

World Archaeoprimatology

An Introduction

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Archaeoprimatology – a term originally coined by one of the editors – explores the interface between humans and nonhuman primates (hereafter referred to as ‘primates’) in antiquity. Hence, archaeoprimatology embraces, both theoretically and methodologically, the disciplines of archaeology and primatology. Archaeoprimatological research is still relatively limited despite its significant implications that range from the art history realm of past iconographic identification of primates to a better grasp of current primate conservation issues. Archaeoprimatology is a discipline that offers multiple perspectives to understand the roots of our perception and apprehension of our own taxonomic group, the order Primates. The edited volume in your hands – the first fully devoted to this discipline – is thus intended to serve as an effort to promote and expand archaeoprimatological studies.

The 21 chapters examine different regions of the globe, from the valley of Teotihuacan in Mexico, through the Aegean islands, to Jomon period Japan (Fig. I.1; Table I.1). The book covers a time span starting millions of years ago until the past century, encompassing information from early hominin sites in South Africa to perceptions on primates in the narratives of Roman rhetoricians, as well as to the relatively recent oral traditions of Madagascar. It explores a variety of past societies, in relation to their interconnections with primates, including, among others, ancient Taino, Arawakans, and Caribans of the circum-Caribbean region; Mayans; pre-Columbian lowland South American peoples; Mesopotamians; and Buddhists and Hindu from the Indian subcontinent. Eight chapters refer to Neotropical settings, six to Asia, five to Africa, and two to Europe, and the volume is arranged according to these geographical divisions. There are pairs of chapters devoted to different archaeoprimatological topics of four countries: Brazil, Peru, Egypt, and South Africa. Twenty-nine percent of the studies focus on primate remains in the zooarchaeological record, 38% on material culture with primatomorphic depictions, and the remaining 33% combines multiple approaches including written and oral sources with information about primates. Sixty-six researchers from around the world share their expertise to build this editorial endeavor. Thirty-nine percent of them are women, and 59% are nationals of the countries where the studies were conducted. The determination of the authors in completing their chapters was especially inspiring considering that the last phase of this project was marked by an unusual year signed by the global turmoil derived from the COVID-19 pandemic. This made their efforts in working on their manuscripts not only challenging but also more significant than ever before. The diversity of the authors with multiple cultural and academic

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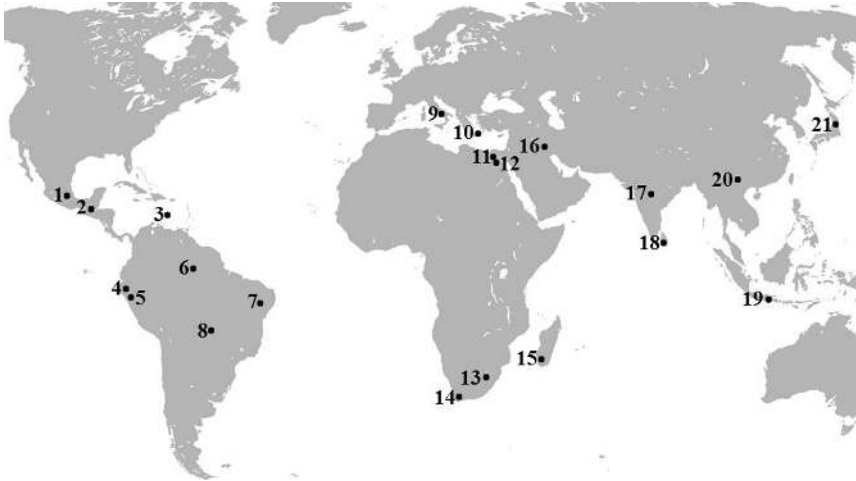


Figure I.1. Location of the archaeoprimateological studies present in this edited volume. See numbers in Table I.1. (Image by B. Urbani, after an open access base map from San Jose, 2006. Wikimedia Commons-CC BY).

backgrounds can be fully perceived through the pages of this book. In addition, to promote and enhance inclusivity, the abstracts of the chapters are presented in the native languages of the countries where the studies focus. This is the first time they have been included in the Cambridge Studies in Biological and Evolutionary Anthropology Series. We consider that it is a modest but yet significant step toward fulfilling the goals of the ‘Joint commitment for action on inclusion and diversity in publishing’ to which Cambridge University Press is a signatory.

Regarding the content of the chapters, Bernardo Urbani and collaborators examine the material culture and skeletal remains of primates recovered in Teotihuacan that is one of the largest pre-colonial urban areas of today Mexico. Portable objects and murals that depict monkeys were recovered in different areas of Teotihuacan. Monkeys and their depictions with the symbolic value attached, circulated in Teotihuacan, especially between ~200 CE and 550 CE (the Classic period). Remains of spider monkeys were reported from the Pyramid of the Moon, the Plaza of the Columns, and from inside the structure in Xalla. The authors argue that, possibly, primates reached Teotihuacan through interconnections with peoples from distant regions, such as those from the Mayan area and the Oaxacan region. The authors argue that the presence and use of primates may be attributed to the elite ruling Teotihuacan and may also include individuals of other adjacent societies. Also, in Mesoamerica, Katherine South and Susan M. Ford provide an evocative example on how to encompass the use of phenotypic attributes of primates and ancient iconography with primatomorphic depictions for identifying primate taxa that interacted with past societies. In doing so, and using an ample iconographic dataset, they explore the relationship between Mayans and spider monkeys, howlers, and possibly capuchin monkeys. The results show that primates have different roles in this society ranging from scribal functions to dancers.

Table I.1. Synopsis of the archaeoprimateological studies present in this edited volume

# in Fig. I.1	Ancient society	General focus	Country/ region	Chapter author(s)
1	Teotihuacan	Material culture and zooarchaeology	Mexico	B. Urbani, C. Serrano-Sánchez, R. Valadez-Azúa, D. Ruiz-Ramoni, & R. Cabrera-Castro
2	Maya	Material culture	Guatemala	K. E. South & S. M. Ford
3	Taino, Arawak (Barrancoid/Saladoid), Cariban	Zooarchaeology, Material culture and written sources	Circum-Caribbean region	B. Urbani, A. T. Antczak, M. M. Antczak, N. R. Cannarozzi, R. H. Colten, K. F. Emery, R. A. C. F. Dijkhoff, T. A. Wake, M. J. LeFebvre, L. A. Carlson, W. F. Keegan, & D. C. Nieweg
4	Chimú, Lambayeque, early Colonial	Material culture	Peru	J. Gamboa
5	Moche	Material culture	Peru	A. K. Alaica
6	Lowland South American peoples	Material culture	Brazil	E. Pereira & J. de Sousa e Silva Júnior
7	Caatinga dwellers	Zooarchaeology	Brazil	A. N. de Queiroz, O. A. de Carvalho, & R. R. Pinto
8	Indigenous peoples	Zooarchaeology	Neotropics (general)	R. F. Quijano, D. R. Gilles, J. Štefka, & M. M. Kowalewski
9	Roman	Written sources and material culture	Italy	M. Vespa
10	Minoan	Material culture	Greece	B. Urbani & D. Youlatos
11	Old Kingdom Egyptian	Material culture	Egypt	L. Bashford
12	Late Dynastic Egyptian	Zooarchaeology	Egypt	D. Brandon-Jones & J. Goudsmit
13	San	Material culture	South Africa	N. Ndlovu

Table I.1. (cont.)

# in Fig. I.1	Ancient society	General focus	Country/ region	Chapter author(s)
14	Hominins	Zooarchaeology and material culture	South Africa	S. Badenhorst
15	Island indigenous peoples	Zooarchaeology and oral sources	Madagascar	N. Vasey & L. R. Godfrey
16	Mesopotamian	Written sources and material culture	Iraq/Iran	M. Such-Gutiérrez
17	Buddhist/Hindu	Material culture	India	A. A. E. van der Geer
18	Island Indigenous peoples	Zooarchaeology	Sri Lanka	M. A. Huffman, C. A. D. Nahallage, T. Ananda, N. Kanthilatha, N. Perera, M. Bardi, & G. Adikari
19	Island Indigenous peoples	Zooarchaeology	Indonesia	N. Amano, T. Ingicco, A-M. Moigne, A-M Sémah, T. Simanjuntak, & F. Sémah
20	Hominins	Zooarchaeology, written sources, and material culture	China	G. He, H. Zhang, H. Wang, X. Ji, S. Guo, B. Li, R. Hou, X. Hou, & R. Pan
21	Jomon	Zooarchaeology	Japan	Y. Nishioka, M. Takai, H. Hongo, & T. Anezaki

In their chapter on pre-Hispanic primates in the circum-Caribbean region (300–1500 CE), Bernardo Urbani and colleagues provide a comprehensive review of the interface between the indigenous peoples of the area and primates before and at early European contact. The analysis of the zooarchaeological record, portable crafted material, alleged rock art, and written documentary sources suggest that interactions between native Caribbean human populations and monkeys existed deep in time with profoundly rooted connections, confirming a close, extended, intricate, and multipurpose interface.

Moving to South America, two chapters illustrate the past interconnections of peoples from the northern desert of Peru with monkeys from lowland South America. In this direction, Jorge Gamboa presents how primates were culturally configured by the Chimú and Lambayeque societies. By using the zooarchaeological record and an iconographic dataset, Gamboa studies the depiction of primates in clay and wooden figurines of these cultures to explore their significance in the context of corporality and symbolism. The cover of this volume embodies the relationship between the Chimú and monkeys as examined in this chapter. In her study, Aleksa K. Alaica claims that monkey images in Moche iconography of northern Peru are well-known and monkey remains have also been excavated in burial sites but, she argues, that limited systematic research has been carried to explore their function in this society. With this premise in mind, she explores monkey representations among the Moche, their characteristics, the contextual information, and their role in purportedly legitimizing authority. Because primates were considered as imitating humans in Moche iconography, they likely have an ancestral connection with elites and ritual practices. Both Gamboa and Alaica contextualize monkey depictions in the Peruvian arid region as key agents of alterity of living subjects from tropical lands.

Two chapters are dedicated to Brazil. In the first, Edithe Pereira and José de Sousa e Silva Júnior explore 29 petroglyphs with representations of primates, from 15 different archaeological sites in Brazilian Amazonia. The examination of taxonomic diagnostic characters, along with features related to life history, behavior, and geographic distribution results in the identification of nine different taxa at species level, one taxon at genus level, and one at family level. All the identified taxa are endemic to Amazonia, three are currently considered vulnerable to extinction, and two are allochthonous to the areas of their representations. These findings probably suggest displacements of ancient human communities in those regions or shrinkage of prior larger, more extended distributions. In the second Brazilian chapter, Albérico N. de Queiroz and colleagues focus on two unusual samples of cranial bones of tufted capuchin monkeys recovered in archaeological excavations at the Furna do Estrago site in the state of Pernambuco in northeastern Brazil. These scarce samples with anthropic modifications allow a reflection on biocultural aspects of the presence of primates in human funerary environments. Thus, they most likely highlight a possibly symbolic or ritual status and their rarity perhaps supports their function as hierarchical indicators within a social group.

To finish with the Neotropics, R. Florencia Quijano and coauthors explore the potential cost of monkeys as hunting game or pets by examining the presence of lice

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in howlers. After review of the existing scholarly reports, they concentrate on the presence of lice (*Pediculus mjobergi*) in three species of howler monkeys in order to determine possible data on louse host switch between humans and primates. They argue that paleontological as well as genetic data suggests that an exchange of genetic material between howler lice and humans happened during interactions related to subsistence activities (e.g. hunting) and/or having monkeys as pets. The authors further suggest this could happen early when modern humans migrated from Africa and later went into the Americas.

Europe is represented by two chapters. Romans and their narrative practices about primates are studied by Marco Vespa. In this study, the author proposes that this society perceived these animals differently than many other European peoples. For example, Romans performed a set of descriptors to interpret the relation of monkeys with them. These descriptors considered not only observable traits but also behavioral features that particularly distinguished them from other animals. Vespa complements his text by adding information on remains of monkeys and primatomorphic representations from the Roman archaeological record. In the Aegean region, Bernardo Urbani and Dionisios Youlatos thoroughly re-examine the depictions of primates on material evidence such as figurines, seals/sealings, and frescoes left by the Minoan civilization from Crete and Santorini. Their analyses that incorporate expertise in archaeology and primatology strengthen previous reports and confirm a vast cultural exchange between Minoans and Egyptians. They also argue that while the depictions of vervet monkeys were related to a more naturalistic context, the baboons were largely part of ritual contexts. Judging from the paintings of detailed narratives the authors state that Minoans were first-hand observers of monkeys.

Lydia Bashford discusses primate behavior in ancient Egypt and presents the iconography of monkeys in the Old Kingdom. During this period, monkeys were allochthonous in Egypt and were traded from southern lands. However, Bashford suggests that the persistence of the depiction of monkeys in this and later Egyptian periods is due to special religious reasons. In another context, particularly in representations related to humans, they display jokily, emulating humans, or performing their natural behavior. In the second chapter on Egypt, Douglas Brandon-Jones and Jaap Goudsmit suggest that Late Dynastic Egyptians macerated and wrapped primates in Saqqara. Almost 200 corpses of, mostly, Anubis baboons were deposited in the animal catacombs of this site. The authors found evidence of malnutrition, as well as a higher ratio of male individuals that might suggest breeding practices. This chapter stands as an interesting and detailed case study on the mummification of primates in ancient Egypt.

From South Africa, Ndukuyakhe Ndlovu summarizes the depiction of chacma baboons on the rock. These primates are less represented than other animals, and some of them were fused with human shapes to create therianthrope images that merge both baboons and humans. Still in South Africa, but from a different viewpoint, Shaw Badenhorst presents a systematic revision on the relationship between chacma baboons and hominins during three million years of co-existence. He argues

that although in the late Plio-Pleistocene, both taxa might have been under the same predation pressures, later, during the Middle Stone Age, humans possibly hunted baboons, as well as samango monkeys and vervets.

In their chapter, Natalie Vasey and Laurie R. Godfrey evaluate the human impacts on *Pachylemur* extinction, some 500 years ago, combining evidence from current hunting practices, Madagascar's oral history, and archaeological and paleontological records. The detailed analysis of such diverse data indicates that this large lemur was a high forest specialist and coexisted with humans for a long time. This evidence suggests that both habitat degradation and hunting played significant roles in the extinction of the, once widespread, *Pachylemur*.

Moving to western Asia, Miguel Such-Gutiérrez argues that the paucity of evidence about primates in Mesopotamia during the third millennium BCE, is due to the fact that they were allochthonous in this region. The earliest mentions of monkeys in Mesopotamia are found on depictions during the Early Dynastic period (c. 2600–2340 BCE) and in the documents, they are mentioned from the Ur III period onwards (c. 2100–2000 BCE). Likely, they were brought in from western-central Asia, or from the Indus Valley. Monkeys show a “ludic character” and, arguably, were pets. In these texts, primates often used to tease the enemies of Sumer and, according to Such-Gutiérrez, this is how the word ‘monkey’ started, and until now, it bears this humorous and pejorative character. East of Mesopotamia and centuries later, Alexandra A. E. van der Geer explores the ample repertoire of primatomorphic depictions in the religious architecture of India. Monkeys, especially macaques and langurs, have different attributes among Buddhist and Hindu representations, ranging from symbols of beauty and cleverness to foolish individuals, as well as erotic characters. Rhesus macaques are predominantly represented in northern India, while langurs (mostly as Hanuman) in the south of this subcontinent. This review also includes an integrative summary that serves to trace the performative representation of this animal group in this large Asian region.

In South East Asia, Michael A. Huffman and collaborators examine the subfossil primate remains yielded in the Sigiriya Potana cave of Sri Lanka. Three primate species, still native to the island, were found with burning evidence that suggests their consumption in the cave between c. 6000 and 3700 BCE. These monkeys are toque macaques, tufted gray langurs, and purple-faced langurs. As it is also the case at other sites in Sri Lanka, monkeys appeared as relevant sources of protein in this location. In Indonesia, Noel Amano and colleagues explore the patterns of primate exploitation in the Early to Mid-Holocene in the Eastern Javan Braholo Cave. The majority of primate remains is represented by cercopithecids, particularly langurs, and was most likely processed on-site, with further use of skeletal elements (e.g., ulnae) for bone tool manufacture. This evidence points to complex human and primate interactions in this site. The authors further argue that it is very likely that primate populations may have not been severely affected by hunting pressures, probably because of relatively low human population densities or because hunter gatherer communities moved across the landscape throughout the year.

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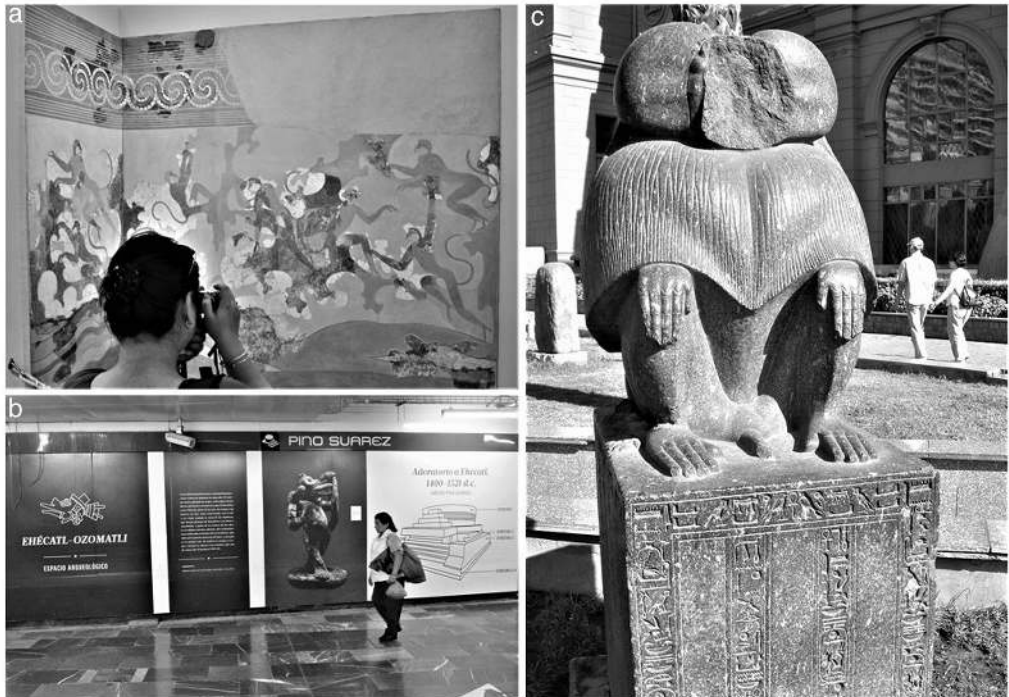


Figure I.2 Archaeoprimateological loci in present-day quotidian life. (a) photographer in front of the Minoan fresco with vervets at the Museum of Prehistory in Santorini, Greece; (b) metro rider of Mexico City at the Pino Suárez station in front of a large poster of an Aztec clay figure of Ehécatl-Ozomatli (monkey) at the place where this piece was discovered; (c) seated baboon, god Thoth, with tourists behind at the yards of the Egyptian Museum in Cairo. (Photographs by B. Urbani).

In the province of Yunnan, China, Gang He and colleagues, after conducting a broad literature review, explore the biogeographical importance of this region, on the relationships between primates and archaic and modern humans. The archaeological record indicates a strong tendency of coexistence and currently, the province hosts the largest number of ethnic groups (26 of 56) as well as primate species (21 of 25) in China. Although primates were inspiration for significant contributions to arts, culture, social life, and medical research, they suffered greatly in recent Chinese history, particularly since the second half of the last century. In Japan, macaques were present long before the arrival of humans. As reported by Yuichiro Nishioka and coauthors, the interactions occurred during the Holocene with the rise of the Jomon culture. Remains of primates have been found in shell middens. The zooarchaeological evidence impressively appears to suggest the presence of Japanese macaques in archaeological locations at around 200 sites dispersed along the island.

The collection of chapters in this volume – with an ample diversity of cultures from different regions of the world – provides firm foundations upon which the discipline of archaeoprimateology can be solidly built. In effect, a thorough look through these pages

reveals that archaeoprimatological research has multiple perspectives and ways of exploring the past interactions of humans with other primates. Archaeoprimatological research envisioned as an interdisciplinary field that poses novel research questions and employs new techniques is expected to untangle the long-lasting quests on defining humans before the appearance of the Anthropocene and explore new ways of conceiving human–animal relations and ethics related to these phenomena. Once again, we hope that this volume will help pave the intellectual challenge and explore, among others, theories of posthumanism and postanthropocentrism, as well as approaches to indistinction. In the meanwhile, factual archaeoprimatological references will be present to remind us that this endeavor is still open (Fig. I.2).