

RESOURCE LIBRARY | ENCYCLOPEDIC ENTRY

Archaeology is the study of the human past using material remains. These remains can be any objects that people created, modified, or used.

Portable remains are usually called artifacts. Artifacts include tools, clothing, and decorations. Non-portable remains, such as pyramids or post-holes, are called features.

Archaeologists use artifacts and features to learn how people lived in specific times and places. They want to know what these people's daily lives were like, how they were governed, how they interacted with each other, and what they believed and valued.

Sometimes, artifacts and features provide the only clues about an ancient community or civilization. Prehistoric civilizations did not leave behind written records, so we cannot read about them.

Understanding why ancient cultures built the giant stone circles at Stonehenge, England, for instance, remains a challenge 5,000 years after the first monoliths were erected. Archaeologists studying Stonehenge do not have ancient manuscripts to tell them how cultures used the feature. They rely on the enormous stones themselves—how they are arranged and the way the site developed over time.

Most cultures with writing systems leave written records that archaeologists consult and study. Some of the most valuable written records are everyday items, such as shopping lists and tax forms. Latin, the language of ancient Rome, helps archaeologists understand artifacts and features discovered in parts of the Roman Empire. The use of Latin shows how far the empire's influence extended, and the records themselves can tell archaeologists what foods were available in an area, how much they cost, and what buildings belonged to families or businesses.

Many ancient civilizations had complex writing systems that archaeologists and linguists are still working to decipher. The written system of the Mayan language, for instance, remained a mystery to scholars until the 20th century. The Maya were one of the most powerful pre-Columbian civilizations in North America, and their Central American temples and manuscripts are inscribed with a collection of squared glyphs, or symbols. A series of circles and lines represents numbers.

By deciphering the Mayan script, archaeologists were able to trace the ancestry of Mayan kings and chart the development of their calendar and agricultural seasons. Understanding the basics of the Mayan writing system helps archaeologists discover how Mayan culture functioned—how they were governed, how they traded with some neighbors and went to war with others, what they ate, and what gods they worshipped.

As archaeologists become more fluent in Mayan writing, they are making new discoveries about the culture every day. Today, some archaeologists work with linguists and poets to preserve the once-lost Mayan language.

History of Archaeology

The word "archaeology" comes from the Greek word "arkhaios," which means "ancient." Although some archaeologists study living cultures, most archaeologists concern themselves with the distant past.

People have dug up monuments and collected artifacts for thousands of years. Often, these people were not scholars, but looters and grave robbers looking to make money or build up their personal collections.

For instance, grave robbers have been plundering the magnificent tombs of Egypt since the time the Pyramids were built. Grave robbing was such a common crime in ancient Egypt that many tombs have hidden chambers where the family of the deceased would place treasures.

In Egypt in the mid-1800s, an Egyptian man searching for a lost goat stumbled across the tomb of Pharaoh Ramses I. (Many archaeologists doubt this story and say grave robbers, working as an organized group, routinely scouted and plundered many tombs in the area.) Ramses I ruled for a short time in the 1290s BCE. Besides the body of the pharaoh, the tomb held artifacts such as pottery, paintings, and sculpture. The man sold the mummies and artifacts from the tomb to anyone who would pay.

The mummy of Ramses I wound up in a museum in Niagara Falls, Ontario, Canada, where it remained until the museum closed in 1999. The Canadian museum sold the Egyptian collection to the Michael C. Carlos Museum in Atlanta, Georgia, which confirmed the mummy's royal status through the use of CT scanners, X-rays, radiocarbon dating, computer imaging, and other techniques. Ramses I was returned to Egypt in 2003.

One of the most well-known archaeological finds is the tomb of Pharaoh Tutankhamun, also known as King Tut. Unlike many other Egyptian tombs, grave robbers had never discovered King Tut. His resting place lay undisturbed for thousands of years, until it was discovered in 1922. In addition to mummies of Tutankhamun and his family, the tomb contained some 5,000 artifacts.

Many early archaeologists worked in the service of invading armies. When Gen. Napoleon Bonaparte of France successfully invaded Egypt in 1798, he brought artists, archaeologists, and historians to document the conquest. Napoleon's troops took home hundreds of tons of Egyptian artifacts: columns, coffins, stone tablets, monumental statues. Today, these Egyptian antiquities take up entire floors of the Louvre Museum in Paris, France.

Some archaeologists of this time were wealthy adventurers, explorers, and merchants. These amateur archaeologists often had a sincere interest in the culture and artifacts they studied. However,

their work is often regarded as an example of colonialism and exploitation. The so-called Elgin Marbles are an example of this controversy.

In 1801, Greece had been taken over by the Ottoman Empire. The British ambassador to the Ottoman Empire, Lord Elgin, received permission to remove half of the sculptures from the famous Acropolis of Athens, Greece. These marble sculptures were a part of buildings such as the Parthenon. Lord Elgin claimed he wanted to protect the valuable sculptures from damage caused by conflict between the Greeks and the Ottomans.

The government of Greece has been lobbying for the return of the Elgin Marbles ever since. Most Greeks view the sculptures as part of their cultural heritage. Greece has cut off diplomatic relations to the United Kingdom several times, demanding the return of the sculptures, which remain in the British Museum in London.

Eventually, archaeology evolved into a more systematic discipline. Scientists started using standard weights and measures and other formalized methods for recording and removing artifacts. They required detailed drawings and drafts of the entire dig site, as well as individual pieces. Archaeologists began to work with classicists, historians, and linguists to develop a unified picture of the past.

In the 20th century, archaeologists began to re-assess their impact on the cultures and environments where they dig. Today, in most countries, archaeological remains become the property of the country where they were found, regardless of who finds them. Egypt, for example, is scattered with archaeological sites sponsored by American universities. These teams must obtain permission from the Egyptian government to dig at the sites, and all artifacts become the property of Egypt.

Archaeology is based on the scientific method. Archaeologists ask questions and develop hypotheses. They use evidence to choose a dig site, then use scientific sampling techniques to select where on the site to dig. They observe, record, categorize, and interpret what they find. Then they share their results with other scientists and the public.