**History and Prehistory**

Human beings have flourished on Earth for at least 2.5 million years. The study of history in its broadest sense is a record of humanity and its accomplishments from its earliest origins to modern times. This record of human achievement has reached us in many forms, as written documents, as oral traditions passed down from generation to generation, and in the archaeological record – sites, artifacts, food remains, and other surviving evidence of ancient human behavior. The earliest written records go back about 5,000 years in the Near East, in Mesopotamia, and the Nile Valley. Elsewhere, written history begins much later: in Greece, about 3,500 years ago; in China, about 2,000 years ago; and in many other parts of the world, after the 15th century C.E. with the arrival of Western explorers and missionaries. Oral histories have an even shorter compass, extending back only a few generations or centuries at the most.

*History*, which remains primarily though not exclusively the study of written documents, covers only a tiny fraction of the human past. *Prehistory*, the span of human existence before the advent of written records, encompasses the remainder of the past 2.5 million years. *Prehistorians*, students of the prehistoric past, rely mainly on archaeological evidence to study the origins of humanity, the peopling of the world by humans, and the beginnings of agriculture and urban civilization.

*Archaeology* is the study of the human past based on the material remains of human behavior. These remains come down to us in many forms. They survive as archaeological sites, ranging from the mighty pyramids of Giza built by ancient Egyptian pharaohs to insignificant scatters of stone tools and animal bones abandoned by very early humans in East Africa. Then there are caves and rock shelters adorned with ancient paintings and engravings, and human burials that can provide vital information, not only on biological makeup but also on ancient diet and disease and social rankings.

Modern scientific archaeology has three primary objectives: to study the basic culture history of prehistoric times, to reconstruct ancient lifeways, and to study the processes by which human cultures and societies changed over long periods of time. Archaeology is unique among all scientific disciplines in its ability to chronicle human biological and cultural change over long periods of time.

**Culture and Context**

Anthropology, and archaeology as part of it, is unified by one common thread, the concept of *culture*. Everyone lives within a cultural context – middle-class Americans, Romans, and Kwakiutl Indians of northwestern North America. Each culture has its own recognizable cultural style, which shapes the behavior of its members, their political and judicial institutions, and their morals.

Human culture is unique because much of its content is transmitted from generation to generation by sophisticated communication systems. Formal education, religious beliefs, and daily social intercourse all transmit culture and allow societies to develop complex and continuing adaptations to aid their survival. Culture is a potential guide to human behavior created through generations of human experience. Human beings are the only animals that use culture as their primary means of adapting to the environment. While biological evolution has protected animals like the arctic fox from bitterly cold winters, only human beings make thick clothes in cold latitudes and construct light thatched shelters in the Tropics.

Culture is an adaptive system, an interface between ourselves, the environment, and other human societies. Throughout the long millennia of prehistory, human culture became more elaborate, for it is our only means of adaptation and we are always adjusting to environmental, technological, and societal change.

The great Victorian anthropologist Sir Edward Tylor described culture as “that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society.” Prehistoric archaeologists prefer to define culture as the primary nonbiological means by which people adapt to their environment. They consider it as representing the cumulative intellectual resources of human societies, passed down by the spoken word and by example.

Human cultures are made up of many different parts, such as language, technology, religious beliefs, ways of obtaining food, and so on. These elements interact with one another to form complex and ever-changing cultural systems, systems that adjust to longand short-term environmental change.

Archaeologists work with the tangible remains of ancient cultural systems, typically such durable artifacts as stone tools or clay pot fragments.

**Finding and Digging up the Past**

The finding and excavating of archaeological sites is a meticulous process of uncovering and recording the finite archives that make up the archaeological record. The sites, large and small, that make up this record are finite resources. Once destroyed and the context of their artifact contents disturbed, they are gone forever. Although the destruction wrought by early archaeologists and treasure hunters was devastating, that of modern industrial development, deep plowing, professional looters, and amateur pothunters has been far worse. In some parts of North America, experts estimate that less than 5 percent of the archaeological record of prehistoric times remains intact. In recent years, massive efforts have been made to stem the tide of destruction and to preserve important sites using federal and state laws and regulations. While some progress has been made in such *cultural resource management*, the recent archaeological record of human prehistory is a shadow of its former self and in many parts of the world is doomed to near-total destruction.

*Finding Archeological Sites*

Many archaeological sites come to light by accident: during highway or dam construction, through industrial activity and mining, or as a result of natural phenomena such as wind erosion. For example, the famous early human sites at Olduvai Gorge in Tanzania, East Africa, were exposed in the walls of the gorge as a result of an ancient earthquake that cut a giant fissure through the surrounding plains. Well-designed archaeological field surveys provide vital information on ancient settlement patterns and site distributions.

Increasingly, archaeologists are relying on remote sensing techniques, such as aerial photography, satellite imagery (digital images of the earth recorded by satellites), or sides can radar (airplane-based radar used to penetrate ground cover). These allow them to identify likely areas, even to spot sites without ever going into the field. The latest approach involves the use of Geographic Information Systems (mapping systems based on satellite imagery that inventory environmental data). The combination of satellite imagery with myriad environmental, climatic, and other data provides a backdrop for interpreting distributions of archaeological sites.

**DRUIDS AND PICTS**

The Picts and the Druids were among the pre-Roman civilizations in the British Isles. There is little concrete information about either group, particularly prior to Roman contact. The Druids were the priests of many ancient Celtic societies, which included those in northwest Europe as well as the British Isles. The Druids were preservers and enforcers of tradition among these tribes, passing on an oral literature that did not survive the arrival of Rome and the decline of the Celtic languages and cultures. They were probably the most learned class among their people and may have passed on to the laity a good deal of practical knowledge in addition to the religious teachings of their polytheistic faith.

Our written sources about the Druids are exclusively Roman. Gaius Julius Caesar’s Gallic Wars ascribed to the Druids among the Gauls the authority to make judgments in disputes both civil and criminal and the use of exile as punishment. Other writers wrote of Druids telling fortunes, receiving instruction in secret, and overseeing sacrifices, including human sacrifices. They were almost certainly the keepers and designers of the calendar the Celtic tribes followed. Though they have long been associated with Stonehenge in the popular imagination, Stonehenge predates the Druids considerably, and they could not have had anything to do with its construction. It is primarily the result of historical fads in the 18th and 19th centuries that so many misconceptions about the Druids are lodged in popular thought, many of them the product of poor scholarship or outright fabrication.

Little, too, is known about the Picts, who inhabited Pictland (northern Scotland) from antiquity until the Middle Ages. A loosely affiliated, ethnically similar group of tribes, they confederated into a number of kingdoms (sometimes ruled over by a high king to whom others owed fealty) sometime after the arrival of Romans in the British Isles. Presumably, the Pictish religion, and perhaps its language, greatly resembled that of other Celtic groups before this time and converted in the fifth and sixth centuries. Once Christianity was entrenched, the cult of saints was especially prominent in Pictland, with patron saints associated not just with towns and kings as in much of Christendom but with noble families. Kingship generally passed from brother to brother before passing on to a son, favoring experienced leaders over a direct line of succession.

**Ancient Egypt**

The civilization of ancient Egypt lasted about 30 centuries when it became part of the Roman Empire.

Ancient Egyptians traced their origins to the land of Punt, an eastern African nation that was probably south of Nubia, but their reasons for this are unclear. As early as the 10th millennium BC, a culture of hunter-gatherers using stone tools existed in the Nile Valley, and there is evidence over the next few thousand years of cattle herding, large building construction, and grain cultivation.

The desert was once a fertile plain watered by seasonal rains, but may have been changed by climate shifts or overgrazing. At some point the civilizations of Lower Egypt (in the north, where the Nile Delta meets the Mediterranean Sea) and Upper Egypt (upstream in the south, where the Nile gives way to the desert) formed. By 3000 B.C. Lower and Upper Egypt were unified by the first pharaoh called Menes. Lower and Upper Egypt were never assimilated into one another. The first Pharaoh also established a capital at Memphis, where it remained until 1300 BC. The advent of hieroglyphics and trade relations with Nubia and Syria coincide with the Early Dynastic Period.

*History*

The history of ancient Egypt is traditionally divided into dynasties, each of which consists of rulers from more or less the same family. Often, a dynasty is defined by certain prevailing trends as a result of the dynastic family’s interests – many of the significant pyramid builders in ancient Egypt were from the Fourth Dynasty, for instance. In the early dynasties, we have little solid information about the pharaohs, and even our list of their names is incomplete. The dynasties are organized into broad periods of history: the Early Dynastic Period (the First and Second Dynasties), the Old Kingdom (Third through Sixth), the First Intermediate Period (Seventh through Tenth), the Middle Kingdom (Eleventh through Fourteenth), the Second Intermediate Period (Fifteenth through Seventeenth), the New Kingdom (Eighteenth through Twentieth), the Third Intermediate Period (Twenty-first through Twenty-fifth), and the rather loosely characterized Late Period (Twenty-sixth through Thirty-first). Ancient Egypt essentially ends with the Thirty-first Dynasty: For the next 900 years Egypt was ruled first by Alexander the Great, then the “Ptolemaic dynasty,” founded by Alexander’s general Ptolemy, and finally by Rome directly.

**GREAT WALL OF CHINA**

Beginning in 324 b.c.e. three northern Chinese states with nomadic neighbors – Qin (Ch’in), Zhao (Chao), and Yan (Yen) – began to build defensive walls. After Qin unified China in 221 b.c.e. the first emperor ordered his most able general, Meng Tian (Meng T’ien), to connect these existing walls and extend them to form Great Wall of China 163 a unified system of defense. The result is the Great Wall of China.

For 10 years beginning in 221 b.c.e. Meng Tian commanded a force of 300,000 men (soldiers, convicts, and corvee laborers), who simultaneously campaigned against the Xiongnu (Hsiung-nu) and other nomads and built the wall. There is no detailed information about the project.

Controversy remains over the length of the Qin wall. Sima Qian used the word *wan*, which translates as “ten thousand” or “myriad” in English; *myriad* was often used to designate a large but not precise number.

Unlike the Ming wall built almost 2,000 years later of rocks and large fi red bricks, the Qin wall was made of tamped earth from local materials. The completed wall stretched from Gansu (Kansu) in the west to north of Pyongyang in present-day North Korea. The building of the wall and earlier Qin defeat of the Xiongnu also had the unintended result of solidifying and unifying the various Xiongnu tribes under their leader Maotun (Mao-t’un) in 209 b.c.e. The fall of Qin in 206 b.c.e. resulted in neglect in China’s northern defenses and Xiongnu incursions, which the first Han emperor Gaozu (Liu Bang) was unable to check. After defeat by Maotun in a major battle in 200 b.c.e., Han and Xiongnu made peace under the Heqin (Ho-chin) Treaty, which made the Great Wall their boundary. Appeasement of the Xiongnu ended in 133 b.c.e. with major Han campaigns that ultimately broke up the Xiongnu confederacy and led to Han expansion to the northwest. The Great Wall was extended across the Gansu Corridor to Yumenguan (Yu-men Kuan), with forts and frontier posts along the way. Military colonists guarded these posts, growing food, supplying provisions for government missions, and safeguarding horse stud farms for the cavalry. Many of the ruined Han forts and outposts remain to show the cost of the Pax Sinica that the Han created and that the Great Wall safeguarded.

**hieroglyphics**

The system of writing known as hieroglyphics was used to write the ancient Egyptian language from before 3000 b.c.e. until the late fourth century c.e. Each symbol in this system is known as a hieroglyph. The term hieroglyphic (meaning “sacred writing”) was coined by the ancient Greeks, who knew that the Egyptians sometimes called their writing “divine script.”

The 500 or so hieroglyphic signs that were in common use can be grouped into three classes: logograms, phonograms, and determinatives. Logograms (also called ideograms) are single signs that represent a complete word. These signs, remnants of the pictographic origins of the system, are relatively few in number. Far more common are the second class of signs, called phonograms. A phonogram represents not a word but a sound or group of sounds. There are three types of phonograms: those that indicate one, two, or three consonants. The signs indicating a single consonant may be called “alphabetic,” but in fact the Egyptians rarely used only these simple alphabetic signs to write a word. It should be noted that the script indicates only consonants; the vowels would have to be supplied by the reader. The third class of hieroglyphs is known as determinatives. These signs, of which there are many, have no phonetic value, but rather appear after other hieroglyphic signs (phonograms) to indicate the semantic category of the word. Determinatives are often very helpful in distinguishing homonyms, which are prevalent due to the lack of vowels in the script. A hieroglyphic text can be written horizontally from left to right or from right to left or vertically from top to bottom.

The use of hieroglyphic script was generally con- fined to carved or painted inscriptions, most of which were monumental or religious in nature. Already in the Old Egyptian Period (mid-third millennium b.c.e.) the Egyptians used a simplified cursive hieroglyphic script, or, more often, an even more cursive script known as hieratic (from Greek, “priestly”), for texts written with ink. The signs of cursive scripts, especially hieratic, can look quite different from their hieroglyphic counterparts. By the Late Egyptian Period, beginning in roughly 1600 b.c.e., an even more abbreviated and cursive form of hieratic developed, known as demotic (from Greek, “popular”). With the coming of Christianity to Egypt, many Egyptians adopted the Greek alphabet to write their language.

**late barbarians**

Late barbarians invaded present-day Europe, contributing politically, culturally, and militarily to the collapse of the Western Roman Empire by establishing their own kingdoms. The Huns, Alans, and Goths from the Asiatic steppes were the first wave of land invaders to make inroads into the waning Roman Empire in the fourth and fifth centuries c.e., while the Vandals, Sueve, and Burgundians pressured the Roman Empire from the west. The Franks, Alamans, and Bavarians invaded during the fifth and sixth centuries. The Lombards and Avars were the last of the land invaders in the sixth and seventh centuries. The maritime invaders included Angles, Saxons, and Jutes.

*The Goths* were originally a group of Teutonic tribes from Scandinavia who had settled between the Vistula and Oder Rivers in present-day Poland. The Roman Empire and the Goths met under the rule of Gordian III (238–244 c.e.). The Goths invaded Thrace in 238 c.e. The Romans concluded an alliance (foedus) with them in 332 that remained in effect until 350 when Gothic king Ermeric extended his territory from the Gulf of Bothnia to the Black Sea. Around 369 divisive internal issues caused a permanent split between the Goths, creating the Teuringi, meaning “forest people,” who eventually became known as the Visigoths (western Goths), and the Greutingi, meaning “shore people,” and known as the Ostrogoths (eastern Goths). Little animosity persisted among the split Gothic tribes; groups would pass from one tribe to the other.

*The Burgundians*, who had settled in present-day Poland, moved westward around 260 c.e. to the present day Koblenz area. They founded their own nation, were crushed by the Huns, later established a foedus (alliance) with Rome, and rooted themselves in present-day Geneva. The Franks eventually vanquished the Burgundians, who converted to Catholicism by 533 and submitted to the Merovingian dynasty in 534, under whom they thrived.

*The Vandals* first raided the Roman Empire around 275 c.e. As they fled from the Huns they settled in Gaul and then Spain from 409 to 411. They moved to North Africa ultimately conquering Algeria and Morocco. The Vandals destroyed Hippo and finally settled in Carthage in 439, raided Sicily and Italy, then sacked Rome in 455. The Western Roman Empire, suffering from population decline, decaying cities, and a poor economy, finally collapsed in 476. Byzantine emperor Justinian I conquered the Vandals in 533.

**Patricians and Plebeians**

The society of the Roman Republic and Roman Empire was made up of several levels. At the top were the *patrician* classes of senator and equestrian. The commoner classes of plebeians, freed peoples, and slaves had fewer opportunities in life. However, these social and political classes maintained order and structure in Roman culture. They created the first socially mobile culture in history. The Roman emperor held the title of princeps senatus (chief senator) and could appoint new senators, preside over the Senate, and propose new legislation. The real power of the Senate was in its judicial functions, mainly its right to crown the new emperor.

Senators were considered a political class of citizen. The Senate was made up of 600 men who were either the sons of senators or Roman citizens over the age of 25 with military and administrative experience. The senate class included all men who served in the Senate and their families. These were mostly nobles or families whose ancestors included at least one elected consul. The first male in each family elected to the position of consul was given the title *novus homo*, meaning “new man.” In order to be considered a senator a Roman citizen had to accumulate 1 million sesterces of wealth and property. Senators were granted special privileges, priority seating at sporting events and theater productions, and the right to hold the highest judicial offices. Senators wore a gold senatorial ring and *a tunica clava* with a five-inch-wide purple stripe on the right shoulder.

*Plebeians* were the lowest class of free citizens. They were the working class of Rome and the main taxpayers. Most jobs were hereditary, and they usually worked as subsistence farmers or as sharecroppers of wealthy patricians. They could also be bakers, artisans, masons, or carpenters. None of these occupations paid very well, and most plebeians struggled to provide for their family. Patricians 335 Plebeians usually lived in apartment homes called *insulae*. These homes were usually built of wood and were extremely susceptible to fi re since running water was not available. As the *insulae* were without kitchens, families would purchase meals consisting of coarse bread, bean or pea soup, porridge, and, if the family saved enough, chicken or rabbit once a month. Plebeians lived in very unsanitary conditions: Two families often shared one room apartments, and chamber pots were often emptied out into the street below.

**THE INDUSTRIAL REVOLUTION**

The Industrial Revolution was the transition to new manufacturing processes in the period from about 1760 to sometime between 1820 and 1840. This transition included going from hand production methods to machines, new chemical manufacturing and iron production processes, the increasing use of steam power, the development of machine tools and the rise of the factory system.

The Industrial Revolution began in Great Britain, and many of the technological innovations were of British origin. By the mid-18th century Britain was the world's leading commercial nation, controlling a global trading empire with colonies in North America and Africa, and with some political influence on the Indian subcontinent, through the activities of the East India Company. The development of trade and the rise of business were major causes of the Industrial Revolution.

The Industrial Revolution marks a major turning point in history; almost every aspect of daily life was influenced in some way.

GDP per capita was broadly stable before the Industrial Revolution and the emergence of the modern capitalist economy, while the Industrial Revolution began an era of per-capita economic growth in capitalist economies. Economic historians are in agreement that the onset of the Industrial Revolution is the most important event in the history of humanity since the domestication of animals and plants.

The precise start and end of the Industrial Revolution is still debated among historians, as is the pace of economic and social changes. Eric Hobsbawm held that the Industrial Revolution began in Britain in the 1780s and was not fully felt until the 1830s or 1840s, while T. S. Ashton held that it occurred roughly between 1760 and 1830.Rapid industrialization first began in Britain, starting with mechanized spinning in the 1780s, with high rates of growth in steam power and iron production occurring after 1800. Mechanized textile production spread from Great Britain to continental Europe and the United States in the early 19th century.

An economic recession occurred from the late 1830s to the early 1840s when the adoption of the original innovations of the Industrial Revolution, such as mechanized spinning and weaving, slowed and their markets matured. Rapid economic growth began to occur after 1870, springing from a new group of innovations in what has been called the Second Industrial Revolution.