# Overview of Archaeological Evidence on the Use of Inland and Maritime Waters in Latin America

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### **Underwater and Maritime Archaeology in Latin America**

Various traditions of underwater and maritime archaeology have developed around the world that represent different theoretical and methodological approaches to the study of underwater and coastal remains and the variability of the material culture. Each heritage reflects the characteristics specific to its area or context of discovery. The research traditions of the study of Latin American heritage are rooted in a rich history of producing scientific knowledge across the entire region.

Research on submerged cultural remains developed considerably later than research on coastal remains. Scuba diving, which is essential for direct underwater exploration in any form, was not available before the 1960s; the work of the first pioneers in underwater archaeology was carried out at that time (Bass 1966). In addition, archaeological remains on land were so abundant in many parts of Latin America that researchers likely felt no urgent need to go under water. Treasure hunting on shipwreck sites also played a role in delaying underwater archaeological research. The region has been a target of private salvage companies offering "assistance" or seeking permits for the recovery of underwater cultural heritage in exchange for keeping a part of it. This situation was accepted for decades; some governments and policymakers did not even regard it as unethical. That is not the case today, as the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage clearly states (UNESCO 2001). However, we must remain vigilant and be mindful of the risks of commercial salvage, as some authors still highlight (e.g., Martín, Pérez Díaz, and Gómez Pretel 2021).

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The fact is that much underwater research can be done with relatively simple infrastructure, unsophisticated equipment (or sophisticated equipment obtained though interinstitutional agreements), and affordable budgets. The archaeological research issues associated with submerged heritage justify going under water to study those material remains or at least preserve them in situ. The UNESCO office in La Habana began to give visibility to the topic in 2002 through the publication of a series of short contributions called Protección del patrimonio cultural subacuático en América Latina y el Caribe (Protection of Underwater Cultural Heritage in Latin America and the Caribbean). In 2008, Margater Leshikar-Denton and Pilar Luna Erreguerena co-edited Underwater and Maritime Archaeology in Latin America and the Caribbean, the first compilation of "a wide array of communications on different aspects of the region's maritime and submerged archaeology" (Castro 2010, 288-289), including chapters on topics related to the protection, conservation, and valorization of this underwater heritage. The contributors to that volume highlighted the fact that the waters of Latin America and the Caribbean hold a vast and rich heritage that has its origins in the pre-Hispanic period of the continent (Luna Erreguerena 2008).

Even though this research has developed unevenly, with countries like Mexico and Argentina playing more leading roles than others (e.g., Luna Erreguerena 1982; Elkin 2002), the field of underwater archaeology has continued to grow in Latin America.

#### The Region and Water-Related Communities

Well aware of the complexities involved in the concept and definition of Latin America (e.g., Bohoslavsky 2011), we chose geographical and cultural criteria in this edited volume that include all the American continental territories from the Mexican highlands to Tierra del Fuego. We have also included the Spanish-speaking Caribbean Sea and insular spaces located off the coasts of the Atlantic and Pacific waterfronts of South America (fig. 1.1).

The first communities to people the Americas benefited from aquatic ecosystems, whether they exploited maritime, lake, or fluvial resources, as clearly reflected in areas such as the western side of the Andes (e.g., Salazar et al. 2020). Prieto and Sandweiss's (2020) publication *Maritime Communities of the Ancient Andes* emphasizes the significance of the concept of "maritime communities" in the study of these populations. The abundant biodiversity and variability of the ecosystems located in the Latin American region have contributed to the emergence of many complex civilizations and the development of different cultural trajectories. The material evidence for activities



Figure 1.1. Map of Latin America highlighting the countries with at least one case study presented in this volume. Map created by Christophe Delaere and Dolores Elkin.

such as the use of nautical spaces and the development of short-range navigation shows that by the turn of the sixteenth century, Latin America had already developed long traditions of practices and beliefs related to the exploitation and management of aquatic environments.

The arrival of the first explorers and settlers from the Iberian peninsula in the fifteenth and sixteenth centuries changed the region's cultural and demographic history in significant ways. Two worlds that had never been in contact with each other clashed. Most of Latin America's underwater heritage research reflects this period of European expansion. Until recently, there were few reports from underwater contexts that date to the pre-Hispanic period except in a few regions, such as the Yucatán Peninsula (cenotes; e.g., Luna Erreguerana 1996, 2000), the Bolivian highlands (Lake Titicaca; e.g., Ponce Sanginés et al. 1992; Reinhard 1992), and the coasts and hydrographic basins of Latin America, where dugout canoes and other types of traditional watercraft are occasionally discovered (e.g., Barba Meinecke 2021). Late Pleistocene and early Holocene paleolandscapes are even less documented in this region. Some exceptions are the work that has been done in the Gulf of Mexico (e.g., Evans and Keith 2011), Chile (e.g., Carabias et al. 2014), and Argentina (e.g., Bayón and Politis 2014). The result is that the underwater archaeological evidence of Latin America overrepresents material remains that date to the historical period.

This lack of balance is one of the justifications for this volume. Since the turn of the twenty-first century, numerous projects have emerged throughout the region and we now have many case studies of Latin American underwater and maritime heritage that cover a broad span of time that includes both the pre-Hispanic and historical periods and a broad geographical range (e.g., Mesoamerica, Central America, the Caribbean, the Andes, Patagonia). Latin American populations today are the result of a cultural diversity that includes thousands of Indigenous communities; African populations that were deported in the sixteenth through the nineteenth centuries, particularly to the Caribbean and Brazil; Iberians (Spanish and Portuguese settlers); Western and Eastern Europeans who immigrated in the nineteenth and twentieth centuries; and Asians (e.g., Chinese tombs from the nineteenth century discovered at the Huaca Bellavista in Lima). The material record manifests this cultural diversity.

## Linking Underwater and Coastal Materiality in Latin America

Since the 1990s, particularly following the publication of Westerdahl's (1992) article "The Maritime Cultural Landscape," one of the critical issues related to the assessment of underwater heritage has been the need to integrate coastal and underwater remains. Although the concept of a maritime cultural landscape has evolved considerably over the last three decades (e.g., Ford 2011; Catsambis, Ford, and Hamilton 2011), it has been used in many different cases, including the study of American "prehistoric landscapes" (e.g., Evans and Keith 2011), pre-Hispanic lacustrine societies (e.g., Delaere 2020), and Latin American port developments in the colonial and historic periods (e.g., Bava de Camargo 2009).

Material culture, the product of practices and beliefs, offers a primary source of information about the behavior of human societies. Archaeology allows for both the construction of a coherent narrative in the absence of written sources, particularly for communities in South America that did not possess writing, and the elaboration of critical discourse in the analysis of events that archaeological records and historical sources document. This book fo-

cuses on the examination of material evidence and brings together different communities of researchers, in particular underwater and coastal archaeologists. The underlying assumption is that materiality provides additional information to that found in ethnohistorical or historical sources, in part because it can reveal the degree of resilience of past and present communities in the face of changes to the climate and a culture's environment.

Coastal archaeology and underwater archaeology are still fundamentally different fields that have developed separately from each other, not just because of research traditions but also because of the onetime scarcity or absence of material evidence from underwater contexts (particularly for remains other than historic shipwrecks). However, when we consider that archaeological excavations in South America have contradicted one of the oldest axioms of archaeology—that the emergence of agriculture is necessary for the development of the so-called complex societies, an observation that underlies the "maritime foundations of Andean civilization" theory (Moseley 1975)—we understand that the archaeological review of underwater landscapes represents a research imperative. Today, the development of technologies and methods of work has made it possible for archaeologists to turn toward the maritorium (see Herrera and Chapanoff 2017) and inland waters.

#### **Chapter Summaries**

This volume presents twenty-nine case studies of the diverse heritage and research traditions related to the inland and maritime waters of Latin America, both chronologically and geographically. Part I (chapters 2-15) presents findings from the pre-Hispanic period and Part II (chapters 16-29) presents studies from the historical period (fig. 1.2). However, the chronological boundary between these two categories is not impermeable, particularly in places where Indigenous traditions have persisted into recent periods. Cultural and environmental boundaries are also arbitrary, particularly when navigation connects quite distant raw materials and ideas.

## The Pre-Hispanic Period

Chapter 2 synthesizes several decades of research on the caves and cenotes of the Yucatán Peninsula in Mexico. The authors have systematically recorded the paleontological, archaeological, and historical evidence preserved under water, presenting more than 10,000 years of archaeological remains preserved in the sedimentary archives of underwater karst. In particular, they highlight the correlation between the evolution of landscapes brought about by climate change and the nature of different submerged cultural heritages, ranging from