society is based on the premise that hierarchy and inequality are inherent to the structure of the cosmos. This cosmological differentiation is expressed in the supernatural qualities contained in the various skies, on earth and in the underworld, and consequently in the beings associated with these universes. Hence, the cosmological system provides the foundations for the schema of social differentiation since the aristocrats are identified with the upper layers of the cosmos. The author sustains that hierarchy and inequality were not new cultural creations that emerged with the chiefdoms. Rather, as part of the changes leading to the emergence of chiefdoms, these principles assumed a public expression through the cosmologies (Helms 1998:178).

Although Helms’ observations are clearly inspired by the sociocosmological forms of Polynesian chiefdoms, they provide insights that can be usefully applied to the study of the cosmologies of pre-colonial Amazonian societies, as inferred from an examination of ceramic iconography. As mentioned earlier, Roosevelt (1996:29) interprets the
representations found in Santarém ceramics of ferocious animals—such as the jaguar, caiman, snakes and birds of prey—as metaphors for the warlike and expansionist nature of the Tapajó, a proposal that demands a more detailed analysis.

However, I believe that the active context involved in the social production of ceremonial objects (Gell 1998), including the symbolic investment made by their producers, can be more effectively recovered through ethnographic analogy. Although profound historical discontinuities have been posited between pre-colonial and contemporary indigenous societies, a claim which in principle would weaken any use of ethnographic analogy, a more detailed examination of the Santarém iconography indicates the predominance of themes related to the structure of the cosmos, and the symbolic relationships with animals and mythological narratives rooted in shamanism. These representations reveal the continuance of the same ideology, still found in today’s indigenous societies. My interpretative model therefore associates the aesthetic system of Santarém art with shamanism.

Ceremonial artifacts designed to store drinks and serve liquids and solid foods may have been produced by artisans under the guidance of shamans, following a stylistic standardization with little freedom for individual variations. This set of objects comprises a highly representational artistic system, sometimes narrational in style, whose symbolic content is associated with the cosmopolitical sphere. Their meaning was recovered by taking into account ethnographic knowledge on the specificity of Amerindian ontological regimes, which refuse any division between nature and culture, or any radical distinction between humans and animals (Descola 1986; Viveiros de Castro 1996b/2002).

Drawing from numerous references contained in Amazonian ethnography, especially his own research on the Araweté (Viveiros de Castro 1986) and Lima’s work on the Yudjá (1995/2006), Viveiros de Castro identifies the existence of a common cosmological substrate to contemporary Amazonian societies, which attributes fundamental importance to hunting and the symbolic relations with animals, and locates shamanism as the core institution (Viveiros de Castro 1996b/2002:342-344). This substrate is characterized by a transformational conception of the way in which humans, animals (prey and predators), the spirits of the dead, the masters of animals gods and other subjectivities see themselves and are seen by other kinds of beings. While humans see themselves as humans, predatory animals see humans as animal prey. For their part, game animals see humans as predatory animals, or as anthropophagic spirits.

According to this theory, denominated perspectivism, the world is inhabited by different human and non-human beings, which not only assume distinct points of view, but can also occupy a position of subjects in relation to humans and metamorphosize into each other. The body or characteristic
body shape of each species comprises a kind of disposable clothing, which enables shamans, under controlled conditions, to turn into the form of particular animals, as well as permitting certain animals to assume the appearance of other animals and common (non-shamanic) humans to be transformed into animals in situations that almost always lead to death. The capacity for agency possessed by other non-human subjects —animals, pathogenic spirits, and so on— is, therefore, dangerous, since it allows room for the predation of humans. The shaman, a specialist in the relations between human and non-human beings and a master in the art of metamorphosis and journeying to other cosmological planes, is responsible among other tasks for negotiating with the different subjectivities and rescuing the human souls captured by them.

Perspectivism not only displays a predatory ontology, it introduces ideas that are fundamental in terms of comprehending the political relations between humans, indissociable from a cosmological organization that involves the interaction of humans with nature and non-human subjectivities with whom it is necessary to negotiate (Sztutman 2005; Viveiros de Castro 1996b/2002). Hence, the figurative representations of the Santarém pottery enable us to postulate and explore connections with the cosmological ideas and social institutions typical of present-day Amazonian societies. Applying these ethnological insights brings to life the dual figures previously described by Barata (1950), along with the humans that metamorphosize into king vultures, prey (such as agoutis and monkeys), the large animal predators associated with shamans (jaguars, harpy eagles and snakes), and mythic beings like the two-headed vulture and the hybrid human-animal creatures that populate the Santarém iconography, while the figures of seated men indicate the importance of shamanism (Gomes 2001, 2002, 2006a).

In contrast to Marajoara pottery—which primarily features decorative fields filled with complex geometric patterns and organized according to various types of symmetry, whose formal analysis reveals the transformation of realist motifs into geometric motifs— Santarém art concentrates on naturalistic and three-dimensional zoomorphic, anthropomorphic and dual representations (Gomes 2001, 2002). The globular vessels with geometric polychrome designs, produced to contain or serve drinks, feature three-dimensional modeled appendages that reproduce the main predator: the jaguar. Sometimes this figure holds a child in its paws, and in certain examples an anthropomorphic face is found on the vessel’s neck, evoking shamanic metamorphosis (Palmatary 1960: plate 168). The shaman’s ambivalent nature, as someone who both cures his compatriots and kills his enemies, is manifested through his aggressive power and his association with the jaguar. In other globular vessels with red zoned painting, the appendages symbolize prey, such as the agouti and monkey, the latter animal often displaying an anthropomorphized face. The dual figures, whose
facial expression varies according to the viewing angle, are also present on these vessels. This universe in transformation, related to hunting and shamanism, is completed with the hybrid figures, half-human, half-animal, in a lying-down position.

Artifacts used to serve solid foods, such as plates and pedestal vessels, decorated with applied elements in relief and modeled zoomorphic appendages, feature other animals such as bats, snakes and caimans. But as well as a set of ceremonial objects containing symbols of a predatory ontology, the structural analysis of particular ceramic forms and their constitutive elements demonstrates the narrational character of Santarém iconography, which finds echoes both in Amazonian mythocosmologies in general, as well as specific myths.

The examination of one of the most elaborate forms from the repertoire of Santarém vessels—the caryatid vessel—reveals the conception of a layered universe, organized along a vertical axis (Figure 1). This structure is typical of the cosmologies of Amazonian groups, such as the Araweté, Tenetehara, Tukano, Wayãpi and Shipibo-Conibo, as well as other South American cultures, for example the Kogi of the Serra Nevada de Santa Marta, in Colombia, though the actual number of layers attributed to the cosmos may vary (Cabrera et al. 1999:97; Reichel-Dolmatoff 1990; Roe 1982; Viveiros de Castro 1986:602). In the caryatid vessel we can see the simplified division into three cosmic strata postulated in various cosmologies, especially in those where shamanism is more highly developed, given that shamans comprise the true custodians of cosmological knowledge, as well as the main explorers of cosmic zones (Chaumeil 1998: 167[1983]).

The base of the caryatids vessel, hyperboloid in shape, symbolizes the subterranean world. The three female figures holding up the vessel represent the ban on women watching the male ceremonies, since they are depicted with their hands covering their eyes or mouth (Nimuendaju 1949). However, they also indicate the world of humans. Above them is a vessel in the form of a half-sphere, surrounded by king vultures with open and closed wings, bats or in some cases two-headed vultures. The convex base of this vessel represents the celestial dome, while the king vultures suggest an analogy with divinities of the "lord of the vultures" type, whose function in some Amazonian cultures is to receive the souls of the dead. In addition, the shamanic capacity for metamorphosis is evinced by the dual character of the king vulture, depicted either in naturalistic form, with open wings, or in a hybrid of human and bird, with closed wings.

Another example of ceramic vessel, whose structural form and combination of elements enables an explicit association with particular mythological narratives and shamanism, is the necked vessel—an artifact with a small volumetric capacity used as a container for liquids (Figure 2). Its main constituent elements are the neck, featuring an anthropomorphic face,
Figura 1. Caryatid vessel representing the cosmos' structure. Museu Nacional, UFRJ. Photo by Maurício de Paiva.

the body of the artifact where different zoomorphic appendages are located, and the base. This type of vessel depicts various animals (king vultures, a variety of smaller birds, wild dogs and so on) and hybrid beings, superimposed on the heads of caimans, which are stretched out into two lateral appendages, placed on the vessel's body. These appendages take the form of two opposed arches, while two other appendages of frogs completing the symmetric radial distribution. Seen from the front, looking at the anthropomorphic face represented on the artifact's neck, the latter (frogs) are positioned along a north-south axis, while the former (caimans) are positioned along an east-west axis.

The rainbow myths analyzed by Lévi-Strauss in the *Mythologiques*, especially those highlighting their dual aspect, typically describe the emergence of the numerous animal species. The Arekuna myth, describing the origin of fish poison, contains an episode that attributes the anatomical discontinuity of living species to the fragmentation of the rainbow. In addition, the Tukuna, who distinguish between the eastern and western rainbows, relate these phenomena to the owners of fish (the caiman) (Levi-Strauss 2004:285-286; 301-302; 321 [1964]). These cosmological ideas in mind, I propose interpreting the iconography of the necked vessels as a mythological narrative on the emergence of a zoological order, stressing the importance of hunting in the life of these societies. Finally, the anthropogenic face on the vessel can be taken to evoke the shaman himself.

Consequently, the symbolism of the necked vessels connects hunting with shamanism. According to Chaumeil (1998:249-250 [1983]), the valorization of a hunt ideology is found in all societies where shamanism is present as a social institution, even those where hunting is no longer a central productive activity. This symbolic association is confirmed in various ways, whether by the shaman’s capacity to metamorphosize into predatory animals, who, in the same way as hunters, encircle their victims during shamanic practices, or by the exchange relations established between the shaman, the hunter and the spirit masters of animal game.

But as well as documenting the historical continuity of a pan-Amazonian cosmological substrate, still present among today’s indigenous societies, the Santarém pottery iconography does not in principle appear to provide unequivocal evidence of the emergence of hierarchical and politically centralized chiefdoms. As a number of ethnographies indicate, this ontology seems to be widely distributed in geographical space and historical time, capable of being traced back to the hunting groups of Asia, passing through Siberia and Canada – reaching back, therefore, to a way of life prior to sedentary horticultural societies, which would associate the genesis of perspectivism with the shamanism of the ancient hunter-gatherers of the Paleolithic (Bird-David 1999; Ingold 2000; Viveiros de Castro 1996b/2002; Willerslev 2004).
On the other hand, comparison of the symbols of Santarém pottery with the ceramic and goldwork iconography of the chiefdoms that flourished in Colombia between 500 and 1500 A.D., such as the Tairona, San Agustín, Tierradentro, Tumaco la Tolita, Muisca and Sinú cultures, indicates that in spite of differences in styles and material substrates, the same universe associated with ontological predation can be found among Andean chiefdoms, which attained a high level of material development, some of them displaying examples of urbanism and monumental architectural works. The sacred gold objects used by chiefs and shamans as symbols of visibility and prestige (pectorals, nose rings, masks, diadems, pendants, scepters, votive statues, artifacts used to consume hallucinogens, and so on) are filled with images of large predatory animals and various other kinds of fauna, such as mammals, fish, reptiles and crustaceans, related to the various cosmological strata. However, the most striking figures are men seated with their auxiliary animals and symbols of shamanic activity, as well as transfigured beings —the shamans in full metamorphosis, appearing as jaguar-men, bird-men and bat-men (Bouchard 2000; Camacho 2000; Legast 2000; Lleras 2000; Reichel 2000). Along with other aspects, this pattern confirms the materialization of an ideology present among various tropical forest Amerindian societies and the symbolic persistence of hunting even in those groups where the activity itself assumes less importance.

The basic difference between the Santarém iconography and that of the Colombian chiefdoms resides in the clear representations of ancestors (conserved bodies), as well as the gold body accessories and ornaments, used as a funerary apparatus for great chiefs. A number of these chiefdoms reveal the practice of conserving the dried bodies of chiefs and men from the upper social class, which were displayed inside houses, caves and temples (Camacho 2000:53; Reichel-Dolmatoff 1990:31). The ethnohistorical chronicles relating to the Tapajó also mention rituals in worship of these dried ancestors, kept in special structures far from the villages, as well as consumption of the ashes of the bones of these same people, mixed with drink and ingested during ceremonies, as detailed in religious accounts in the 17th and 18th centuries (Betendorf 1910; Daniel 1976).

Alongside rare realist reproductions of chiefs seated on stools and wearing body adornments (Gomes 2001), we also find artifacts that depict shamans as men sat holding rattles in a more stylized manner. However, some of these necked artifacts were used as vessels to store drinks, while others feature an oval hole at the back, suggesting their use as an urn to store long bones (Gomes 2002:128, 278-279). These urns indicate the existence of ancestor cults, in this case related to the importance of shamans in this society. According to Métraux (1949:597), the ancient Guarani worshipped the bones of renowned shamans, which were kept in hidden locations, covered by a bird-feather cape, where they received offerings.
Santarém art therefore combines two main classes of inter-related representations, which seem to have been expressly used in public ceremonies. The first class comprises the innumerable objects with images linked to a cosmological substrate associated with perspectivism. These include the globular vessels with red or polychrome painting with large predators such as jaguars, dual figures or human-animal hybrids. The caryatid and necked vessels also belong to this first class of artifacts, although they combine various symbols in an ordered way that allows us to identify the structure and content of the cosmos, as well as specific mythological narratives. The contextual information obtained in recent excavations at the Aldeia site in Santarém, from bell shaped disposal structures containing only ceremonial ceramics, indicates that the globular vessels depicting jaguars, along with the caryatid and necked vessels, had the complementary functions of storing and serving drinks and were used during the same rituals (Gomes 2006b:8).

The second class of representations includes rare male images that emphasize the social roles of chiefs and shamans (Figure 3). Some of these

![Figura 3. The representation of a shaman. Museu Nacional, UFRJ. Photo by Mauricio de Paiva.](image-url)
artifacts are statuettes depicting figures sat on stools, symbolizing wisdom, stability and connection to the axis mundi. Other objects represent shamans in a stylized form, such as those employed to store bones. The other artifacts—such as vessels for storing drinks, bottles with a small volumetric capacity, drinking vessels, plates and bowls to serve solid foods—include elements that reaffirm the shamanic iconography, not only through the anthropomorphic or zoomorphic figures, which symbolize the relationship with hunting and the masters of animals, but also the predatory animals (jaguar, harpy eagle, king vulture) with which the shaman associates his capacity for metamorphosis and translocation, enabling his access to the sky, the world of the dead and the other layers of the cosmos. The jaguar, present in artifacts with polychrome painting where the animal’s skin is symbolized by elaborate geometric patterns, is primarily a symbol of altered states of consciousness, a fact which can be inferred indirectly from ethnographic accounts that mention the visualization of the jaguar’s spots during trances induced by the consumption of hallucinogens (Reichel-Dolmatoff 1975, 1990).

Although shamanism as an institution displays a high degree of formal variability, in general the shaman’s practice is related to curing illnesses, life-cycle rituals, human fertility, attacks on enemies, warfare expeditions and hunting. The shaman’s otherness is developed through a process of intense transformation of self, including severe food restrictions, sexual abstinence, sleep deprivation, social isolation, meditative states, and the ingestion of hallucinogenic substances or tobacco that induces a trance state and his transformation into a jaguar. His esoteric knowledge derives in large part from the experience of visiting the different levels of the cosmos and thus acquiring the capacity to negotiate on the behalf of humans with the variety of beings inhabiting these domains. On the other hand, shamanic attacks constitute the basis of invisible wars. This ambivalent role is the source of the shaman’s political power (Chaumeil 1998 [1983]).

Earle (1997) discusses the role of ideology as a source of political power in chiefdoms. Abstract ideas, values, beliefs, myths and cosmic principles related to humans, animals and supernatural beings are physically materialized through ceremonies and symbolic objects. The author argues that this intentional materialization of symbols is typical of chiefdoms, which confer elites with the social control of a particular set of ideas. During public ceremonies, the use of ritual objects enables the reinforcement of the principles of cosmological order and the reiteration of values contained in the mythological narratives, instigating concrete experiences among the participants and the cohesion of the group. In societies where archeological evidence points to the development of a priest-temple complex, such as among the Tairona, Oyuella-Caycedo (2005:143-144) qualifies the work of
sacerdotal elites as religious routinization, a process which does not imply the disappearance of shamanic practices.

The representational system of Santarém art can be understood in a context where objects were intentionally used by shamans to mediate political relations and cosmological connections during public ceremonies. In this sense, the iconographic interpretation proposed in this article refutes Hornborg’s argument (2005:592-594) that a predatory ideology was incompatible with the emergence of stratified societies in Amazonia and with a strategy of social integration. As we have seen above, the analysis of Santarém iconography reveals the existence of artifacts with clear predatory symbols that express ideas fundamental to the entire society and that were employed for the same integrating purpose. On the other hand, the rare realistic statuettes of seated chiefs and the funerary urns representing shamans can be seen as indices of hierarchical social relations, in the same way as ancestral bodies are represented in the iconography of Colombian chiefdoms. These figures point both to the importance of ancestor worship and the materialization of the individual status of chiefs.

Demography and settlement patterns

Denevan (1996) presented a model of riverine occupation in late pre-colonial Amazonia, on the basis of ethnohistorical sources, archeological information and agricultural evidence, which highlighted the role of bluffs as a principal of local settlements. The floodplain/terra firme dichotomy is abandoned in favor of a model that proposes the existence of integrated resource exploitation strategies involving both areas. Furthermore, Denevan rejects his own earlier population estimates, especially for the floodplain areas, taking into account new evidence that the populations were concentrated in large villages in the floodplain area rather than being dispersed. However, the author points out the absence of quantitative data on these villages and their sizes, making it impossible to reach any overall estimate of the pre-colonial floodplain population.

Denevan (1996) contrasts a number of ethnohistorical references from the 16th and 17th centuries that suggest the concentration of dense populations situated along the main Amazonian rivers, showing that these villages were indeed populous, but did not attain the numbers reported by some chroniclers. One example is the report by Captain Altamirano from the Aguirre expedition in the 16th century, who mentions Omagua villages on the Napo and Putumayo rivers with a population varying between 8000 and 2000 Indians. Based on a re-evaluation of the demographic information from various chronicles, Denevan comes to the conclusion that the Omagua villages sheltered between 800 and 1000 people at any one time. The same applies to the descriptions of the size of Amazonian villages, which according
to some sources varied between 1 and 5 km. Even so, Carvajal’s references to the linear villages of the Omagua and the Tapajó, said to have measured between 1 and 5 leagues in length (5.9 to 29.5 km), are continually cited despite very probably representing an overestimate.

Another indirect population estimate concerns the number of warriors mentioned by the chroniclers. Although two versions of the 16th century Carvajal report exist, the first compiled by José Toribio Medina, which mentions 50,000 warriors among the Machiparo, and another compiled by Gonzalo Fernandez de Oviedo, which makes only general references to a large number of Indians, the Medina version is the one most cited. In the 17th century, Heriarte (1874) reports the existence of 60,000 warriors among the Tapajó, a figure that is taken as an exaggeration by a series of authors (Meggers 1971; Denevan 1996; Porro 1996), although it has been used uncritically to assert the war-based character of the Tapajó chiefdom (Roosevelt 1987:154).

As for the size of the Tapajó village, Roosevelt estimates an area of 5 km² (500 ha) which would correspond to the center of the chiefdom, today entirely covered by the urban area of the city of Santarém (Denevan 1996:665; Roosevelt 1987:157, 1991:122). However, she fails to provide any detailed information justifying this estimate. Results of recent works surveying the parameters of this site, undertaken through systematic subsurface probes in the urban area of Santaré, indicate the possibility of different occupation patterns. A strip of the urban space, 4 km in length, running parallel to the Tapajó river, was systematically covered and test excavations carried out along the stretch. The distribution of archaeological features, plotted on a map of the city, reveal a continuous, linear occupation, measuring 1.7 × 0.7 km (120 ha) and comprehending the present-day Centro and Aldeia districts of Santarém (Gomes 2006b) (Figure 4).

There is no doubt that this is the site mentioned by 16th and 17th century chroniclers, where the findings of Nimuendaju in the 1920s were also made (1949, 2004), as well as being the place of origin of the most elaborate ceramic pieces, found in museums across the world, including the male statuettes and the ceremonial vases obtained in surface collection, clandestine excavations and chance discoveries, since systematic research has never been conducted in this area. Though comparable with the size of other sites already recorded in Amazonia, the dimensions of this site (120 ha) are lower than those proposed by Roosevelt.

A distance of a little over 1 km, without evidence of archaeological remains, separates the Aldeia site from another known site which is being excavated by Roosevelt and her associates. The Porto site, located in an area of the ancient Vera Paz beach, occupies the extreme west of the city and possesses an area of approximately 50 ha. There ancient residential sectors were detected, along with ritual deposits – refuse pits containing ritual
Figura 4. Delimitation of Aldeia site in the urban area of Santarém, PA, Brazil.
ceramics associated with the classical Santarém phase and food leftovers (fish bones and fragments of turtle shell). The carbon dates produced indicate this area was occupied between 1300 and 1440 A.D. (Roosevelt 1999b:23; Quinn 2004:236).

Nimuendajú describes the Porto site as an area separate from the Aldeia site with evidence of ancient dwellings, surface remains of Tapajó pottery, as well as sherds of a different kind of ceramics, painted red and white, stone artifacts, fish spines, turtle shells and animal bones, contained in the middle and lower part of a 1.40 meter deep stratum. These characteristics led Nimuendaju to conclude that this site had been occupied by another people who inhabited the location before the Tapajó (Nimuendaju 2004:131). While Nimuendaju's perception of a spatial discontinuity between the Vera Paz area and the Aldeia site was confirmed by our archaeological survey (Gomes 2006b), the datings obtained by Roosevelt, as well as her contextualization of the remains, contradict Nimuendajú’s initial impressions concerning an occupation prior to the Tapajó.

It is fairly improbable that the Aldeia site had been abandoned and this smaller area, corresponding to the Porto site, subsequently occupied at a later date. The most plausible hypothesis is that the sites were contemporaneous during the 14th and 15th centuries. This would imply a settlement pattern that reflected some kind of social differentiation of status among the Tapajó, with distinctions between residential and ceremonial sectors allocated to people with greater social prestige, inhabitants of the Aldeia site, and another settlement set apart at the Porto site, containing the houses of people not linked to these dominant lineages.

The results of the archaeological delimitation of the ancient Tapajó village, situated in the urban center of Santarém, indicate that the dimensions initially suggested for this site were overestimated. The size proposed by Roosevelt may have been based on the ethnohistorical accounts from the 16th century, which mention the existence of villages of 1 to 5 leagues (Carvajal 1941). However, the spatial discontinuities observed between the Aldeia site and the Porto site, also confirmed by Nimuendaju’s reports, have additional implications for our understanding of Santarém society insofar as they suggest the existence of settlement patterns that express hierarchical differences.

Conclusion

The argument developed in this article maintains that functionalist interpretations, based around socio-evolutionist typologies, are inadequate in terms of reconstructing the social landscape of Amazonia’s late pre-colonial chiefdoms. On the other hand, the model of complex societies proposed by Roosevelt at the end of the 1980s constitutes a preliminary attempt to comprehend the data available on the social organization of these late pre-
colonial formations, but not a definitive interpretation. In particular, her historical reconstruction of the Santarém chiefdoms reveals ethnocentric conceptions of warfare related to territorial expansion and political power among indigenous societies which diverge from the Amerindian tradition. Here, warfare is understood within an encompassing indigenous logic of symbolic predation, an economy in which persons are produced through the appropriation of the incorporeal principles of victims (Fausto 2001: 328-331, 419). Later discussions at the end of the 1990s on heterarchy, which led to the incorporation of ideas on more horizontal dimensions of power that develop between communities within the same regional system, amount to just one more form of projecting experiences familiar to modern western democracy onto the indigenous past (Roosevelt 1999a:27).

Essentially derived from ethnohistorical projections, Roosevelt’s model involves a literal interpretation of the references to high-status lineages, chiefs and principals, organized hierarchically in the form of regional provinces that receive tribute. However, these ethnohistorical sources have been more recently reassessed and to some extent challenged by both archaeologists and ethnologists. Navarrete (2006:63) argues that many of the descriptions of late pre-colonial societies in the north of South America should be taken as projections made by European chroniclers based on their own sociopolitical references, rather than ethnographic documents capable of being used in the interpretation of archeological remains. Meanwhile, Sztutman (2005) suggests the need to go beyond the appearances contained in the archaeological remains and chronicles in order to consider how the supralocal networks and the political representatives were seen by indigenous peoples themselves. For the latter author, the danger is that these terms may be no more than mirages, since many of the territories considered by the chroniclers as a single jurisdiction can be compared with certain configurations of contextual alliances, which the ethnological literature has called multicommunity clusters, regional complexes or endogamic networks (Sztutman 2005:281).

Research developed on the lower Amazon, in the southern periphery of the Santarém region, has questioned the idea of political centralization and regional unification, as well as the existence of clearly defined cultural boundaries. Archaeobotanical evidence derived both from this region and from Central Amazonia has tended to disprove the existence of intensive systems of agricultural production and thereby weakened the idea of political centralization. The adoption of an approach focused on the reconstitution of the community and its local and regional interactions within a historical perspective has highlighted the variability of social forms in late pre-colonial periods. Between the 11th and 13th centuries, autonomous social formations coexisted in the same regional space with hierarchized societies, which suggests a socially heterogenic context, incompatible with the idea of cultural domination.
and political centralization (Gomes 2005). On the other hand, the comparison of the data from the Aldeia site, in the central area of Santarém, with the information available on the Porto sites indicates the existence of a local hierarchy with possible social differences in settlement patterns between the 13th and 15th centuries (Gomes 2006b; Roosevelt 1999a; Quinn 2004).

The existing literature suggests that the relations between chiefdoms and shamanism have been largely overlooked by researchers studying pre-colonial Amazonian chiefdoms. The ceramic iconography of Santarém demonstrates the construction of a symbolic system whose signs manifest a shamanic ideology with the recurrence of elements linked to the structure of the cosmos and the diverging perspectives of its subjectivities, along with an emphasis on the potency of the shaman and his capacity to transform into a jaguar. Likewise, the comparison with the iconography of the Colombian chiefdoms makes evident the importance of shamanism as a source of political power for these late pre-colonial South American societies, as well as the great historical continuity of the same general cosmology, as Reichel-Dolmatoff has demonstrated (1990). Examples from the Tairona and Muisca cultures found in the iconography of gold artifacts document the presence of both shamanic and sacerdotal practices, the latter devoted to ancestor worship. The parallel with Santarém culture resides in both the symbolic representations that distinguish this same cosmological substrate and the indications of ancestor worship, which do not seem to have attained the same degree of elaboration in Santarém as the priest-temple system of the Colombian chiefdoms.

However, the distinctions made by Hugh-Jones (1994) between horizontal shamanism, associated with more egalitarian societies, and vertical shamanism, present in hierarchized societies, may be useful in terms of conceptualizing the differences observed between the Santarém iconography and the Tairona and Muisca cultures. The Colombian examples point to a greater crystallization of the two types of shamanism, where the more aggressive curing shamans are linked to an ideology of hunting and the more passive sacerdotal shamans devoted to the rituals of social reproduction. Hence, this pattern can be seen to imply both the incorporation of the esoteric knowledge of shamanism on the part of elites, leading to the emergence of different specialists, as illustrated by the examples of Mayan and Polynesian societies (Thomas 1994; McAnany 1994), and the coexistence of two ideal types of shamans.

The contrast elicited by the Santarém iconography seems to be related to the social morphology itself, given that we can observe the concentration of symbols linked to shamans of the horizontal type (pajés), with rare images manifesting probable differences in genealogy and social roles. It can also be suggested that the emergence of the sacerdotal function in Santarém —associated with the emergence of values linked to ancestriality, which
emphasize the diachronic continuity between the living and the dead, and values linked to hierarchy, which imply synchronic discontinuities among the living, in the terms proposed by Viveiros de Castro (2002:470-471)—perhaps had not developed to the point of assuming a more consistent iconographic expression.

Nonetheless, the type of sociopolitical configuration existing in Santarém in late pre-colonial periods is not easy to determine with any precision. The current state of the art indicates that the adoption of a long-term historical approach combined with the body of knowledge accumulated in Amazonian ethnology is perhaps the most productive form of providing a global understanding of the archeological data available on the Santarém region. While political centralization and intensive agriculture do not seem to be confirmed in the archaeological record, indications of social hierarchy emerge in two independent types of evidence, both in the analysis of iconography and in the differences in settlement patterns of the sites located in the present-day city of Santarém. Although differences in organizational scale are recognized, the fabrication of a generalized image of the social complexity of large pre-colonial Amazonian civilizations, which presupposes profound discontinuities between these societies and latter-day indigenous peoples, is increasingly difficult to sustain where social differences in terms of access to resources and material goods have not been archaeologically demonstrated.

Far from resolving the questions relating to the development of one of the most emblematic—but still little known—cultures of pre-colonial Amazonia, the archaeological information discussed in this article allow us to highlight the diverse panorama of late pre-colonial social formations, rejecting models based on a projection of modern western sociopolitical forms, which tend to homogenize differences and minimize the observed contradictions. By demonstrating the importance of the symbolic representations associated with a predatory ideology, analysis of Santarém pottery iconography has enabled us to reassess the role of institutions such as chieftaincy and shamanism within the emergence of hierarchical social formations, somewhat reducing the large historical discontinuities held to exist between late pre-colonial societies and the present-day indigenous groups of Amazonia. A different picture emerges emphasizing the character of theses societies of tropical forest.

**Acknowledgements**

The ideas contained in this article were presented at a meeting of Nuti-Pronex, at the Postgraduate Program in Social Anthropology, Rio de Janeiro Federal University, on 20/10/2006. I am grateful to Eduardo Viveiros de Castro for supervising my post-doctoral project, developed with the support of
CNPq (Process: 151577/2005-6), the aim of which was to establish a systematic dialogue between archaeology and indigenous Amazonian ethnology, with emphasis on the study of sociocosmologies. I am also indebted to David Rodgers for the translation of this text and critical revision.

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