

# Introduction

## The nature and aims of archaeology

About 5300 years ago a 40-year-old man made his last journey, on a mountain path in the European Alps. He lay undisturbed until his body was discovered by hikers in September 1991. Archaeologists were able to determine not only his age, but also the contents of his last meal: meat (probably ibex and venison), plants, wheat, and plums. The Iceman suffered from arthritis, and analysis of a fingernail showed that he had suffered serious illness 4, 3, and 2 months before he died. At first it was thought that he died from exhaustion in a fog or blizzard. However, later analysis revealed what may be an arrowhead in his left shoulder and cuts on his hands, wrists, and ribcage, as well as a blow to the head, so he may well have died a violent death. These observations are just a sample of what archaeologists were able to learn about this long-dead man.

The thrill of discovery and the ability of **archaeology** to reveal at least some of the secrets of our past have been the theme of many famous novels and movies: notably Steven Spielberg's Indiana Jones series. Many discoveries in archaeology are far less spectacular than that of the Iceman, perhaps a collection of broken pieces of pottery, but these kinds of remains too can tell us a lot about the past through careful collection and analysis of the evidence.

Archaeology is unique in its ability to tell us about the whole history of humankind from its beginnings over 3 million years ago. Indeed for more than 99 percent of that huge span of time archaeology – the study of past **material culture** – is the only source of information. The archaeological record is the only way that we can answer questions about the **evolution** of our species and the developments in **culture** and society which led to the emergence of the first civilizations and to the more recent societies which are founded upon them.

This book provides a brief introduction to the ways in which archaeologists uncover and collect evidence about our past, how they analyze it (often using sophisticated scientific methods), and how they interpret it (both for fellow scholars and members of the public).

### The Discipline of Archaeology

Many archaeologists consider themselves as part of the broader discipline of **anthropology**. Anthropology at its broadest is the study of humanity – our physical characteristics as animals, and our unique non-biological characteristics. Anthropology is thus a broad discipline – so broad that it is often broken down into different fields:

- **Physical or biological anthropology**: the study of human biological or physical characteristics and how they evolved.
- **Cultural anthropology**: the study of human culture and society.
- Linguistic anthropology: the study of how speech varies with social factors and over time.
- Archaeology: the study of former societies through the remains of their material culture and, in the case of literate cultures such as those of Mesopotamia or Mesoamerica, such written records as have survived.

Archaeologists who are interested in the societies of ancient Greece and Rome, their empires and neighboring territories, consider themselves Classical archaeologists. They study the material remains of the Greek and Roman worlds, but can also take into account the extensive written records (literature, history, official records, and so on) that survive.

Similarly, biblical archaeologists work in much the same way as anthropological archaeologists, but with reference to the events set out in the Bible.

Archaeology has some aspects in common with both history and with science. Like history, archaeology is concerned with documenting and understanding the human past, but archaeologists operate in a time frame much larger than the periods studied by historians. Conventional historical sources begin only with the introduction of written records around 3000 BC in Western Asia, and much later in most other parts of the world (not until AD 1788 in Australia, for example). The period before written records and history (meaning the study of the past using written evidence) is known as **prehistory**.

Although archaeologists spend much of their time studying **artifacts** and buildings, it is worth emphasizing that archaeology is about the study of humans and, in that sense, like history is a humanity. But it differs from the study of written history – although it uses written history – in a fundamental way. Historical records make statements, offer opinions, and pass judgments (even if those statements and judgments themselves need to be interpreted). The objects that archaeologists discover, on the other hand, tell us nothing directly in themselves. It is *we* today who have to make sense of these things. In this respect the practice of archaeology is rather like a science. The scientist collects data, conducts experiments, formulates a hypothesis (a proposition to account for the data), tests the hypothesis against more data, and then devises a model

(a description that seems best to summarize the pattern observed in the data). The archaeologist has to develop a picture of the past, just as the scientist has to develop a coherent view of the natural world. It is not found ready made.

Archaeology, in short, is a science as well as a humanity. That is one of its fascinations as a discipline: it reflects the ingenuity of the modern scientist as well as the modern historian. The technical methods of archaeological science are the most obvious, from **radiocarbon dating** to studies of food residues in pots. Equally important are scientific methods of analysis: archaeology is just as much about the analytical concepts of the archaeologist as the instruments in the laboratory.

### The Important Questions of Archaeology

Because the evidence of archaeology cannot speak for itself, it is important that archaeologists ask the right questions of the evidence. If the wrong questions are asked, the wrong conclusions will be drawn. For example, early explanations of the unexplained mounds found east of the Mississippi river assumed that they could not have been built by the indigenous American peoples of the region; it was assumed instead that the mounds had been built by a mythical and vanished race of Moundbuilders. Thomas Jefferson, later in his career the third President of the United States, decided to test this hypothesis against hard evidence and dug a trench across a mound on his property. He was able to show that the mound had been used as a burial place on many occasions and found no evidence that it could not have been built by the indigenous peoples. In other words, Jefferson asked questions about what the evidence suggested: he did not simply reach a conclusion that fitted his prejudices and assumptions.

One of the most important tasks of the archaeologist is to ask the right questions about the evidence. Traditional approaches tended to regard the objective of archaeology mainly as reconstruction: piecing together the puzzle. But today it is not enough simply to recreate the material culture of remote periods: how people lived and how they exploited their environment. We also want to know *why* they lived that way, why they had certain patterns of behavior and how their material culture came to take the form it did. We are interested, in short, in explaining change.

### How to Use This Book

This book is organized around some of the most important questions that archaeologists ask, and in response to suggestions from a number of teachers this new edition has twelve chapters instead of ten. Chapter 1 looks at the history of archaeology, the kinds of questions asked by archaeologists in the past and the methods they used.

In Chapter 2 we ask the question What Is Left?: the evidence with which archaeologists work. The next chapter examines the important question Where? Archaeologists can learn a good deal from the **context** in which evidence is found and have developed many techniques for locating and recovering evidence. In Chapter 4 the question is When?: how can we know whether something dates from a few hundred years or many thousands of years ago? Chapter 5 examines the fascinating question of How Were Societies Organized? In Chapter 6 we look at the world in which ancient people lived: What Was the Environment and What Did They Eat? Technology was an important factor in changing society and the lives of our ancestors, as were contact and trade with other ancient peoples: the key question for Chapter 7 is How Were Artifacts Made, Used, and Distributed?

Chapter 8 looks at the archaeology of people: What Were They Like? The next chapter addresses some of the more difficult questions that modern archaeologists are trying to answer: the ways ancient peoples thought about their world and issues of identity. In other words, What Did They Think? An equally difficult question is Why Did Things Change?, the subject of Chapter 10. In Chapter 11 we address the often controversial question: Whose Past? The past may be remote in time but it can be very relevant today if it touches on the beliefs, identity, and wishes of the descendants who lived long ago. Finally, in the new Chapter 12 we look at both the practice of applied archaeology, a profession that now employs more people than the academic archaeology pursued in universities, and more generally The Future of the Past.

If you follow the questions examined in this book you will understand how archaeologists work, think, analyze, and seek to understand the past. You will also discover that not all questions can be answered or perhaps that there might be more than one answer.

To help you understand how archaeology works, we have provided some special features in this book. Case studies, designed as box features, show you archaeology in action and will help you understand the issues that archaeologists deal with in their research and fieldwork. Key Concept and Key Fact boxes summarize and review important concepts, methods, or facts about archaeology. These boxes are usually placed at the end of a section to help you reinforce what you have learned, but sometimes we have positioned them at the beginning of a discussion to help you understand technical concepts as you read about them. At the end of every chapter there is a summary to recap what you have read and a suggested reading list that will guide you to the most important and helpful publications if you want to research any subject further. Archaeological terms in the text that are defined in the glossary are highlighted in bold (e.g. **excavation**) when they first occur in a chapter.