Chapter 8 In Brief

Peoples of the Amazon before European Colonization





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Key Messages

- The Amazon has been occupied by Indigenous peoples for over 12,000 years. During this long history, Indigenous societies developed technologies that were highly adapted to local conditions and optimized the expansion of food production systems.
- 2) Amazonian archaeology shows how deeply the Indigenous history of the region is characterized by cultural and agro-biological diversity. It is one of the few independent centers of plant domestication on the planet and the earliest center of ceramics production in the New World.
- 3) The evolutionary history of Amazonian Biomes during the Holocene is significantly intertwined with Indigenous Peoples' management practices to the point that it is hard today to disentangle natural from cultural heritage in the region.
- 4) These technologies may inspire new forms of urbanism, waste management, and land-use systems integrated with the Amazon's natural conditions, and with the potential to boost sustainable solutions for the Amazon's development.

Recommendations

1) Indigenous peoples and local communities (IPLCs)' territorial rights must be recognized

- and guaranteed urgently. Their rights to self-determination must be upheld.
- 2) Strict-protection nature reserves whose interiors have traditionally been occupied IPLCs should be reconfigured to allow these peoples to remain and continue their ways of life, preserving their natural-cultural heritage.
- 3) Legislation should include greater recognition of rights for areas of communal use within IPLCs' territories to avoid conflicts with neighboring communities. Prior to territorial demarcation, in-depth research about, and inclusion of, the affected peoples and their natural-cultural heritage is a *sine qua non* condition.
- 4) Additional land uses, not only habitation, must be considered when configuring protected areas (which include Indigenous lands, conservation units, and traditional peoples' territories). Anthropogenic forests must be understood as natural-cultural heritage.
- 5) IPLCs as well as social scientists should be included in the creation of and management plans for protected areas.
- 6) Additional initiatives from state agencies, NGOs and the private sector are needed to support IPLCs to generate income from agrobiodiversity that allows residents to continue their lifestyles while preserving vital ecosystem services.

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- 7) State agencies should include IPLCs controlled use of fire in environmental management strategies within protected areas.
- 8) Governments should create protection and buffer zones around "islands of forests", particularly corridors of protected lands.
- 9) Education paradigms must shift to incorporate archaeological knowledge of the Amazon and raise awareness of the fundamental intellectual contributions of Amazonian peoples to both national and global development. Intercultural education projects are needed so local histories and knowledge can serve as a central reference that empowers IPLCs.
- 10) Decisions on infrastructure and other development projects should abide by the International Labour Organisation's Indigenous and Tribal Peoples Convention (C169).

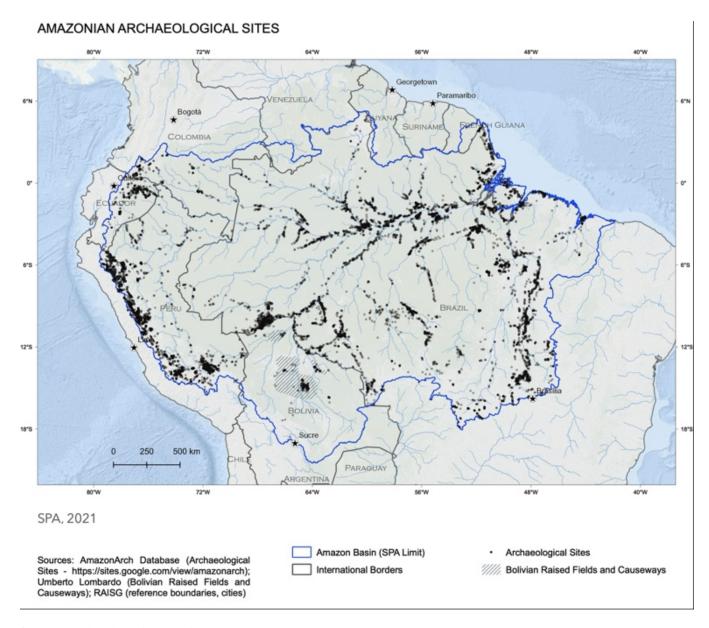
Abstract Archaeology tells us how Indigenous peoples transformed nature in the Amazon over the millennia to the point that it is difficult to separate natural from cultural heritage there today. It also shows that any kind of sustainable future for the region has to consider the rich Indigenous heritage manifested in archaeological sites and contemporary landscapes, and the contemporary knowledge of traditional societies.

Introduction Archaeology shows that all of the Amazon was settled by Indigenous peoples in the past. The gaps seen in the map (Figure 8.1)1,2,3, for instance the Iça/Putumayo and Juruá rivers, reflect a lack of fieldwork rather than an absence of past human occupation. Archaeology also provides a singular opportunity for understanding the human past from its earliest manifestations up to the present, spanning several temporal and spatial scales, permitting us to observe continuities and historical processes that could otherwise elude observation⁴. Archaeological research in the Amazon has grown considerably over the last decades, gaining momentum in the region following the development of large, international, and interdisciplinary collaborations and the consolidation of Amazon-based research groups and university archaeology departments. All of these have contributed significantly to broadening and deepening our knowledge about the histories of Amazonian Indigenous populations.

The region's human history is closely interwoven with important environmental transformations that affect the distribution of vital resources today. Although the focus of this chapter falls mostly on the periods prior to 1492, it aims to show that archaeology is an invaluable tool to inform conservation policies.

Initial settlement of the Amazon The notion that environmental hostility and forces of nature triggered a process of decay in Amazonian populations goes back to the early 19th century and influenced the first archaeological research conducted in the mid-20th century. The high visibility of archaeological sites containing elaborate ceramics and monumental structures prompted suggestions of a late arrival of humans to the Amazon from more culturally 'advanced' areas such as the Andes. On the contrary, data from diverse Amazonian regions demonstrate human settlement since the end of the last glaciation, more than 12,000 years ago, in synchrony with other places in South America, including the earliest rock art known in the Americas. The high diversity of biomes within the Amazon was likely one of the drivers for the emergence of cultural diversity among the early settlers, establishing a pattern early on that continued to the present. Genetic data shows that virtually all Indigenous American populations south of the Arctic Circle share the same genetic background derived from Northeast Asia, and this is the case of Amazonian Indigenous peoples as well⁵.

The Amazon as a domestication hotspot Not only is the Amazon is one of the world's independent centers of plant domestication, it is also the setting of a large process of landscape domestication. Studies of current practices among IPLCs, and the biological assemblages that result from them, provide archaeologists with clues as to how past practices impacted biodiversity^{6,7}. By culturally constructing their niches, IPLCs have domesticated Amazonian landscapes by increasing food availability near their homes through practices including: (1) removing unwanted plants, (2) protecting useful trees



 $\textbf{Figure 8.1} \ \textbf{Archaeological sites in the Amazon.}$

throughout their development, (3) attracting animal dispersers, (4) directly dispersing seeds, (5) selecting specific phenotypes, (6) managing fire, (7) cultivating useful plants, and (8) increasing soil fertility and structure such as creating anthropogenic soils and earthworks⁸. By changing the morphology, demography, and distribution of both plant and animal species, Indigenous peoples increasingly trans-

formed local ecosystems during the Holocene, domesticating different environments including forests, savannas, and wetlands, and using and managing thousands of plant species^{9–12}. Recent progress made by archaeologists and ecologists in documenting human influences on vegetation, both past and present, point to a scenario whereby, after at least 12,000 years of co-evolution between humans, plants, animals, climate, and landscapes, current

Amazonian ecosystems reflect varying degrees of human influence and pristine environments became increasingly rare^{13–15}.

The Amazon as the center of the first ceramics production in the Americas Ceramic analyses occupy a special place of research in Amazonian archaeology because they tell us about the technological traditions, social relations, and symbolic universes of the people who made and used them. Ceramics not only play an important role in the processing and consumption of beverages and food, but also act as a means of transmitting ideas through their decorative patterns¹⁶. In South America, ceramics were invented independently in at least six different areas. Four of these centers are in the Amazon: the lower Amazon, the Atlantic coast, the Upper Madeira Basin, and the Zamora-Chinchipe basin in Ecuador. In the first three areas, early ceramics are associated with the construction of artificial shell and earthen mounds. In the fourth, with early monumental sites. The two areas outside the Amazon are found in tropical areas in Northern Colombia and Coastal Ecuador.

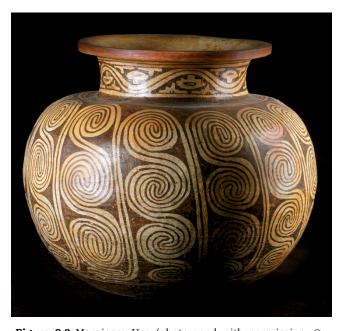


Figure 8.2 Marajoara Urn (photo used with permission, © Wagner, Souza, e Silva 2006).

The formation of anthropic dark earths (ADEs or *terras pretas*) and evidence of widespread human niche construction in the middle/late Holocene ADEs are black to brown, organic-rich anthrosols covering areas up to 90 hectares that are found in many of the archaeological sites in the Amazon and date mostly from ca. 2,500 years BP onwards^{9,17-20}, although earlier cases have been identified. These are stable, fertile soils with higher pH and nutrient contents (P, N, Ca, Mg) than adjacent soils. ADEs maintained these characteristics to the present, despite the intense leaching conditions of the Amazon^{21,22}. Contemporary communities choose ADEs for cultivation because of these properties^{23,24}.

Despite being known to scientists since the nine-teenth century, it was only much later that the Indigenous origin of these soils was established^{25,26}. Today, it is accepted that ADEs are among the most visible and widespread testimonies of past Indigenous settlements in the Amazon. The establishment of the Indigenous origin of ADEs marked a major turning point in Amazonian archaeology, as they attest to past landscape transformations at scales that were previously thought to be impossible^{27–29}.

Cultural Diversity and Monumentality in the Ancient Amazon Since the beginning of systematic research in the region, ceramics have played a key role in mapping the distribution of archaeological cultures or units, largely because of the great quantities in which they are found compared to other cultural remains. Beautifully decorated ceramics from the lower Amazon region quickly caught the attention of 19th century naturalists, gaining ample space in many European museum collections at the time³⁰.

Material culture and monumentality constitute critical features in the make-up of present-day Amazonian landscapes. Artificial mounds, roads, road networks, raised fields, ditches, causeways, ponds, channels, and megaliths are the types of monuments found everywhere in the Amazon. Because most of them were built with earth as raw material, and because they were covered by forest after the demographic collapse of the early colonial era,



Figure 8.3 Monumentality in the Amazon.

many of these structures were considered to be natural until recently (Figure 8.3). There are, on the one hand, natural places such as waterfalls, rivers, rapids, and hills that inhabit the memory of local populations. Many of these monuments, natural or artificial, are places of memory. Archaeological sites and objects act to forge and maintain local regional identities, past and pre sent, while they continuously

play an important part in building connections between societies and spiritual worlds.

Archaeology: A privileged path to the Amazonian past and present In the Amazon, archaeology is alive and pertains to the present as much as to the past. Despite the demographic collapses that took place across the region following the onset of European conquest and colonization, we can state that

over the past 12,000 years the Amazon has never been an empty space, devoid of people, but has been shaped as an archive of human practices.

Landscapes continuously occupied by IPLCs encompass multiple temporalities and time scales. The multiple connections between pre-Columbian and contemporary traditional management practices evidence how plants and landscapes provide us with a thread of continuity that stretches back millennia, irrespective of biological discontinuities between human populations.

Therefore, the use of archaeology to understand the period following the European invasion of the Americas to the present is of utmost importance; to do otherwise risks perpetuating a fossilized image of Indigenous peoples as inhabitants of a long-distant past or of a faraway forest^{31,p4)}, while obscuring the contributions of other social groups, such as *quilom-bola* (Afro-descendants; see Chapter 13), forest peasants, rubber tappers, and urban populations, who have created their own archaeological remains.

The role of archaeological data and perspectives in evaluating and planning for protected areas Archaeological research can provide useful perspectives in evaluating current land-uses and supply valuable support in planning for more efficient and just strategies that recognize the fundamental role and rights of current IPLCs. Such strategies need to incorporate the creation of protected lands occupied by IPLCs and not devoid of them. The full chapter presents the most problematic issues related to the creation and management of current protected areas, which include Indigenous lands, traditional peoples' territories, and conservation units.

Indigenous peoples and local communities' archaeologies From its inception as a discipline, archaeology was employed as a powerful element in the construction of ethnic, national, and imperial identities. Until recently, this endeavor was carried out by elite groups, or to suit reigning political interests. Over the past few decades, pressure from other groups, who actively began claiming the past for themselves³² by mobilizing archaeological sites (and

specific remains) as part of their political discourse³³, has contributed to changing this scenario, leading the discipline to reconsider its role and responsibilities towards claimants, in particular marginalized IPLCs.

Encounters between IPLCs and archaeology have also occurred within wider contexts of conflict and human rights violations spearheaded by the expansion of capitalist frontiers (e.g., the development of infrastructure such as dam and road building) within environmental licensing frameworks^{34,35}.

In the Amazon, natural heritage is cultural heritage By unearthing the role of ancient Amazonians in configuring forest and urban landscapes, and by studying relationships between agrobiodiversity, landscape legacies, and the region's current plural societies, archaeology can provide a long-term perspective and concrete examples of pathways leading to the conservation and restoration of the region.

Conclusions The archaeological heritage of the Amazon, which includes its natural components, is now being destroyed at a faster pace than ever before. Any solution conceived for the Amazon must necessarily have IPLCs, whose very identities are closely linked to their traditionally occupied territories, at its center. As guardians, they know how to manage these territories. Collective land rights for Indigenous peoples and local communities, together with the input from scientific knowledge, are proven to be the most effective way of conserving biodiversity in the Amazon and worldwide^{36,37}.

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