

What is archaeology

Human-made objects like tools, clothes, and decorations are known as artifacts. These items provide important clues for researchers studying ancient cultures. Archaeologists carefully dig up these artifacts from old sites to learn about the people who lived there. Since many ancient civilizations didn't write down their history, artifacts can be the only way we know how they lived. For example, the tombs of ancient Egypt have given us a lot of information about life back then. The tomb of King Tut is particularly famous, and it contains thousands of artifacts that help us understand what life was like during his time. Archaeology is the study of human past using material remains created by people, which can include tools, clothing, food, and living arrangements. It explores various aspects such as arts, music, geography, social studies, world history, and physical geography to understand how people lived, interacted, and developed their cultures. Archaeological sites like Stonehenge in Great Britain have left behind a treasure trove of mysteries that scientists still struggle to decipher. Unlike written records found at other historical sites, these ancient structures offer few clues about their construction and use. To uncover the secrets of these enigmatic monuments, archaeologists rely on analyzing the massive stones themselves for any hidden messages or symbols. One area of study that sheds light on ancient diseases is paleopathology. These researchers delve into the lives of people from centuries past by examining teeth to determine what they are and even how they died. On the other hand, historic archaeology relies heavily on written records. A significant example of this can be seen in the Rosetta Stone, a large marble slab discovered in Egypt in 1799. The stone's unique feature is that it was inscribed with texts in three different languages - hieroglyphic, demotic, and Greek. This led to an epiphany for historians who could decipher the meaning of the ancient Egyptian writings by using their knowledge of Greek. In addition to these areas of focus, other disciplines like ethnoarchaeology help modern archaeologists understand how people used tools in the past. By studying contemporary cultures such as the San in southern Africa or the indigenous peoples of Brazil, researchers can gain insight into hunting and tracking practices, which could have a bearing on their ancient counterparts. Environmental conditions are another area that scientists examine to learn about past human activities. For instance, research has shown that 1400 years ago, the climate in the Brazilian highlands became significantly wetter, leading to an expansion of forests and providing ample resources for early inhabitants like the Taquara/Itararé people. Experimental archaeology involves replicating ancient artifacts and structures on a large scale. One notable example is Thor Heyerdahl's Kon-Tiki expedition, where he sailed from South America to Polynesia in 1947 aboard a raft constructed based on Polynesia in 1947 ab usually hired by towns or construction companies to locate and preserve archaeological remains during development projects. Given the vast layers that accumulate over time, pinpointing where to dig can be challenging for archaeologists. Sometimes it's a matter of following up on local legends or choosing sites based on previous finds. Before excavation begins, an archaeological team typically conducts a thorough assessment by looking for artifacts on the surface and examining aerial images. Sometimes features are not visible from the ground level, so technologies such as satellite imaging can provide crucial information about what lies beneath. Accidental discoveries have also led to some of the most significant archaeological finds in history, like the discovery of the Terra Cotta Warriors in China's Xian city. The last step before any excavation is to meticulously map the site and take detailed photographs, preserving every aspect for future generations to study. The site is divided into a grid to help archaeologists keep track of artifact locations. To determine an artifact's age, scientists use technology, such as analyzing bones to learn about past diets. They also employ non-invasive methods, like ground-penetrating radar, to probe beneath the surface without damaging it. During excavations, archaeologists may use heavy machinery or hand tools, like brushes and shovels, to uncover artifacts. Once found, they take detailed notes and photos before cleaning, labeling, and classifying the items. The National Geographic Society provides media credit information on its website. The Rights Holder is credited and can be found in the page title, URL, and access date. To access downloadable media assets, a download button appears in the media viewer's corner. However, non-downloadable interactives cannot be accessed offline. Printable text from this page complies with the society's Terms of Service. Archaeology is the study of human past using material remains such as artifacts and features. Archaeologists use these remains to understand daily life, governance, interactions, values, and behaviors. Sometimes, artifacts provide clues about ancient communities without written records. The study of Stonehenge remains challenging due to lack of written records. Archaeological discoveries have shed light on the cultures and civilizations of Mesoamerica, particularly in Central America, where temples and inscriptions are adorned with a distinctive collection of symbols. The deciphering of the Mayan script has enabled archaeologists to unravel the ancestry of Mayan kings and chart the development of their calendar system. As they became more proficient in reading the Mayan writing system, researchers gained valuable insights into how Mayan society functioned, including governance, trade practices, conflicts with neighboring communities, dietary habits, and spiritual beliefs. The field of archaeology itself has a rich history, dating back to ancient times when people began excavating monuments and collecting artifacts. However, early archaeological efforts were often marred by looting and grave robbing, as individuals sought to profit from their discoveries or enhance their personal collections. In some cases, these individuals worked in organized groups, scouring the countryside for valuable relics. Notable examples of archaeological finds include the tomb of Pharaoh Ramses I, which was discovered by an Egyptian man searching for a lost goat. The tomb contained a range of artifacts, including pottery, paintings, and sculptures, which were later sold to museums and collections. In some instances, these relics have undergone rigorous scientific analysis to confirm their authenticity and significance. The story of the tomb of Pharaoh Tutankhamun, also known as King Tut, is another famous example of an archaeological discovery in 1922, yielding a treasure trove of over 5,000 artifacts. Similarly, Napoleon's invasion of Egypt in 1798 led to the removal of numerous Egyptian antiquities, which are now housed in museums such as the Louvre in Paris. Today, archaeologists continue to uncover new insights into ancient cultures through their work with linguists and other specialists. As a result, they have been able to preserve the once-lost Mayan language and continue to expand our understanding of these fascinating civilizations. These amateur archaeologists were motivated by their passion for the culture and artifacts they studied. However, their work has been criticized for its colonialist and exploitative nature. The Elgin Marbles controversy is a prime example. Lord Elgin claimed to have obtained permission to remove half of the Parthenon's sculptures from Greece in 1801, citing concerns about damage during a conflict between Greeks and Ottomans. Today, Greece continues to lobby for the return of these marble sculptures, which are considered part of their cultural heritage. Meanwhile, archaeology has evolved into a more systematic discipline, incorporating standard methods and collaboration with other scientists. Archaeologists now recognize the importance of respecting the cultures and environments they study. In most countries, archaeological remains belong to the country where they were found. For instance, in Egypt, archaeological teams must obtain permission from the government to excavate, and all artifacts become Egyptian property. Underwater archaeology is not just about shipwrecks; it also includes sites like hunt camps on the Gulf of Mexico's continental shelf and parts of ancient Alexandria, Egypt, which were submerged due to earthquakes and sea level rise. This framework applies to various disciplines within archaeology. There are two main areas: prehistoric and historic archaeology. Prehistoric archaeology deals with civilizations that didn't develop writing, leaving only artifacts like arrowheads and stone tools for clues about their lives. Paleopathologists study diseases in ancient cultures to understand how modern diseases progress. Historic archaeology incorporates written records into research, as seen in the discovery of the Rosetta Stone, which helped decipher hieroglyphs and demotic scripts. The study of ancient cultures and civilizations encompasses various disciplines, including religious studies. A notable example is the Dead Sea Scrolls, comprising approximately 900 documents discovered between 1947 and 1956 in Qumran, West Bank. These scrolls feature biblical texts, psalms, and prophecies written in Hebrew, Aramaic, and Greek, providing insight into the development of Judaism and Christianity. In contrast, industrial archaeology focuses on materials created or used after the Industrial Revolution. Key sites, such as the Ironbridge Gorge in Shropshire, England, offer valuable information on economic development during this period. By analyzing artifacts and features, researchers can reconstruct the area's transformation from agriculture to manufacturing and trade. Additionally, ethnoarchaeologists study how people utilize objects today, enabling a better understanding of past practices. Environmental archaeologists investigate the environmental conditions that influenced ancient cultures, while experimental archaeologists replicate ancient techniques and processes to gain insight into object creation or use. These disciplines collectively contribute to our understanding of human history, allowing researchers to reconstruct the lives and societies of ancient civilizations. Forensic archaeologists use their expertise to uncover the truth behind historical events and human rights abuses by analyzing DNA evidence, excavating mass graves, and studying cultural artifacts. In Cambodia, they worked with geneticists to shed light on the Khmer Rouge regime's atrocities, determining the cause of death for thousands of victims. Archaeology also involves preserving cultural heritage sites threatened by construction. By collaborating with local governments and balancing economic needs with historical interests, archaeologists can help protect valuable artifacts and features. The field of archaeology relies heavily on excavation, as natural forces like wind and flood deposits soil over ancient remains. In areas like the Grand Canvon, layers of soil reveal a rich history, while cities are built in layers, with contemporary structures often erected on top of older ones. Establishing dig sites can be challenging due to inhabited areas and unknown discoveries. To overcome these obstacles, archaeologists use methods such as analyzing old myths and stories about ancient settlements, like the mythical city of Troy, which was rediscovered using Homer's epic poem "The Iliad". In the early 1970s, archaeologists used historical maps and modern tech to locate the wreck of the USS Monitor, a Union ship from the Civil War era. The Monitor sank off North Carolina's Cape Hatteras in 1862. After finding it, the US designated the area as the country's first marine sanctuary. Before excavating, archaeologists search for signs like artifacts or unusual earth mounds. New tech has improved their ability to survey areas, revealing patterns on aerial and satellite images. Techniques like radar and sonar use radio waves and echoes to detect what lies beneath the surface. Accidental finds can also lead to discoveries, such as farmers uncovering pottery shards or construction crews finding ruins. In 1974, agricultural workers in China stumbled upon an enormous mausoleum for Qin Shi Huangdi, the first Chinese emperor, containing 7,000 life-sized clay soldiers and artifacts. Research on the Terra Cotta Warriors provided insights into Qin Shi Huangdi's leadership style and Chinese culture. Before digging, archaeologists obtain permission, make maps, take photos, and divide the site into a grid to track finds. They also leave some areas untouched for future scientists to study with more advanced tools. Today, tech advancements allow scientists to analyze items like charcoal, bone, and pottery to learn about past civilizations. This preservation is crucial as it enables future researchers to gain new knowledge and perspectives on historical events. Given article text here Today many archaeologists continue some methods from ancient digs while incorporating new technologies like sensors and cameras to study sites without touching them. Dr. Albert Yu-Min Lin is exploring this approach with his team in Mongolia. The project uses advanced visualization software to find the tomb of Genghis Khan. Thanks to technology, Dr. Lin's team can analyze information remotely without disturbing the land or visiting Mongolia. Given article text here Vasa, a Swedish ship, was recovered in 1628. To preserve it, conservators used polyethylene glycol (PEG) on its delicate oak structure for 17 years, allowing it to dry before placing it in a massive museum. Once there, artifacts were analyzed in labs, combining data with other scientists' findings to reconstruct humanity's past. Researchers investigate various aspects like tool development, clothing styles, food habits, and social structures. Archaeologists publish their discoveries in scientific journals for peer review and public awareness. for media credited to the person or group, like Mary Crooks from National Geographic Society and others. If you're unsure about using our website content in your project or presentation, ask your teacher for help. They'll guide you on the preferred format. When reaching out, remember to provide the page title, URL, and access date. Media assets can be downloaded if a button appears, but some may not be available. The text on this page is printable and cannot be saved. Anthropology explores human societies and cultures from their origin to development. It's the study of learned behaviors, including languages, belief systems social structures, institutions, and material goods. Anthropologists use various techniques to investigate human communities and describe how people lived throughout history. To ensure objectivity, anthropologists aim to present their subjects clearly and unbiasedly. They achieve this by observing daily life and describing interactions and customs, and material goods. process called ethnography. By participating in local environments, they gain a deeper understanding of institutions, culture, and practices. As anthropologists study diverse societies, they must evaluate their interpretations to avoid bias, known as ethnocentrism. This enables them to describe people through their own terms. Anthropology's subdisciplines include cultural or social anthropology, linguistic anthropology, biological or physical anthropology, and archaeology, and archaeology. Each subdiscipline employs unique techniques and methods to explore the diverse topics of study within the broader field of anthropology, and archaeology, and archaeology, and archaeology, and archaeology. cultural traditions of Micronesian navigators who don't use maps or instruments. She observed and documented rare customs and practices, such as chants, to understand individual cultures. Similarly, Wade Davis, an ethnobotanist, spent years studying how indigenous groups in Latin America use plants in their daily lives. Linguistic anthropologysta. examines how language shapes social life. Researchers like Lera Boroditsky study how languages influence people's understanding of themselves and their environments. For example, she found that the Pormpuraaw Aboriginal community in Australia uses cardinal directions to navigate and communicate with precision. National Geographic's Enduring Voices Project aims to prevent languages from Bolivia, Paraguay, Papua New Guinea, and more, helping indigenous communities revitalize their languages. Biological anthropology, also known as physical anthropology, explores the evolution of human beings and their fossil relatives. It examines how humans have evolved over time and how they relate to other living organisms. Biological anthropologists explore human evolution within its cultural and behavioral context, examining how physical developments intersect with social behaviors throughout history. They study primates like monkeys and apes to understand similarities and differences between humans and our closest living relatives. By analyzing the use of tools by chimpanzees and the adaptation of early human ancestors' hands for toolmaking, researchers uncover clues about human evolution. Some biological anthropologists focus on skeletal remains to see how humans adapted to different physical environments and social structures over time. They look at fossils found in various regions, like Ethiopia's Busidima-Dikika site, to understand why some early hominid species survived while others didn't. Biological anthropology also examines the relationship between biological characteristics of living people and their social or cultural practices. For example, the Jul'hoansi people of Namibia developed unique physical features, such as a thick layer of fat, in response to cold weather and limited food resources. Archaeologists study the human past using material remains like artifacts and objects that people created or used. They carefully uncover and examine these items to interpret the experiences and activities of ancient peoples and civilizations. By studying prehistoric cultures through their artifacts, archaeologists can reconstruct a culture's way of life. In the United States Southwest, archaeologists can reconstruct a culture's way of life. In the United States Southwest, archaeological sites reveal the role macaws played as exotic trade items and objects of reverence among ancient societies. Prehistoric peoples in certain regions often drew attention from archaeologists. These researchers may concentrate on specific cultures or aspects of cultural life, such as Constanza Ceruti, who specializes in Incan artifacts and features at high altitudes. To reconstruct ancient sites, she uses archaeological evidence alongside historical sources and Andean beliefs. Her analysis provides insight into the symbolic meaning behind each artifact and how ceremonies took place. Throughout history, anthropological study has mirrored our evolving relationships with other cultures. These connections are tied to various societal forces present during different periods in time. The ancient Greeks and Romans valued understanding societies through reason and inquiry, influencing their approach to creating just societies. Herodotus, a Greek historian, extensively traveled through regions like Libya, Ukraine, Egypt, and Syria in the fifth century B.C.E. His accounts of customs and social structures continue to be studied as one of the earliest forms of ethnography. The establishment of exchange routes significantly contributed to expanding interest in cultures. Zhang Qian's diplomatic efforts between Asia, East Africa, and Eastern Europe for thousands of years. Medieval scholars and explorers, like Marco Polo and Ibn Battuta, documented their encounters with various cultures, greatly advancing our understanding of these regions. Many experts believe that modern anthropology emerged during the Age of Enlightenment in 18th century Europe. This cultural movement emphasized reason's power to advance society and knowledge. Enlightenment scholars sought to understand human behavior and society as phenomena governed by specific principles. Their work was influenced by other cultures, shaping their approach to anthropological study. Colonialism and Anthropological Theories: A Shift towards Cultural Relativism Historically, scholars of natural history documented indigenous cultures as "human primitives," inferior to European societies. These studies legitimized colonial agendas by portraying foreign territories and peoples as needing European reason and control. Today, we recognize these studies as racist. 19th-century anthropologists followed two main theories: evolutionism and diffusionism. Evolutionism and diffusionism. Evolutionism and diffusionism. Evolutionism and diffusionism and diffusionism. advanced civilizations. Diffusionists proposed that cultures originated from a set of "culture circles" that spread throughout the world. However, these theories were criticized by 20th-century anthropologists who sought to understand cultures in their own terms, rather than comparing them to European traditions. The theory of cultural relativism, supported by Franz Boas, emphasized the importance of understanding a culture within its context. Modern anthropologists have shifted towards describing particular cultures or societies at a given time, rather than searching for universal laws about human behavior. They use participant-observation and ethnography to gain a deeper understanding of social and cultural life. Additionally, some anthropologists have criticized the discipline's focus on developed societies. This shift has led to a broader range of ethnographic work, covering topics such as university hierarchies and retirement homes. New technologies and emerging fields of study enable contemporary anthropologists to uncover complex information about people's lives and behaviors, furthering our understanding of diverse cultures is an interdisciplinary field that combines archaeology, biology, genetics, and anthropology to understand human societies and behaviors. By analyzing ancient remains through CT scans, researchers can gain insights into the health, disease, and mortality patterns of past populations. Anthropologists use various approaches to study how humans create new social connections and cultural identities, such as examining the impact of digital media on relationships and communication. For example, Michael Wesch is studying how new media platforms are changing human interactions and relationships. The field of anthropology has a long history, with notable figures like Margaret Mead, who published influential works on human cultures, including "Coming of Age in Samoa." However, some of her methods have been questioned by anthropologists, who argue that her conclusions may have been influenced by the time period in which she conducted her research. Anthropology and the Environment, and Feminist Anthropology. Zora Neale Hurston's literary works significantly contributed to the Harlem Renaissance, a pivotal movement among African Americans in the 1920s and 1930s. As an accomplished anthropologist, she also made notable contributions to her field. Hurston received her education from Barnard College, where she was the lone black student at the time. Her academic accomplishments earned her a prestigious Guggenheim Fellowship, allowing her to conduct extensive research throughout the Caribbean and Central America. One of her most celebrated works, "Their Eyes Were Watching God," was penned during her anthropological field work in Haiti. The novel is widely regarded as Hurston's magnum opus.